

# Six Monthly Compliance Report of Environmental Clearance

For

**Grasim Industries Ltd. (Chemical Division)**



**Submitted to:**

State Level Environment Impact  
Assessment Authority  
Gujarat Pollution Control Board,  
Paryavaran Bhavan,  
Sector – 10 A,  
Gandhinagar – 382 010

**Submitted By:**

Grasim Industries Limited  
(Chemical Division)  
Plot No. 1 GIDC Vilayat Industrial  
Estate, PO-Vilayat, Taluka-Vagra,  
Dist: Bharuch-392012,  
Gujarat, India

**Period: April 2022 to September 2022**

**Compliance Status Report for “Environmental Clearance”  
Accorded by the SEIAA  
For  
Grasim Industries Ltd. (Chemical Division)**

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<b>Sr. no.</b>	<b>Title</b>	<b>Annexure no.</b>
1	(a) Copy of EC vide Letter No.: SEIAA/GUJ/EC/1(d),4(d) & 5(f)/96/2011 dated 30th May 2011 and amendment to EC vide letter No. SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/98/2012 dated 22nd March 2012 and EC name change letter (b) Copy of EC vide Letter No.: SEIAA/GUJ/EC/5(f)/90/2014 dated 1st Aug 2014 (c) Copy of EC vide Letter No.: SEIAA/GUJ/EC/5(f) & 4(d)/642/2016 dated 29th Oct 2016 (d) Copy of EC vide Letter No.: SEIAA/GUJ/EC/1(d)/287/2019 dated 4th Feb 2019 (e) Copy of EC vide Letter No.: SEIAA/GUJ/EC/1(d)&4(d)/764/2021 dated 10th Jun 2021	Annexure-1
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## **Introduction**

Grasim Chemical Division (GRCD), Vilayat is a unit of Grasim Industries Limited, a flagship company of the US \$40 billion Aditya Birla Group, was established as a strategic backward integration for supplying Caustic Soda to Fiber Division & other group companies.

The plant was commissioned in March 2013 with a Caustic Soda Lye capacity of 500 MTPD (MT/ Day) and Caustic Soda Flakes capacity of 100 MTPD (MT/ Day). Grasim Cellulosic Division is a latest plant in the Pulp & Fibre business, commissioned in Apr-2014 which produces both grey VSF and specialty fibre. This is the company's first plant producing specialty grade fibre.

The unit produces Caustic Soda (Lye & Flakes), Hydrogen Gas, Chlorine Gas, HCl, Hypo Chlorite, ALCP, Poly Aluminum Chloride (PAC), Stable Bleaching Powder (SBP) & Chlorinated Paraffin (CP) Wax Product.

GRCD, Vilayat plant has implemented Quality, Environment and Safety Management Systems as per ISO 9001:2015, ISO 14001:2015, ISO 45001:2018. Environmental quality monitoring in & around the project site is being carried out by GPCB & NABL approved Laboratory on a regular basis.

Grasim's caustic soda business at Nagda, Madhya Pradesh, started with an initial capacity of 33,000 TPA, and has since grown to 440,500 TPA, making it the second-largest caustic soda manufacturer in India.

After commissioning caustic soda plant in Vilayat of capacity 365,000 MTPA, in Gujarat region making it the largest chlor-alkali player in India.

Today, Grasim's Chemical Division spans across seven chlor-alkali plants in India and offers a plethora of chlorine derivatives. The business focuses on innovation and is committed to providing customized solutions and product offerings.

Point wise compliance status of Environmental Clearance for GRCD, Vilayat is furnished herewith.

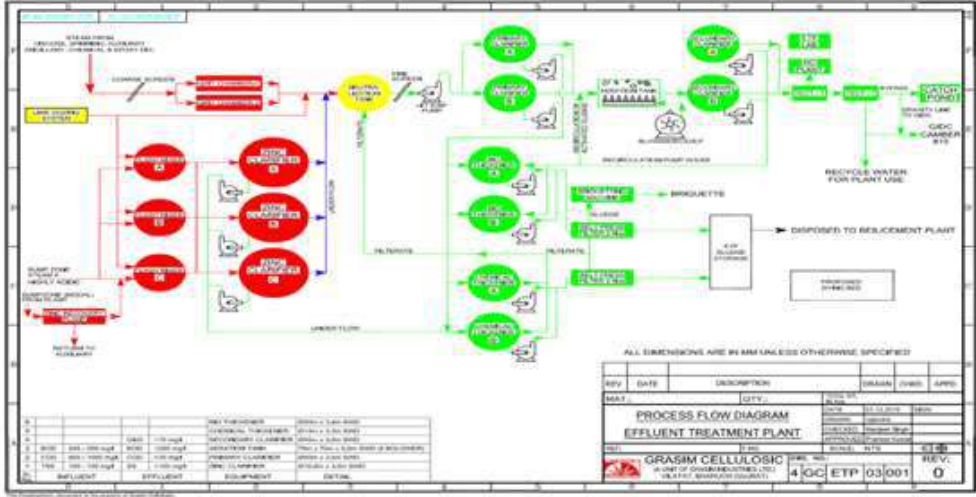
## Compliance status of Environmental Clearance


**vide Letter No.: SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/96/2011  
dated 30<sup>th</sup> May 2011 &**

**amendment to EC vide letter No. SEIAA/GUJ/EC/1(d), 4(d)  
& 5(f)/98/2012 dated 22<sup>nd</sup> March 2012**

Sr. No.	EC Conditions	Compliance status						
1	<p>The proposal is for environmental clearance for Expansion: putting Chlor-alkali unit with value added products (as a backward integration of VSF plant) along with expansion of captive power plant from 25 MW to 85 MW located at Plot No. 1, GIDC Industrial Estate, Vilayat - 394 120, Tal: Vagra, Dist: Bharuch by M/s. Grasim Cellulosic (A Unit of Grasim Industries Ltd.). M/s. Grasim Cellulosic obtained environmental clearance in the year 2008 for manufacturing of VSF, CS<sub>2</sub>, Sulphuric Acid, Sodium Sulfate and Captive Power Plant at Vilayat Vagra. In addition to above products, it is now proposed to expand the project by putting Chlor-alkali unit as a backward integration of power plant from 25 MW to 85 MW. Bipolar membrane cell technology shall be adopted for the Chlor-alkali unit. The applicant has applied for Expansion following product.</p>	<ul style="list-style-type: none"> <li>• Noted</li> <li>• Copy of Environment Clearance dated 30/05/2011 &amp; name change letter dated 22/03/2012 are attached as <b>Annexure-1.</b></li> </ul>						
		<b>Products</b>	<b>Caustic Soda Lye</b>	<b>Liquid chlorine / Hydrochloric Acid</b>	<b>Hydrogen</b>	<b>Chlorosulphonic Acid</b>	<b>Sulphuric Acid</b>	<b>Carbon Disulphide</b>
		SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/96/2011 dated 30th May 2011 and amendment to EC vide letter No. SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/98/2012 dated 22nd March 2012	219000 TPA (600 TPD)	197100 TPA (540 TPD)	61320000 NM3/Year (168000 NM3/Day)	73000 TPA (200 TPD)	36500 TPA (100 TPD)	31025 TPA (85 TPD)
		Total Production (Tons) - Apr 2022 to Sep 2022	Nil	Nil	Nil	Nil	Nil	Nil
		<b>Products</b>	<b>Liquid Poly</b>	<b>Stable</b>	<b>Chlorinated</b>	<b>Aluminum</b>	<b>Power</b>	

Sr. No.	EC Conditions		Compliance status																								
		Aluminum Chloride	Bleaching Powder	Paraffin	Chloride	Generation																					
	SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/96/2011 dated 30th May 2011 and amendment to EC vide letter No. SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/98/2012 dated 22nd March 2012	146000 TPA (400 TPD)	36500 TPA (100 TPD)	36500 TPA (100 TPD)	14600 TPA (40 TPD)	96 MW																					
	Total Production (Tons) - Apr 2022 to Sep 2022	Nil	Nil	Nil	Nil	13870 MW																					
	Average Production (Tons) - Apr 2022 to Sep 2022	Nil	Nil	Nil	Nil	2312 MW																					
* Note: Production data for the period April 2021 to September 2022 is provided on Page no. 1-2 in EC compliance of EC vide no. SEIAA/GUJ/EC/5(f)&4(d)/642/2016 dated 29 <sup>th</sup> Oct 2016.																											
<b>A Specific Conditions</b>																											
1	The Unit shall obtain requisite permission from PESO, Nagpur for storage of Chlorine, Hydrogen etc. before commissioning of the project.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have obtained licenses from Petroleum &amp; Explosives Safety Organization (PESO) for Chlorine, Hydrogen and Class B chemicals before commissioning of the project. Licenses are attached as <b>Annexure-2</b>.</li> </ul>																									
		<b>PESO License No.</b>	<b>Description</b>	<b>Date of Issue/ Renewal/ Amendment</b>	<b>Validity</b>																						
		S/HO/GJ/03/1445 (S52646)	License to store compressed gas in pressure vessel or vessels (Chlorine Bullet)	05-09-2022	30-09-2027																						
		G/HO/GJ/05/733 (G31658)	License to Fill Compressed Gas in Cylinders – Chlorine	07-10-2019	30-09-2028																						
		G/HO/GJ/06/724 (G31658)	License to Store Compressed Gas in Cylinders – Chlorine	07-10-2019	30-09-2028																						
		A/G/WC/GJ/GCT/11(G58778)	Periodic examination and testing of chlorine seamless cylinders	18-09-2020	30-09-2023																						
		G/HO/GJ/05/738 (G31657)	License to Fill Compressed Gas in Cylinders – Hydrogen	07-10-2019	30-09-2029																						
		G/HO/GJ/06/728 (G31657)	License to Store Compressed Gas in Cylinders – Hydrogen	07-10-2019	30-09-2029																						
		P/HQ/GJ/15/5344 (P296022)	License to import and store Petroleum in an installation – Petroleum Class B	30-09-2019	31-12-2023																						
		G/WC/GJ/06/1803 (G34271)	License to Store Compressed Gas in Cylinders-ALCP Plant	27-07-2022	30-09-2033																						
<b>A.1 Water:</b>																											
2	No ground water shall be used for the project. Entire water requirement of 35000 KLD after the proposed expansion shall be met through the GIDC water supply.	<ul style="list-style-type: none"> <li>Complied</li> <li>No ground water is used for the project and entire water requirement is met through GIDC supply.</li> <li>We have obtained approval for using 35000 KLD of Gujarat Industrial Development Corporation (GIDC) Water through water supply pipeline. Following are the GIDC offer cum allotment letter details:</li> </ul> <table border="1"> <thead> <tr> <th>Sr. No.</th> <th>Letter No.</th> <th>Water Supply</th> <th>Effluent Discharge</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GIDC/POJ/MKT/GRASIM/575 Dated 6th December 2006</td> <td>15.60 MLD</td> <td>12.48 MLD</td> </tr> <tr> <td>2</td> <td>GIDC/SE/CG/BRH/1236 Dated 29th December 2016</td> <td>25 MLD</td> <td>19.4 MLD</td> </tr> <tr> <td>3</td> <td>GIDC/ENG/CE/34 Dated 9th October 2017</td> <td>55-56 MLD</td> <td>--</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th rowspan="2">Month</th> <th>Water Consumption</th> </tr> <tr> <th>KL/Month</th> </tr> </thead> <tbody> <tr> <td>April-22</td> <td>483336</td> </tr> </tbody> </table>					Sr. No.	Letter No.	Water Supply	Effluent Discharge	1	GIDC/POJ/MKT/GRASIM/575 Dated 6th December 2006	15.60 MLD	12.48 MLD	2	GIDC/SE/CG/BRH/1236 Dated 29th December 2016	25 MLD	19.4 MLD	3	GIDC/ENG/CE/34 Dated 9th October 2017	55-56 MLD	--	Month	Water Consumption	KL/Month	April-22	483336
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Sr. No.	EC Conditions	Compliance status																
		<table border="1"> <tr><td>May-22</td><td>521930</td></tr> <tr><td>June-22</td><td>492324</td></tr> <tr><td>July-22</td><td>498513</td></tr> <tr><td>August-22</td><td>465180</td></tr> <tr><td>September-22</td><td>479133</td></tr> <tr><td><b>Total</b></td><td><b>2940417</b></td></tr> </table>	May-22	521930	June-22	492324	July-22	498513	August-22	465180	September-22	479133	<b>Total</b>	<b>2940417</b>				
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<b>Total</b>	<b>2940417</b>																	
3	The Industrial effluent generation from the project shall not exceed 25600 KLD after the proposed expansion.	<ul style="list-style-type: none"> <li>Complied</li> <li>The Industrial effluent generation does not exceed 25600 KLD.</li> </ul> <table border="1"> <thead> <tr> <th data-bbox="695 415 979 464">Month</th> <th data-bbox="979 415 1357 464">Industrial effluent KL/Month</th> </tr> </thead> <tbody> <tr><td>April-22</td><td>43639</td></tr> <tr><td>May-22</td><td>44822</td></tr> <tr><td>June-22</td><td>47254</td></tr> <tr><td>July-22</td><td>48573</td></tr> <tr><td>August-22</td><td>41941</td></tr> <tr><td>September-22</td><td>46587</td></tr> <tr><td><b>Total</b></td><td><b>272816</b></td></tr> </tbody> </table>	Month	Industrial effluent KL/Month	April-22	43639	May-22	44822	June-22	47254	July-22	48573	August-22	41941	September-22	46587	<b>Total</b>	<b>272816</b>
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<b>Total</b>	<b>272816</b>																	
4	The Industrial effluent shall be treated in the ETP consisting of Zinc Clarifier, tanks (3.0 Nos), Grit Chambers (3.0 Nos), Primary Clarifier (2.0 Nos), Equalization Tank, Biological Reactor, Final Clarifiers (2.0 Nos) Thickeners (2.0 Nos). Belt Press (2.0 Nos) and sludge Dryers (6.0 Nos). The ETP shall be operated regularly and efficiently so as to achieve the GPCB norms at the ETP outlet.	<ul style="list-style-type: none"> <li>Complied</li> <li>The industrial effluent is treated in the ETP consisting Zinc Clarifier, tanks (3.0 Nos.), Grit Chambers (3.0 Nos.), Primary Clarifier (2.0 Nos.), Equalization Tank, Biological Reactor, Final Clarifiers (2.0 Nos.) Thickeners (2.0 Nos.) Belt Press (2.0 Nos.) and sludge Dryers (6.0 Nos.).</li> <li>ETP is operated regularly and efficiently to achieve the prescribed GPCB norms at the ETP outlet.</li> </ul>																
 <p>ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED</p> <table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>DESCRIPTION</th> <th>DESIGN</th> <th>CHKD</th> <th>APPR</th> </tr> </thead> <tbody> <tr> <td>01</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>PROCESS FLOW DIAGRAM EFFLUENT TREATMENT PLANT</p> <p>GRASIM CELLULOSE A UNIT OF GRAMMERCHEMICALS LTD. WALTHEK, RAJASTHAN (INDIA)</p> <p>4   GPC ETP   03   001</p> <p>REV: 0</p>			REV	DATE	DESCRIPTION	DESIGN	CHKD	APPR	01									
REV	DATE	DESCRIPTION	DESIGN	CHKD	APPR													
01																		
5	The treated waste water conforming to the GPCB norms shall be discharged into the GIDC underground drain for its final disposal into deep sea.	<ul style="list-style-type: none"> <li>Complied</li> <li>The treated waste water conforming to the GPCB norms are discharging into GIDC underground pipeline for final disposal to deep sea through GIDC.</li> </ul>																
6	A Guard or polishing pond shall be provided before discharge of treated effluent in to GIDC drain. The Unit shall provide on line pH	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided 2 Nos. of guard ponds, each of (L: 90m, B: 60m, SWD: 6.5m) equivalent to 50,000 m3 capacity provided, (suitable for storage of 48 hrs) before discharge of treated effluent into GIDC drain.</li> </ul>																

Sr. No.	EC Conditions	Compliance status
	meter, TDS meter & TOC meter for online monitoring of the treated effluent.	<ul style="list-style-type: none"> <li>As per CCA condition, we have installed Online pH meter, flow meter &amp; TOC meter are provided for monitoring of the treated effluent.</li> </ul> Photograph of Guard Pond: 
7	The domestic waste water generation shall not exceed 800 KLD after the proposed expansion.	<ul style="list-style-type: none"> <li>Complied</li> <li>The domestic waste water generation does not exceed 800 KLD.</li> </ul>
8	The domestic waste water shall be treated in the adequate STP, the STP shall be operated regularly and efficiently so as to achieve the GPCB norms at the STP outlet.	<ul style="list-style-type: none"> <li>Complied</li> <li>STP is operated regularly and efficiently to achieve the GPCB norms at the STP outlet.</li> <li>We have installed Sewage Treatment Plant for treatment of domestic wastewater on the following specification:               <ul style="list-style-type: none"> <li>Design Capacity of STP: 1080 m<sup>3</sup>/day.</li> </ul>               Design Basis:                Flow: 1080 m<sup>3</sup>/day.                BOD: 250-270 mg/l.                COD: 400-600 mg/l                TSS: 400 mg/l                pH : 6 - 9             </li> </ul>
9	The treated domestic waste water conforming to the GPCB norms shall be utilized for gardening/ plantation within premises. However the rainy season, it shall be transferred to the ETP for its discharge into the GIDC underground drain.	<ul style="list-style-type: none"> <li>Complied</li> <li>Treated domestic wastewater from STP is utilized for gardening/ plantation within premises after conforming to GPCB prescribed standards.</li> <li>In rainy season, treated domestic water is transferred to the ETP for its discharge into the GIDC underground drain.</li> </ul>
10	The Unit shall provide metering facility at the inlet and outlet of the ETP & STP and maintain the record of the same.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided metering facility at inlet &amp; outlet of the ETP &amp; STP and maintain the records of the same regularly.</li> </ul>
11	Proper logbooks of ETP & STP operation and also showing the quantity of effluent generated, discharge into GIDC underground drain, utilized for plantation/ gardening etc. shall be maintained and furnished to the GPCB from time to time.	<ul style="list-style-type: none"> <li>Complied</li> <li>Proper logbooks of ETP &amp; STP operation is maintained, quantity of effluent generated &amp; discharge into GIDC drain and utilization in plantation/ gardening is maintained.</li> <li>Readings are maintained and submitted in the Monthly Patrak on GPCB XGN regularly.</li> </ul>
12	Regular performance evaluation of the ETP & STP shall be undertaken every	<ul style="list-style-type: none"> <li>Complied</li> <li>Regular performance evaluation of ETP &amp; STP is undertaken every year and checked for adequacy by</li> </ul>



Sr. No.	EC Conditions	Compliance status
	year to check its adequacy, through credible institutions like, L. D. College of Engineering, NPC or such other institutions of the similar reputed, and its records shall be maintained.	GPCB authorized 3 <sup>rd</sup> party Schedule-I Environment Auditor (M. S. Patel Department of Civil Engineering, CSPIT, CHARUSAT) and its record is maintained.
13	Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run-off, pre-treatment must be done to remove suspended matter.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Rainwater is recovered from flat roof tops and stored in a rain water harvesting well near admin building to conserve fresh water and reduce the water requirement from other sources.</li> <li>• We are exploring the possibilities for rainwater harvesting in nearby area in consultation with a Geo-hydrology expert.</li> <li>• Photograph of Rain water harvesting in school of Saladara village.</li> </ul>
		
14	The Unit shall join and participate financially and technically for any common environmental facility/ infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt./ GIDC.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are and will be participating financially and technically for any common environmental facility/ infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt./ GIDC.</li> <li>• We have also invested a special amount for a training &amp; development of education program that has been initiated jointly by Paryavaran Vikas Kendra-Rajkot and Paryavaran Mitra Ahmedabad.</li> </ul>
<b>A.2 AIR:</b>		
15	Process emission shall be controlled with the air pollution control equipment (APCE) as mentioned below. <ul style="list-style-type: none"> <li>a. Poly Aluminum Chloride Plant - Water scrubber for absorption of HCl vapor.</li> <li>b. Caustic Soda Plant- Water scrubber having bubble cap tray system for absorption of HCl vapors &amp; three tower systems with alkali scrubber for absorption of unreacted chlorine to produce</li> </ul>	<p>Complied</p> <ul style="list-style-type: none"> <li>a. We have provided water scrubber for absorption of HCl vapor.</li> <li>b. We have provided Water scrubber having bubble cap tray system for absorption of HCl vapors &amp; three tower systems with alkali scrubber in Sodium Hypo Stack. Online monitoring system is also provided and it is connected to CPCB &amp; GPCB server.</li> <li>c. We have provided Alkali Scrubber for the absorption of Cl<sub>2</sub> emission in Bleaching Powder Plant, Aluminum Chloride Plant &amp; Chlorinated Paraffin Plant.</li> <li>d. Double Contact Double Absorption (DCDA) system is installed in Sulphuric Acid manufacturing. We have provided with 2-stage scrubber system for scrubbing SO<sub>2</sub> using alkali. With this scrubbing system, we are</li> </ul>

Sr. No.	EC Conditions	Compliance status														
	<p>sodium Hypo Chlorite.</p> <p>c. Bleaching Powder Plant, Aluminum Chloride Plant and Chlorinated Paraffin Plant -Alkali scrubbers of absorption of Cl<sub>2</sub> emission.</p> <p>d. Sulphuric Acid Plant- DCDA system in manufacturing and scrubbing system.</p> <p>e. Chlorosulphonic Acid Plant- Acid scrubber for absorption of SO<sub>3</sub> emissions.</p>	<p>meeting the emission norms prescribed for sulphuric acid plant.</p> <p>e. Chlorosulphonic Acid project is not implemented in chlor-alkali unit yet.</p>														
16	<p>The APCE shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB at stack outlets. Adequate stack height as per prevailing norms shall be provided for the process emissions.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>The Air Pollution Control Equipment (APCE) attached with different stacks are operated efficiently and effectively to achieve the GPCB prescribed norms.</li> <li>We have provided adequate stack height as per prevailing norms for the process emissions.</li> </ul>														
17	<p>Natural gas shall be used as a raw material in the CS<sub>2</sub> Plant. Thus, there shall be no CS<sub>2</sub> &amp; H<sub>2</sub>S emission from the CS<sub>2</sub> Plant.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>We have upgraded Sulphur recovery system by installation of an additional scrubber so as to ensure that no CS<sub>2</sub> &amp; H<sub>2</sub>S get emitted from CS<sub>2</sub> Plant.</li> </ul>														
18	<p>Imported Coal to the tune of 1700 TPD shall be used as a fuel in the proposed 96 MW Power Plant. Two stacks, each of 125 m height shall be provided for the proposed power plant.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>Coal consumption for the period Apr' 22 to Sept' 22 is provided below:</li> </ul> <table border="1" data-bbox="695 1104 1357 1310"> <thead> <tr> <th data-bbox="695 1104 1045 1157">Month</th> <th data-bbox="1045 1104 1357 1157">Coal MT/ Month</th> </tr> </thead> <tbody> <tr> <td data-bbox="695 1157 1045 1182">April-22</td> <td data-bbox="1045 1157 1357 1182">46821</td> </tr> <tr> <td data-bbox="695 1182 1045 1207">May-22</td> <td data-bbox="1045 1182 1357 1207">57524</td> </tr> <tr> <td data-bbox="695 1207 1045 1232">June-22</td> <td data-bbox="1045 1207 1357 1232">55110</td> </tr> <tr> <td data-bbox="695 1232 1045 1257">July-22</td> <td data-bbox="1045 1232 1357 1257">60152</td> </tr> <tr> <td data-bbox="695 1257 1045 1283">August-22</td> <td data-bbox="1045 1257 1357 1283">48972</td> </tr> <tr> <td data-bbox="695 1283 1045 1310">September-22</td> <td data-bbox="1045 1283 1357 1310">46594</td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Two stacks of 125 m Ht are installed for 96 MW Power plant.</li> </ul>	Month	Coal MT/ Month	April-22	46821	May-22	57524	June-22	55110	July-22	60152	August-22	48972	September-22	46594
Month	Coal MT/ Month															
April-22	46821															
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19	<p>High Efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9 % shall be installed for control of flue gas emission from power plant. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in the plant DCS in such a way that if emission from ESP exceeds the specified standard, Utilization of Boiler Capacity shall reduce so that flue gas emission from the stack meets with the specified norms or boiler shut down totally.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>High Efficiency Electro Static Precipitators (ESP) &gt; 99.9 % efficiency installed for control of flue gas emission from power plant.</li> <li>The ESP is operated efficiently to meet the prescribed norms of GPCB for particulate matter and data has integrated in the Distributed Control System (DCS).</li> <li>Online monitoring system is also provided at power plant stack and it is connected to CPCB &amp; GPCB server.</li> <li>The control system has been designed and integrated in the plant DCS in such a way that if emission from ESP exceeds the specified standard, utilization of Boiler Capacity is reduced.</li> </ul>														

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	<ul style="list-style-type: none"> <li>Monthly Analysis Report from Unistar Environment &amp; Research Lab Pvt. Ltd. refer as <b>Annexure-3</b></li> <li>Agency &amp; Address: Unistar Environment &amp; Research Lab Pvt. Ltd. GIDC Char Rasta, Vapi</li> <li>NABL: TC-7753</li> <li>Details of instrument Used for Monitoring:</li> </ul>	<table border="1" data-bbox="334 317 1357 632"> <thead> <tr> <th rowspan="2">Month/ Parameters</th> <th colspan="3">Power Plant Stack 1</th> <th colspan="3">Power Plant Stack 2</th> </tr> <tr> <th>SPM (mg/Nm3)</th> <th>SO2 (ppm)</th> <th>NOx (ppm)</th> <th>SPM (mg/Nm3)</th> <th>SO2 (ppm)</th> <th>NOx (ppm)</th> </tr> </thead> <tbody> <tr> <td>Apr-22</td> <td>28</td> <td>39</td> <td>36</td> <td>22</td> <td>35</td> <td>38</td> </tr> <tr> <td>May-22</td> <td>26</td> <td>41</td> <td>33</td> <td>20</td> <td>37</td> <td>36</td> </tr> <tr> <td>June-22</td> <td>20</td> <td>33</td> <td>35</td> <td>24</td> <td>30</td> <td>33</td> </tr> <tr> <td>July-22</td> <td>18</td> <td>36</td> <td>31</td> <td>27</td> <td>34</td> <td>38</td> </tr> <tr> <td>Aug-22</td> <td>21</td> <td>30</td> <td>34</td> <td>30</td> <td>36</td> <td>34</td> </tr> <tr> <td>Sept-22</td> <td>16</td> <td>37</td> <td>40</td> <td>18</td> <td>32</td> <td>38</td> </tr> <tr> <td><b>Min</b></td> <td><b>16</b></td> <td><b>30</b></td> <td><b>31</b></td> <td><b>18</b></td> <td><b>30</b></td> <td><b>33</b></td> </tr> <tr> <td><b>Max</b></td> <td><b>26</b></td> <td><b>41</b></td> <td><b>40</b></td> <td><b>30</b></td> <td><b>37</b></td> <td><b>38</b></td> </tr> <tr> <td><b>Avg.</b></td> <td><b>20</b></td> <td><b>35</b></td> <td><b>35</b></td> <td><b>25</b></td> <td><b>33</b></td> <td><b>36</b></td> </tr> </tbody> </table>	Month/ Parameters	Power Plant Stack 1			Power Plant Stack 2			SPM (mg/Nm3)	SO2 (ppm)	NOx (ppm)	SPM (mg/Nm3)	SO2 (ppm)	NOx (ppm)	Apr-22	28	39	36	22	35	38	May-22	26	41	33	20	37	36	June-22	20	33	35	24	30	33	July-22	18	36	31	27	34	38	Aug-22	21	30	34	30	36	34	Sept-22	16	37	40	18	32	38	<b>Min</b>	<b>16</b>	<b>30</b>	<b>31</b>	<b>18</b>	<b>30</b>	<b>33</b>	<b>Max</b>	<b>26</b>	<b>41</b>	<b>40</b>	<b>30</b>	<b>37</b>	<b>38</b>	<b>Avg.</b>	<b>20</b>	<b>35</b>	<b>35</b>	<b>25</b>	<b>33</b>	<b>36</b>
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20	<p>There shall be one extra field in the ESP to ensure that even though one field goes out of order, the prescribed standards of PM are met with. In case failure of two or more fields of the ESP, the unit shall immediately shut down the Power Plant.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>The ESPs are designed for all five fields working and Suspended Particulate Matter emission from stack 30 mg/Nm3. With (n-1) four fields working, the designed Suspended Particulate Matter emission from stack is in the prescribed standards.</li> <li>In case failure of two or more fields of the ESP, we will immediately shut down the Power Plant.</li> </ul>																																																																												
21	<p>On line monitoring system shall be installed to monitor at least SOX &amp; PM concentrations in the flue gas emission and the results shall be displayed at strategic locations in the premises.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>Online monitoring system installed at DCS/ Control room of Power plant, displaying the values of SOX &amp; PM.</li> <li>Also same has been displayed at the board available at plant main gate.</li> </ul>																																																																												
22	<p>The company shall prepare schedule, carry regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>We have prepared schedule and carry out for regular preventive maintenance of mechanical and electrical parts of ESPs under the responsibility of Sr. Maintenance Engineer of the company.</li> </ul>																																																																												
23	<p>Adequate air pollution control system shall be provided as proposed for control of fugitive emission viz. water sprinklers at all coal transfer points and truck unloading points. Dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>Water sprinkler (14 nos.) system has been provided to control the fugitive emission at coal storage, coal transfer points and truck unloading area.</li> <li>We have provided dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.</li> <li>Fly ash is stored in silo and transferred in close trucks to avoid any dust emission.</li> </ul>																																																																												
24	<p>The fugitive emission in the work zone environment shall be maintained. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety &amp; Health).</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>Fugitive emissions in work zone environment &amp; storage area are monitored by third party on monthly basis and are well within GPCB stipulated norms.</li> </ul>																																																																												
25	Regular performance	<ul style="list-style-type: none"> <li>Complied</li> </ul>																																																																												

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	evaluation of air pollution control system shall be undertaken every year to check its adequacy, through credible institutions like, L. D. College of Engineering, NPC or such other institutions of the similar reputed, and its records shall be maintained.	<ul style="list-style-type: none"> <li>Regular performance evaluation of ETP &amp; STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor (Dr. Jivraj Mehta Institute of Technology) and its record is maintained.</li> </ul>				
26	Regular monitoring of ground level concentration of CS <sub>2</sub> , SO <sub>2</sub> , NO <sub>x</sub> , Cl <sub>2</sub> , HCl, PM <sub>10</sub> and PM <sub>2.5</sub> shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by Gujarat Pollution Control Board. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with GPCB.	<ul style="list-style-type: none"> <li>Complied</li> <li>Regular monitoring of ground level concentration of CS<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, Cl<sub>2</sub>, HCl, PM<sub>10</sub> and PM<sub>2.5</sub> is done by third party in the impact zone and its records are maintained.</li> <li>If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures will be provided immediately.</li> <li>The location of the monitoring stations and frequency of monitoring are decided in consultation with GPCB. There are 4 nos. of ambient air quality monitoring stations covering all directions in nearby villages (Derol, Sarnar, Argama &amp; Vilayat).</li> </ul>				
<b>A.3 HAZARDOUS/ SOLID WASTE:</b>						
27	The company must strictly comply with the rules and regulations with regard to handling and disposal of Hazardous waste in accordance with the Hazardous waste (Management, Handling and transboundary movement) rules 2008, as may be amended from time to time. Authorization from the GPCB must be obtained for collection/ treatment/ storage/ disposal of hazardous wastes.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are member of TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd. Following is the BEIL membership details: <table border="1" data-bbox="690 1163 1360 1245"> <tr> <td data-bbox="690 1163 1008 1213"><b>Membership No.</b></td> <td data-bbox="1008 1163 1360 1213">OTH/133 dated 02/03/2022</td> </tr> <tr> <td data-bbox="690 1213 1008 1245"><b>Booked Quantity</b></td> <td data-bbox="1008 1213 1360 1245">31000 MT/Year</td> </tr> </table> </li> <li>Copy of the membership certificate is attached as <b>Annexure-4.</b></li> </ul>	<b>Membership No.</b>	OTH/133 dated 02/03/2022	<b>Booked Quantity</b>	31000 MT/Year
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28	The Hazardous wastes shall be stored in separate designated hazardous waste storage facility with pucca bottom and leachate location facility, before its disposal.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided impervious layer with pucca bottom and leachate location facility in the separate hazardous waste storage area for storing before disposal.</li> </ul>				
29	The Unit shall dispose its ETP sludge, Brine/ process sludge, spent resin, spent catalyst and spent carbon at the nearest common TSDF. The unit shall obtain membership of the nearest common TSDF for disposal of the aforesaid	<ul style="list-style-type: none"> <li>Complied</li> <li>We are member of TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd. Following is the BEIL membership details: <table border="1" data-bbox="690 1827 1360 1908"> <tr> <td data-bbox="690 1827 1008 1877"><b>Membership No.</b></td> <td data-bbox="1008 1827 1360 1877">OTH/133 dated 02/03/2022</td> </tr> <tr> <td data-bbox="690 1877 1008 1908"><b>Booked Quantity</b></td> <td data-bbox="1008 1877 1360 1908">31000 MT/Year</td> </tr> </table> </li> <li>Copy of the membership certificate is attached as <b>Annexure-4.</b></li> </ul>	<b>Membership No.</b>	OTH/133 dated 02/03/2022	<b>Booked Quantity</b>	31000 MT/Year
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30	Discarded containers/ barrels/ bags/ liners shall be either reused or sold only to the authorized recyclers after decontamination	<ul style="list-style-type: none"> <li>Complied</li> <li>We are disposing Discarded containers/ barrels/ bags/ liners to GPCB approved registered recyclers only.</li> </ul>																						
31	Used Oils can be sold only to the registered recyclers.	<ul style="list-style-type: none"> <li>Complied</li> <li>Used Oil is sold to Registered recyclers only.</li> </ul>																						
32	Fly ash to be handled in dry site and handling of the fly ash shall be done through a closed pneumatic system.	<ul style="list-style-type: none"> <li>Complied</li> <li>Fly ash is handled in dry site and handled through closed pneumatic system.</li> </ul> <table border="1" data-bbox="690 506 1360 783"> <thead> <tr> <th data-bbox="690 506 927 533">Month</th> <th data-bbox="927 506 1360 533">Fly ash Generation</th> </tr> <tr> <td data-bbox="690 533 927 560"></td> <th data-bbox="927 533 1360 560">In MT</th> </tr> </thead> <tbody> <tr> <td data-bbox="690 560 927 588">April-22</td> <td data-bbox="927 560 1360 588">6754</td> </tr> <tr> <td data-bbox="690 588 927 615">May-22</td> <td data-bbox="927 588 1360 615">7725</td> </tr> <tr> <td data-bbox="690 615 927 642">June-22</td> <td data-bbox="927 615 1360 642">3002</td> </tr> <tr> <td data-bbox="690 642 927 669">July-22</td> <td data-bbox="927 642 1360 669">5594</td> </tr> <tr> <td data-bbox="690 669 927 697">August-22</td> <td data-bbox="927 669 1360 697">4221</td> </tr> <tr> <td data-bbox="690 697 927 724">September-22</td> <td data-bbox="927 697 1360 724">3779</td> </tr> <tr> <td data-bbox="690 724 927 751"><b>Min.</b></td> <td data-bbox="927 724 1360 751"><b>3002</b></td> </tr> <tr> <td data-bbox="690 751 927 779"><b>Max.</b></td> <td data-bbox="927 751 1360 779"><b>7725</b></td> </tr> <tr> <td data-bbox="690 779 927 806"><b>Average</b></td> <td data-bbox="927 779 1360 806"><b>5179</b></td> </tr> </tbody> </table>	Month	Fly ash Generation		In MT	April-22	6754	May-22	7725	June-22	3002	July-22	5594	August-22	4221	September-22	3779	<b>Min.</b>	<b>3002</b>	<b>Max.</b>	<b>7725</b>	<b>Average</b>	<b>5179</b>
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33	Atleast seven days storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed for storage of fly ash.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided 2 nos. Silo (350 MT each) for storage of fly ash at the site for 7 days.</li> <li>No ash pond is constructed for storage of fly ash.</li> </ul>																						
34	The ash shall be supplied to the manufacturers of ash based products such as cement, concrete block, panels, etc. The unit shall strictly comply with the fly ash notification under the E. P. Act and it shall be ensured that there is 100% utilization of ash to be generated from the unit.	<ul style="list-style-type: none"> <li>Complied</li> <li>The fly ash is supplied to the manufacturer of ash based products (Manufacturer of Cement/ Bricks). 100 % fly ash is utilized.</li> </ul> <table border="1" data-bbox="690 1087 1360 1367"> <thead> <tr> <th data-bbox="690 1087 927 1115">Month</th> <th data-bbox="927 1087 1360 1115">Fly ash Generation</th> </tr> <tr> <td data-bbox="690 1115 927 1142"></td> <th data-bbox="927 1115 1360 1142">In MT</th> </tr> </thead> <tbody> <tr> <td data-bbox="690 1142 927 1169">April-22</td> <td data-bbox="927 1142 1360 1169">6754</td> </tr> <tr> <td data-bbox="690 1169 927 1197">May-22</td> <td data-bbox="927 1169 1360 1197">7725</td> </tr> <tr> <td data-bbox="690 1197 927 1224">June-22</td> <td data-bbox="927 1197 1360 1224">3002</td> </tr> <tr> <td data-bbox="690 1224 927 1251">July-22</td> <td data-bbox="927 1224 1360 1251">5594</td> </tr> <tr> <td data-bbox="690 1251 927 1278">August-22</td> <td data-bbox="927 1251 1360 1278">4221</td> </tr> <tr> <td data-bbox="690 1278 927 1306">September-22</td> <td data-bbox="927 1278 1360 1306">3779</td> </tr> <tr> <td data-bbox="690 1306 927 1333"><b>Min.</b></td> <td data-bbox="927 1306 1360 1333"><b>3002</b></td> </tr> <tr> <td data-bbox="690 1333 927 1360"><b>Max.</b></td> <td data-bbox="927 1333 1360 1360"><b>7725</b></td> </tr> <tr> <td data-bbox="690 1360 927 1367"><b>Average</b></td> <td data-bbox="927 1360 1360 1367"><b>5179</b></td> </tr> </tbody> </table>	Month	Fly ash Generation		In MT	April-22	6754	May-22	7725	June-22	3002	July-22	5594	August-22	4221	September-22	3779	<b>Min.</b>	<b>3002</b>	<b>Max.</b>	<b>7725</b>	<b>Average</b>	<b>5179</b>
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<b>A.4 SAFETY:</b>																								
35	Provisions of the Manufacturing, Storage & Import of Hazardous Chemicals Rules, 1986 & Factory act 1948 shall be compiled with.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are following MSIHC Rules, 1989 and Factories Act, 1948.</li> <li>All the chemicals/ materials are stored in the storage tanks with required material of Construction.</li> <li>Sufficient dykes are provided at Tank storages as per chemical handling and storage guidelines.</li> <li>Fire Hydrant system is provided nearby storage and handling area for emergency purpose.</li> <li>Safety trainings are provided to all the operators and workers working in such areas.</li> <li>Hazard Identification and Risk Assessment (JSA) of all activities carried out and SOPs are prepared accordingly.</li> <li>Safety showers are provided nearby storage areas.</li> </ul>																						
36	A well designed fire hydrant system shall be installed as per the prevailing standards.	<ul style="list-style-type: none"> <li>Complied</li> <li>Fire hydrant system installed as per TAC (Tariff Advisory Committee) guidelines.</li> <li>CA Plant</li> </ul>																						



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		Fire Water Reservoir Storage Capacity: 3000 KL Fire Tender Details: Water capacity: 5000 liter Foam capacity: 500 liter Emergency Rescue Vehicle for attending outside emergencies: 1 No. Single Headed Hydrant: 100 Nos Fire Hose Reel: 22 Nos DCP Extinguisher: 100 kg (50 kg × 2 Nos.), CO2 Extinguishers: 22.5 kg × 4 Nos. • CMS plant Fire Foam Tender Details: Water capacity: 4000 liter Foam capacity: 2000 liter Emergency Rescue Vehicle for attending outside emergencies: 1 No. Fire Water Reservoir Storage Capacity: 2950 KL Fire extinguisher total 95 nos. ABC: 68 nos. CO2: 17 nos. Foam type: 10 nos. Hydrant: 33 nos. Monitor: 5 nos. Hose reel: 10 nos. Foam capacity: 7500 L																					
37	All the risk mitigation measures, general & specific recommendations mentioned in Chapter 6 of the EIA Report shall be implemented.	<ul style="list-style-type: none"> <li>Complied</li> <li>As per Chapter 6 of the EIA, we have identified the risks and take mitigation measures accordingly.</li> </ul>																					
	<table border="1"> <thead> <tr> <th data-bbox="326 1073 399 1129">Sr. No.</th> <th data-bbox="399 1073 935 1129">Risk Mitigation Measure - Recommendations</th> <th data-bbox="935 1073 1362 1129">Compliance Status</th> </tr> </thead> <tbody> <tr> <td data-bbox="326 1129 399 1266">1</td> <td data-bbox="399 1129 935 1266">Surrounding population shall be made aware of the safety precautions to be taken in the event of any mishap within the plant. This can effectively be done by conducting the training awareness programs.</td> <td data-bbox="935 1129 1362 1266">We have distributed "Disclosure of Information" as per Section-41 B as per Factories Act to the surrounding population and conducted training programs for awareness.</td> </tr> <tr> <td data-bbox="326 1266 399 1402">2</td> <td data-bbox="399 1266 935 1402">Critical switches and alarm should be always kept in line.</td> <td data-bbox="935 1266 1362 1402">Our plant is operated by Distributed Control System (DCS) and all safety interlocks are provided and ensured its compliance by DCS operator on continuous basis.</td> </tr> <tr> <td data-bbox="326 1402 399 1518">3</td> <td data-bbox="399 1402 935 1518">Fire detectors should be installed near those units which handle large amount of flammable material and operate under high temperature and pressure.</td> <td data-bbox="935 1402 1362 1518">Fire detectors are installed near those units which handle large amount of flammable material and operate under high temperature and pressure.</td> </tr> <tr> <td data-bbox="326 1518 399 1654">4</td> <td data-bbox="399 1518 935 1654">A wind direction pointer should also be installed at storage site so that in an emergency the wind direction can be directly seen and downwind population cautioned.</td> <td data-bbox="935 1518 1362 1654">We have provided wind indicators at 20 locations in factory premises so that in an emergency the wind direction can be directly seen and downwind population cautioned.</td> </tr> <tr> <td data-bbox="326 1654 399 1738">5</td> <td data-bbox="399 1654 935 1738">Shut off and isolation valves should be easily approachable in emergencies.</td> <td data-bbox="935 1654 1362 1738">All shut off and isolation valves are located as such that it can be easily approachable in emergencies.</td> </tr> <tr> <td data-bbox="326 1738 399 1839">6</td> <td data-bbox="399 1738 935 1839">Material Safety Data Sheet and Toxicological Data should be displayed at the facility.</td> <td data-bbox="935 1738 1362 1839">Material Safety Data Sheet and Toxicological Data are displayed in Hindi and English languages at the facility.</td> </tr> </tbody> </table>	Sr. No.	Risk Mitigation Measure - Recommendations	Compliance Status	1	Surrounding population shall be made aware of the safety precautions to be taken in the event of any mishap within the plant. This can effectively be done by conducting the training awareness programs.	We have distributed "Disclosure of Information" as per Section-41 B as per Factories Act to the surrounding population and conducted training programs for awareness.	2	Critical switches and alarm should be always kept in line.	Our plant is operated by Distributed Control System (DCS) and all safety interlocks are provided and ensured its compliance by DCS operator on continuous basis.	3	Fire detectors should be installed near those units which handle large amount of flammable material and operate under high temperature and pressure.	Fire detectors are installed near those units which handle large amount of flammable material and operate under high temperature and pressure.	4	A wind direction pointer should also be installed at storage site so that in an emergency the wind direction can be directly seen and downwind population cautioned.	We have provided wind indicators at 20 locations in factory premises so that in an emergency the wind direction can be directly seen and downwind population cautioned.	5	Shut off and isolation valves should be easily approachable in emergencies.	All shut off and isolation valves are located as such that it can be easily approachable in emergencies.	6	Material Safety Data Sheet and Toxicological Data should be displayed at the facility.	Material Safety Data Sheet and Toxicological Data are displayed in Hindi and English languages at the facility.	
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4	A wind direction pointer should also be installed at storage site so that in an emergency the wind direction can be directly seen and downwind population cautioned.	We have provided wind indicators at 20 locations in factory premises so that in an emergency the wind direction can be directly seen and downwind population cautioned.																					
5	Shut off and isolation valves should be easily approachable in emergencies.	All shut off and isolation valves are located as such that it can be easily approachable in emergencies.																					
6	Material Safety Data Sheet and Toxicological Data should be displayed at the facility.	Material Safety Data Sheet and Toxicological Data are displayed in Hindi and English languages at the facility.																					
38	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling	<ul style="list-style-type: none"> <li>Complied</li> <li>We have developed job safety analysis procedure and trainings have been provided to all employees. Proper controls are provided to mitigate any emergency.</li> </ul>																					

Sr. No.	EC Conditions	Compliance status
	of toxic/ hazardous chemicals, especially chlorine, hydrogen, CS <sub>2</sub> , HCl etc.	
39	Storage and use of hazardous chemicals shall be minimized to the extent possible and all necessary precautions shall be taken to mitigate the risk generated out of it. Storage of hazardous chemicals shall be taken to mitigate the risk generated out of it. Storage of hazardous chemicals shall be in multiple small capacity tanks/ containers instead of one single large tank for safety purpose.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided tanks and vessels to storage hazardous chemicals with proper controls such as Dyke wall, Level Transmitters, safety valves and interlocks are provided in DCS.</li> </ul>
40	During material transfer, spillage shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• For material transfer, we have provided pipelines of required MOC in the plant.</li> <li>• We have block the storm water drain connection point in the plant areas.</li> </ul>
41	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/ dyke walls shall be provided for storage tanks for Hazardous chemicals. Close handling system for chemicals shall be provided.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided suitable tanks and vessels to storage hazardous chemicals with proper controls such as Dyke wall, Level Transmitters, safety valves and interlocks are provided in DCS.</li> </ul>
42	Tie up shall be done with nearby health care unit for seeking immediate medical attention in the case of emergency, regular medical checkup of the workers and keeping its records etc.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• OHC with availability of para-medical staff &amp; ambulance is available round the clock.</li> <li>• We have also tied up with M/s. Apex Multispecialty Hospital at Bharuch.</li> <li>• Periodic health checkup of all workers is also carried out regularly as per Factory act requirement.</li> </ul>
43	Personal protective equipment shall be provided to workers and its usage shall be ensured and supervised.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided proper job specific PPEs to all the workers and its usage is ensured and supervised regularly.</li> </ul>
44	First aid box and required antidote for the chemicals used in the unit shall be made readily available in adequate quantity.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have 58 Nos. of first aid boxes at different locations of our plant containing required antidote for the chemicals used in the plant.</li> </ul>
45	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Training is imparted to all the workers at regular intervals for safety and health during chemical handling, Emergency Preparedness, etc.</li> <li>• We have engaged DuPont Safety for implementation of Work place safety &amp; Process Safety management system and to provide training &amp; Awareness of employees in the site.</li> <li>• We have made six different sub committees of Work place safety and Process safety management subcommittees. APEX Committee headed by Unit Head,</li> </ul>

Sr. No.	EC Conditions	Compliance status
		functional Head and department heads to develop and implement safety management system.
46	Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical examination for all the workers shall be undertaken as per the factories Act & rules.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Occupational health surveillance of the workers is done and its records are maintained.</li> <li>• Six monthly pre-employment and periodical examination for all the workers is being carried out.</li> </ul>
47	Handling and charging of the chemicals shall be done in such a manner that minimal human exposure occurs.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have DCS operated plan which requires minimum Human intervention though we have provided suitable means of PPEs to avoid exposure.</li> </ul>
48	Transportation of Hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are following Central Motor Vehicles Rule - 9 for Hazardous chemical transportation.</li> </ul>
<b>A.5 NOISE:</b>		
49	To minimize the noise pollution the following noise control measures shall be implemented:	
-	Selection of any new plant equipment shall be made with specification of low noise levels	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have procured and installed standardize equipment in our plant. We are regularly monitoring noise level of the plant area.</li> </ul>
-	Manufacturers/ suppliers of major noise generating machines/ equipments like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible supply and installation to mitigate the noise generation and to comply with the national/ international regulatory norms with respect to noise generation for individual units.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• During our procurement, we are instructing our Manufacturers/ suppliers to make required design modifications in equipments like air compressors, feeder pumps, turbine generators, etc. to mitigate the noise generation and to comply with the national/ international regulatory norms.</li> <li>• We are regularly monitoring noise level of the plant area as per schedule.</li> </ul>
-	Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Regular maintenance of machinery and vehicles are undertaken to reduce the noise impact and also considered upgraded version equipment with reputed vendors to ensure minimal noise impact.</li> </ul>
-	Noise suppression measures such as enclosures, buffers and/ or protective measures shall be provided.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Noise suppression measures have been provided at D. G. Sets with acoustic enclosures, utility compressors in well-ventilated area with noise protection.</li> </ul>
-	Employees shall be provided with ear protection measures like earplugs or earmuffs.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Earplugs and earmuffs are provided to all the workers working in high noise area and we have displayed caution notice 'High Noise Area - Use ear protection' in such locations.</li> </ul>
-	Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Proper oiling, lubrication and preventive maintenance is carried out of the machineries and equipment to reduce noise generation.</li> <li>• We are following different maintenance practices such</li> </ul>



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		as Preventive Maintenance, Predictive Maintenance, Condition based Maintenance and also maintenance prevention with joint collaboration with vendors/ new technology at our site.
-	Construction of equipment generating minimum noise and vibration shall be chosen.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have procured and installed equipment like compressors of the companies such as Kirloskar, Ingersoll pneumatic etc. with silencers and Pumps such as Micro finish, Rajedia, Johnson, Trittech etc.</li> </ul>
-	Ear plug and muffs shall be made compulsory for the construction workers working near the noise generating activities/ machines/ equipment.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Earplugs and earmuffs are provided to all the workers working in high noise area and we have displayed caution notice 'High Noise Area - Use ear protection' in such locations</li> </ul>
-	Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Vehicles and construction equipment with internal combustion engines without proper silencer are not allowed to operate at our site.</li> </ul>
-	Construction equipment meeting the norms specified by EP Act.1986 shall only be used.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Construction equipment meeting the norms specified by EP Act 1986 are used.</li> </ul>
-	Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Noise control equipment such as Silencers are provided in Emergency D. G. sets which are used as power back up in case of emergency and any other potential areas are also considered with the same.</li> </ul>
-	Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided silencers/ mufflers on such noise generator equipment to reduce the noise levels.</li> </ul>
50	The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, variation dampers etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act and rules. Work place noise levels for workers shall be as per the factory act and rules.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• The overall noise level in and around the plant area is kept well within the prescribed standards by providing noise control measures including acoustic insulation, silencers, enclosures etc. on all sources of noise generation.</li> <li>• The ambient noise levels are conforming to the standards prescribed under the Environment (Protection) Act and Rules.</li> </ul>
<b>A.6 ENERGY CONSERVATION:</b>		
51	The project proponent shall install energy efficient devices and appliances conforming to the Bureau of Energy Efficiency norms.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have installed energy efficient devices and appliances as per the Bureau of Energy Efficiency norms.</li> </ul>
52	The energy audit shall be conducted at regular intervals and the recommendations of	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Energy Audit of Chlor-alkali &amp; Value Added Products plant is carried out on regular basis by central technical</li> </ul>



Sr. No.	EC Conditions	Compliance status
	the audit report shall be implemented.	cell.
53	The project proponent shall implement the application of solar energy which shall be utilized as solar lighting for illumination of common areas, lighting of internal roads and passages in addition to utilization of solar water heating system.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Solar landscaping lights are installed for Admin Building and also in other plant areas.</li> </ul> 
54	The transformers and motors shall have minimum efficiency of 85%.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• All transformers are of higher efficiency &gt; 98 %</li> </ul>
55	Variable frequency drives shall be installed.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• 80 nos. of Variable frequency drives are installed for energy saving.</li> </ul>
56	Energy conservation measures shall include use of electronic lighting system. Use of CFL tubes to minimize energy use. Use of programmable timers for pumping system and lighting. Water level controllers for water pumps, centralized cooling etc.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• All lights are energy efficient MH lamps and we are replacing the same with LED lights. (50 % replacement is already done).</li> </ul>
57	<p>Energy saving practices as follows shall be practiced.</p> <ul style="list-style-type: none"> <li>• Constant monitoring of energy consumption and defining targets for energy conservation</li> <li>• Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort level</li> <li>• Use of solar cells for lighting</li> <li>• Use of solar water heater for canteen &amp; washing area</li> <li>• Proper load factor shall be maintained by the unit</li> <li>• Provision of day light roof to utilize maximum natural light in the production plant instead of electrical lighting.</li> <li>• Use of electronic ballast to save energy</li> <li>• Automatic switching system for lighting &amp; water tank pumping shall be used</li> </ul>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Energy saving practices and initiatives are in place.</li> <li>• Solar landscaping lights are installed for Admin Building and also in other plant areas.</li> </ul> 

Sr. No.	EC Conditions	Compliance status
	<ul style="list-style-type: none"> <li>• To the maximum extent possible and technically feasible, energy efficient equipment like motors, pumps, air conditioning systems shall be selected</li> <li>• Gravity flow shall be preferred wherever possible to save pumping energy</li> <li>• Promoting awareness on energy conservation</li> <li>• Training to the staff on methods of energy conservation and to be vigilant for this</li> </ul>	
<b>A.6 CLEANER PRODUCTION AND WASTE MINIMISATION</b>		
58	The unit shall undertake the cleaner production Assessment study through a reputed institute/ organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have carried out Cleaner Production Assessment studies by Gujarat Cleaner Production Centre (Established by Industries &amp; Mines Department, Government of Gujarat).</li> <li>• We have received participation certificate from Gujarat Cleaner Production Award for the year 2014-2015 and 2015-2016.</li> <li>• We have also applied for Gujarat Cleaner Production Award 2016-2017.</li> </ul>
59	The company shall undertake following waste minimization measures:	
a)	Metering and control of quantities of active ingredients to minimize waste.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided flow meters for wastewater generation.</li> <li>• We have installed RO system for reducing the effluent 192 KLD. Recycle steam and vapor condensate used in process &amp; cooling tower.</li> <li>• We use super washed salt to reduce chemical consumption in turn to reduce solid waste generation.</li> </ul>
b)	Reuse of by-products from the process as raw materials or raw material substitute in other process.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are using Hydrogen as a clean fuel for producing Caustic Soda flakes &amp; Poly Aluminum Chloride.</li> <li>• Use of waste chlorine gas for producing 32% HCl. Vapor condensate from flaking plant treated by polishing unit and finally used as DM water.</li> <li>• By-product HCl from CPW Plant is used in PAC plant as raw material.</li> </ul>
c)	Use of automated and enclosed filling to minimize spillages.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are using automated and closed filling to minimize spillages.</li> </ul>
d)	Use of close feed system into batch reactors.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are using close feed system into batch reactors.</li> </ul>
e)	Dry cleaning/ mopping of floor instead of floor washing.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Floors are cleaned through mopping.</li> </ul>
f)	Use of light pressure hoses for cleaning to reduce waste water generation.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Light pressure hoses are used for cleaning and reduce the wastewater.</li> </ul>
g)	Regular preventive maintenance for avoiding leakage, spillage etc.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Preventive maintenance schedule is strictly complied to ensure the health of the equipment &amp; pipelines.</li> <li>• Chlorine liquid &amp; gas pipelines thickness is being measured &amp; monitored regularly.</li> </ul>

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<b>A.7 GREEN BELT AND OTHER PLANTATION</b>																																					
60	The unit shall develop green belt with premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road side and suitable open areas in the GIDC / local bodies / GPCB and submit an action plan of plantation for next three years to the GPCB.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have appointed a Horticulture Expert to develop &amp; maintain the greenbelt properly.</li> <li>We have already started plantation and about 5000 saplings have been planted in &amp; around the boundary of plant during this monsoon.</li> </ul>																																			
61	Minimum of 15000 trees shall be planted every year up to five years and budget of Rs 10 lacs per annum shall be earmarked for the greenbelt development, as committed by the project proponent.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have planted 20,000 nos. of trees as a green belt development in the premises and separate budget is earmarked for the green belt development project.</li> <li>5 Years rolling plan with the budget of Rs. 50 Lakh is prepared for green development.</li> <li>Out of 567 Acres, Grasim Cellulosic division has 300 Acre and out of 300 Acre, 168 Acre is construction area. We have developed greenbelt in our factory complex along the boundary wall and open space area of 55.4 Acre area to achieve target of 33% green belt of construction area</li> </ul> <table border="1" data-bbox="690 926 1360 1150"> <thead> <tr> <th>Sr. No.</th> <th>Village Name</th> <th>Total Acre</th> <th>Number of Tree Plantation</th> <th>Time Line</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Saran-2</td> <td>2</td> <td>4000</td> <td>2020-21</td> </tr> <tr> <td>2</td> <td>Sarnar -2</td> <td>2</td> <td>4000</td> <td>2021-22</td> </tr> <tr> <td>3</td> <td>Vilayat -2</td> <td>2</td> <td>4000</td> <td>2022-23</td> </tr> <tr> <td>4</td> <td>Vorasamni</td> <td>2</td> <td>4000</td> <td>2023-24</td> </tr> <tr> <td>5</td> <td>Derol</td> <td>2</td> <td>4000</td> <td>2024-25</td> </tr> <tr> <td colspan="2"><b>Total</b></td> <td><b>10</b></td> <td><b>20000</b></td> <td></td> </tr> </tbody> </table>	Sr. No.	Village Name	Total Acre	Number of Tree Plantation	Time Line	1	Saran-2	2	4000	2020-21	2	Sarnar -2	2	4000	2021-22	3	Vilayat -2	2	4000	2022-23	4	Vorasamni	2	4000	2023-24	5	Derol	2	4000	2024-25	<b>Total</b>		<b>10</b>	<b>20000</b>	
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62	Drip irrigation / low-volume, low angle sprinkler shall be used for the green belt development.	<ul style="list-style-type: none"> <li>Complied</li> <li>Drip irrigation / low-volume, low angle sprinklers are used for green belt development.</li> <li>Total 22,000 m<sup>2</sup> area is covered under drip irrigation &amp; low angle sprinkler system.</li> </ul>																																			
<b>B. GENERAL CONDITIONS:</b>																																					
63	In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.	<ul style="list-style-type: none"> <li>Complied</li> <li>All pollution control systems installed in our plant area directly connected with process safety inter locks from DCS. For ensure, all the safe requirements meet before any start up. We are also following pre-start up safety review before restart of the system.</li> </ul>																																			
64	The company shall strictly follow all the recommendations mentioned in the Charter Corporate Responsibility for Environment Protection (CREP) published by the Central pollution control board, as may be applicable.	<ul style="list-style-type: none"> <li>Complied</li> <li>As per Charter Corporate Responsibility for Environment Protection (CREP) published by the CPCB, Tree plantation &amp; Tree guard provided to protect Trees.</li> <li>Energy Program: Low smoke wood stoves &amp; Solar Street Light etc.</li> </ul>																																			
65	A separate environment management cell equipped with full-fledged laboratory	<ul style="list-style-type: none"> <li>Complied</li> <li>A separate environment management cell equipped with full-fledged laboratory facilities and qualified personnel</li> </ul>																																			

Sr. No.	EC Conditions	Compliance status
	facilities and qualified personnel shall be set up to carry out the Environment Management and Monitoring functions and a separate budget shall be allotted for this purpose.	set up to carry out the Environment Management and Monitoring functions and a separate budget is allotted for this purpose.
	<pre> graph TD     V[President &amp; Unit Head] --&gt; NP[Nand Pradny FH- Technical]     V --&gt; SM[Sudhir Maheshwari FH- Commercial]     V --&gt; BN[Basuki Nath FH- HR]     NP --&gt; PR[Product &amp; Responsibility]     NP --&gt; EE[Energy &amp; Emission]     SM --&gt; EC[Economics]     SM --&gt; WW[Water &amp; Waste Water]     BN --&gt; SWP[Social &amp; Wash Pledge]     PR --- KJ[Kirit Javed]     EE --- SG[Santhosh G.]     EC --- BG[Bharwati Gupta]     WW --- SV[Satyaveer Singh / Vikas Valand]     SWP --- PP[Prashant Paralikar]     WW --- VB[Vikas Valand] </pre>	
66	The funds earmarked for environment protection measures shall be maintained in a separate account and there shall not be diversion of these funds for any other purpose. A year wise expenditure on environmental safeguards shall be reported.	<ul style="list-style-type: none"> <li>Complied</li> <li>A separate fund / budget is defined / sanctioned on an annual basis with respect to Environmental Management a separate account is maintained with respect to the same.</li> <li>Yearly expenses with respect to environmental safeguards are also reported on an annual basis.</li> </ul>
67	Pucca flooring/ impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided RCC and /acid brick line flooring in the required areas.</li> </ul>
68	Leakages from the pipes, pumps, shall be minimal and if occurs shall be arrested promptly.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided pipelines of suitable MOC in the plant which ensures no leakages from the pipes/ pumps.</li> </ul>
69	All the recommendations made in the EIA/ EMP submitted by the project proponent shall be strictly implemented.	<ul style="list-style-type: none"> <li>Complied</li> <li>Recommendations made in the EIA/ EMP were submitted &amp; implemented.</li> </ul>
70	The applicant shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have not received any additional condition that may be imposed by the SEAC till date.</li> <li>We ensure that we shall comply with any additional condition that may be imposed by the SEAC or any other competent authority for the purpose of environmental protection.</li> </ul>
71	No future expansion or modifications in the plant	<ul style="list-style-type: none"> <li>Noted</li> <li>All future expansion or modifications in the plant will be</li> </ul>

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	shall be carried out without prior approval of the MOEF / SEIAA, as the case may be. In case of deviations or alterations in the project proposal from those submitted to MOEF / SEIAA / SEAC for clearance, a fresh reference shall be made to the SEIAA/ SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	<p>carried out with prior approval of the MOEF / SEIAA, as the case may be.</p> <ul style="list-style-type: none"> <li>• In case of deviations or alterations in the project proposal from those submitted to MOEF / SEIAA / SEAC for clearance, a fresh reference will be made to the SEIAA/ SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measures required.</li> </ul>
72	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA/ SEAC as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Separate fund / budget is identified / sanctioned on annual basis for Environmental management.</li> <li>• A year wise expenditure on environmental safeguards is also reported.</li> </ul>
73	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with GPCB and may also be seen at the website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter in at least two local newspapers that are widely circulated in the region one of which shall be in Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned regional office of the Ministry.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have informed the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with GPCB and may also be seen at the website of SEIAA/ SEAC/ GPCB.</li> <li>• English and Gujarati Newspaper advertisement of the Environment Clearance is as per below and the same is attached as <b>Annexure-5</b>.</li> </ul> <p>Name of Paper: Times of India Date of Issue: 08.06.2011 In: English language</p> <p>Name of Paper: Gujarati Lok Satta Date of Issue: 07.06.2011 In: Gujarati language</p>

Sr. No.	EC Conditions	Compliance status
	 <p><b>Grasim Cellulosic</b> A Unit of Grasim Industries Ltd Plot No. 1, GIDC Vilayat Dist. Bharuch, (Gujarat) Environment Clearance by State Level Environment Impact Assessment Authority, Gujarat</p> <p>Vide letter No SEIAA/GUJ/EC/112/A/85/195/2011, dated 30.05.2011, which was received on 07.06.2011, the State Level Environment Impact Assessment Authority, Gujarat, has accorded Environmental Clearances for the expansion of Chlor-Alcal plant with Capacity upto plant 213000 TPA and Alkal Products-Liquid Chlorine/Hydrochloric Acid 137100 TPA Hydrogen 6110000 tms/Year, Chlorosulfonic Acid 23000 TPA, Sulfuric Acid 26500 TPA, Gation Dichloride 21000 TPA, Liquid Pyro Aluminum Chloride 185000 TPA, Super Bleaching Powder 36500 TPA, Chlorinated Paraffin 26000 TPA, Aluminum Chloride 14600 TPA with additional 60 MW steam plant.</p> <p>Copies of the clearance letter are available with GPCB and may also be seen at website of SEIAA/SEAC/GPCB.</p> <p><b>Grasim Industries Ltd</b> Registered Office: PO: Birsgram, Raigarh - 496 331, Dist. Ujjain (M.P.)</p>	 <p><b>ADITYA BIRLA</b> <b>GRASIM</b> Grasim Cellulosic</p> <p>સાહેબજી, ઈ. એ. આઈ. બી. આઈ. ગ્રાસિમ (ગુજરાત) ગુજરાત સ્તરીય પર્યાવરણ અભ્યાસ અધિકારી દ્વારા પર્યાવરણ પરિચ્છેદ, ગુજરાત</p> <p>વ્યાજ નંબર: SEIAA/GUJ/EC/112/A/85/195/2011 તારીખ ૩૦.૦૫.૨૦૧૧ ના સહી સાથે - ૦૭.૦૬.૨૦૧૧ ના સહી સાથે ગુજરાત સ્તરીય પર્યાવરણ અભ્યાસ અધિકારી દ્વારા આપવામાં આવેલ સંબંધિત પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે. આ પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે.</p> <p>પર્યાવરણ પરિચ્છેદને સહી અને અનુમતિ આપવામાં આવેલ છે.</p> <p>સહી અને અનુમતિ આપવામાં આવેલ છે. સહી અને અનુમતિ આપવામાં આવેલ છે. સહી અને અનુમતિ આપવામાં આવેલ છે.</p>
74	It shall be mandatory for the project management to submit half yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authorities concerned on first June and 1st December of each calendar year.	<ul style="list-style-type: none"> <li>• Noted &amp; Complied</li> <li>• We are submitting half yearly compliance report to SEIAA in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies regularly.</li> </ul>
75	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	<ul style="list-style-type: none"> <li>• Noted &amp; Complied</li> <li>• We are complying all the conditions stipulated by the Gujarat Pollution Control Board.</li> </ul>
76	The project authorities to inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of starting the project.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• The date of financial closure and final approval of the project by the concerned authorities and the date of starting the project are: <ul style="list-style-type: none"> <li>○ Date of financial closure: 31<sup>st</sup> March 2014</li> <li>○ Date of final approval of the project by the concerned authorities: 26<sup>th</sup> June 2013</li> </ul> </li> </ul>
77	The SEIAA may revoke or suspend the clearance, if implementation of the above conditions is not found satisfactory.	<ul style="list-style-type: none"> <li>• Noted</li> <li>• We have been complying the conditions issued by the SEIAA.</li> <li>• No suspension order issued by the SEIAA till date.</li> </ul>
78	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act 1974. Hazardous waste (Management Handling and Transboundary Movement) Rules 2008 and the public liability Insurance Act, 1991 along with their amendments and rules.	<ul style="list-style-type: none"> <li>• Noted &amp; Complied</li> <li>• We are complying Water (Prevention &amp; Control of Pollution) Act, 1974, Air (Prevention &amp; Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.</li> </ul>

<b>Sr. No.</b>	<b>EC Conditions</b>	<b>Compliance status</b>
79	The Environmental Clearance is valid for five Years.	<ul style="list-style-type: none"><li>• Noted</li><li>• The EC is valid for 5 years and we are submitting half yearly compliance report to GPCB RO, MoEF RO and SEIAA on regular basis.</li><li>• Before due date of the EC, we have encase the same via CTE and CCA.</li></ul>



## Compliance status of Environmental Clearance

**vide Letter No.: SEIAA/GUJ/EC/5(f)/90/2014 dated 1<sup>st</sup> Aug 2014**

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	<p>The proposal is for Environmental Clearance for Chloromethanes and Fatty Alcohol Plants of M/s. Grasim Cellulosic (A Unit of Grasim Industries Ltd.) located at Plot No. 1, GIDC Industrial Estate, Vilayat - 392 140, Tal. Vagra, Dist. Bharuch. Grasim Cellulosic is proposing to manufacture the following products as a forward integration to their existing Chlor-alkali plant, which falls in the category - 5(f) of the schedule of the EIA Notification-2006:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sr. no.</th> <th rowspan="2">Name of product</th> <th colspan="2">Quantity (MT/Month)</th> </tr> <tr> <th>Product</th> <th>By-product</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: center;"><b>Chloromethanes</b></td> </tr> <tr> <td>1</td> <td>Methyl Chloride</td> <td colspan="2">Produced as 1st step of manufacturing of all other product</td> </tr> <tr> <td>2</td> <td>Methylene Chloride (50 % to 80 % of total production)</td> <td rowspan="3" style="text-align: center; vertical-align: middle;">4500</td> <td style="text-align: center;">--</td> </tr> <tr> <td>3</td> <td>Chloroform (15 % to 40 % of total production)</td> <td></td> </tr> <tr> <td>4</td> <td>Carbon Tera Chloride (5 % to 10 % of total production)</td> <td></td> </tr> <tr> <td>5</td> <td>Hydrochloric Acid</td> <td style="text-align: center;">--</td> <td style="text-align: center;">2250</td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>FATTY ALCOHOLS</b></td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>A) FATTY ALCOHOL MANUFACTURING PLANT</b></td> </tr> <tr> <td>1</td> <td>Fatty Alcohol</td> <td style="text-align: center;">2700</td> <td style="text-align: center;">--</td> </tr> <tr> <td>2</td> <td>Crude Alcohol Refining (Light)</td> <td style="text-align: center;">--</td> <td style="text-align: center;">25</td> </tr> <tr> <td>3</td> <td>Crude Alcohol Refining (Heavies)</td> <td style="text-align: center;">--</td> <td style="text-align: center;">144</td> </tr> <tr> <td colspan="4" style="text-align: center;"><b>B) FATTY ALCOHOL FRACTIONATION PLANT</b></td> </tr> <tr> <td>1</td> <td>Fractionated Fatty Alcohol – Middle Cut Alcohol</td> <td style="text-align: center;">541</td> <td rowspan="3" style="text-align: center; vertical-align: middle;">5</td> </tr> <tr> <td>2</td> <td>Fractionated Fatty Alcohol – Light Cut Alcohol</td> <td style="text-align: center;">199</td> </tr> <tr> <td>3</td> <td>Fractionated Fatty Alcohol – Light</td> <td style="text-align: center;">13</td> </tr> </tbody> </table>	Sr. no.	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1	Fresh Water requirement for Chloromethanes and fatty alcohol plants shall not exceed 553 KL/Day and it shall be met only through GIDC water supply only. Metering of water shall be done and its records shall be maintained. No ground water shall be used for the project.	<ul style="list-style-type: none"> <li>• <b>Complied</b></li> <li>• Fresh Water requirement for Chloromethanes is being met through GIDC Water supply only.</li> <li>• Average water consumption for April 2022 to September 2022 is 91 KLD, sourced from GIDC water supply for the Chloromethanes Plant.</li> <li>• We have installed Meters and maintaining the record of the same on regular basis.</li> <li>• We are not using ground water for the Chloromethanes project.</li> <li>• For Fatty Alcohol, suitable technology is not finalized by our technical/ project team hence we have not applied for the CTE of Fatty Alcohol plant and also we had deleting this products in upcoming EC Application.</li> </ul>
2	Cooling tower blow down to the tune of 275 KL/Day and 20 KL/Day of wastewater from VRC unit and heavy recovery unit shall be treated by RO System. RO Reject to the tune of 88 KL/Day shall be treated in the ETP whereas RO Permeate water to the tune of 207 KL/Day shall be reused back in process plants.	<ul style="list-style-type: none"> <li>• <b>Complied</b></li> <li>• Cooling Tower blow down, Wastewater from VRC Unit &amp; heavy recovery unit treated in RO system. RO Permeate reused in Process and RO reject further treat in ETP.</li> </ul>
3	Industrial effluent generated from process of fatty alcohols - 25 KL/Day & Chloromethane (Hydro Chlorination & Photo Chlorination) - 60 KL/Day. VRC Unit & Heat Recovery Unit - 30 KL/Day, RO Reject - 88 KL/Day and safety showers - 4.5 KL/Day; hence total 207.5 KL/Day shall be treated in the ETP consisting of primary, secondary & tertiary treatment facilities.	<ul style="list-style-type: none"> <li>• <b>Complied</b></li> <li>• Industrial Effluent generated from Chloromethanes plant, VRC Unit &amp; Heat recovery unit, RO reject, Safety Showers are treated in ETP.</li> <li>• For Fatty Alcohol, suitable technology is not finalized by our technical/ project team hence we have not applied for the CTE of Fatty Alcohol plant and also we had deleting this products in upcoming EC Application.</li> </ul>
4	Domestic wastewater generation shall be 12.5 KL/Day and it shall be treated in the ETP along with the industrial wastewater.	<ul style="list-style-type: none"> <li>• <b>Complied</b></li> <li>• Domestic Wastewater generation is not exceeded from 12.5 KLD and is being treated in ETP along with Industrial Wastewater.</li> </ul>
5	The ETP shall be operated regularly and efficiently so as to achieve the GPCB norms at the ETP outlet.	<ul style="list-style-type: none"> <li>• <b>Complied</b></li> <li>• The ETP is being operated regularly and efficiently to achieve GPCB norms at the ETP Outlet.</li> <li>• Also please note that the OCMS (Online Continuous monitoring system) is installed at outlet for continuous monitoring and it is connected with CPCB Server. Also weekly report sent by us to CPCB for the same.</li> <li>• Also the monthly monitoring of the same is being carried out by NABL &amp; MoEFCC approved Laboratory. ETP Outlet Monitoring reports are attached as <b>Annexure 7</b>.</li> </ul>
6	The treated wastewater conforming to the GPCB norms shall be discharged into the GIDC underground drain for its final disposal in deep sea.	<ul style="list-style-type: none"> <li>• Not Applicable</li> <li>• As per CCA received from GPCB, unit need to follow ZLD system.</li> <li>• The treated wastewater totally reused in plant process units and rejects used for Coal Sprinkling, Fly ash sprinkling, Dust suppression etc. Hence complied as per CCA Condition.</li> <li>• No Wastewater discharged into the GIDC underground drain for disposal in deep sea.</li> </ul>
7	A Guard/ Polishing Pond shall be provided before discharge of treated effluent into GIDC underground drain.	<ul style="list-style-type: none"> <li>• Not Applicable</li> <li>• As described in condition No. 6.</li> </ul>

Sr. No.	EC Conditions	Compliance status
8	Online monitoring system shall be provided at final outlet of ETP for pH, TDS & TOC parameters and arrangement shall be made to reflect monitored data on server of the company, which can be accessed by the GPCB on real time basis. The unit shall also provide metering facility at the inlets and outlets of the ETP and maintain the records of the same.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have already installed online monitoring system at final outlet of ETP for pH &amp; TOC parameters for existing ETP and the same can be accessed by the GPCB on real time basis.</li> <li>• Meters are also installed at the inlets and outlets of the existing ETP and records are maintained on regular basis.</li> </ul>
9	Proper logbooks of ETP operation and also showing the quantity of effluent generated, discharged into GIDC underground drain, utilized for plantation/ gardening etc. shall be maintained and furnished to the GPCB from time to time.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Logbooks are maintained for the existing ETP and data are furnished to the GPCB from time to time.</li> </ul>
10	Regular performance evaluation of the ETP shall be undertaken through credible institute and its records shall be maintained.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Regular performance evaluation of the existing ETP is undertaken through credible institute and its records are being maintained.</li> </ul>
11	The unit shall join and participate financially and technically for any common environmental facility/ infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt./ GIDC.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are and will be participating financially and technically for any common environmental facility/ infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt./ GIDC.</li> <li>• We have also invested a special amount for a training &amp; development of education program that has been initiated jointly by Paryavaran Vikas Kendra-Rajkot and Paryavaran Mitra Ahmedabad.</li> </ul>
<b>A.1.2 AIR:</b>		
12	Hydrogen gas shall be used as a fuel in Volatile Reduction Chamber (VRC) whereas HSD shall be used as a fuel in the D. G. Set of 750 KVA proposed for new plants.	<ul style="list-style-type: none"> <li>• Noted &amp; Complied</li> <li>• Hydrogen gas is being used as a fuel in Volatile Reduction Chamber (VRC).</li> <li>• HSD is being used as a fuel in DG Set of 750 KVA.</li> <li>• Till date there is no fuel consumption as VRC system yet not started and DG Set is for standby.</li> </ul>
13	Process emission shall be controlled with the air pollution control equipments (APCE) as mentioned below:	
	Hydro Chlorinator of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Condenser and Guard Condenser are provided with cooling water circulation for control of VOC in Hydro Chlorinator of Chloromethanes Plant.</li> </ul>
	Crude CMS distillation column of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Condenser and Guard Condenser are provided with cooling water circulation for control of VOC in Crude CMS distillation column of Chloromethanes Plant.</li> </ul>
	Heavies CMS Distillation Column of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Condenser and Guard Condenser are provided with cooling water circulation for control of VOC in Heavies CMS Distillation Column of Chloromethanes Plant.</li> </ul>
	Volatile Reduction Chamber (VRC) of Chloromethanes Plant - Water and Caustic Scrubber for control of NOX, HCl & Cl <sub>2</sub> .	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Water and Caustic Scrubber are provided with Volatile Reduction Chamber (VRC) of Chloromethanes Plant for control of NOX, HCl &amp; Cl<sub>2</sub>.</li> </ul>
	Methanol column DT 111 of Fatty Alcohol Plant - Condenser and Guard	<ul style="list-style-type: none"> <li>• Not Applicable</li> <li>• For Fatty Alcohol, suitable technology is not finalized by our technical/ project team hence we</li> </ul>

Sr. No.	EC Conditions	Compliance status																		
	Condenser with cooling water circulation for control of VOC.	have not applied for the CTE of Fatty Alcohol plant and also we had deleting this products in upcoming EC Application.																		
	Crude Alcohol Let Down Drum S1301 of Fatty Alcohol Plant - Water Seal and Flame Arrester for control of VOC.	<ul style="list-style-type: none"> <li>• Not Applicable</li> <li>• For Fatty Alcohol, suitable technology is not finalized by our technical/ project team hence we have not applied for the CTE of Fatty Alcohol plant and also we had deleting this products in upcoming EC Application.</li> </ul>																		
	Product Alcohol Let Down Drum S1301 of Fatty Alcohol Plant - Water Seal and Flame Arrester for control of VOC.																			
14	In Chloromethanes Plant, all vents after guard condenser shall be directed to Volatile Reduction Chamber (VRC) Unit, where gases shall be incinerated. Water Scrubber followed by Caustic Scrubber shall be provided for control of emission from VRC.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• In Chloromethanes plant, all vents after guard condenser has been directed to Volatile Reduction Chamber (VRC) Unit, where gases have been inserted.</li> <li>• Water Scrubber followed by Caustic scrubber has been provided for control of emission from VRC.</li> <li>• Also please note that OCEMS is provided with VRC and connected with CPCB Server.</li> </ul>																		
15	The APCE shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB at stack outlets. Adequate stack height as per prevailing norms shall be provided for process and flue gas emission.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• The Air Pollution Control Equipment (APCE) attached with different stacks are operated efficiently and effectively to achieve the GPCB/ CPCB / MoEF&amp;CC prescribed norms.</li> <li>• We have provided adequate stack height of as per prevailing norms for the process emissions.</li> </ul> <table border="1" data-bbox="808 869 1360 1121"> <thead> <tr> <th data-bbox="808 869 906 919">S. N.</th> <th data-bbox="906 869 1175 919">Stack Attached to</th> <th data-bbox="1175 869 1360 919">Stack Height Provided</th> </tr> </thead> <tbody> <tr> <td data-bbox="808 919 906 978">1</td> <td data-bbox="906 919 1175 978">DG Set (750 KVA – 1 No.)</td> <td data-bbox="1175 919 1360 978">11 m</td> </tr> <tr> <td data-bbox="808 978 906 1037">2</td> <td data-bbox="906 978 1175 1037">Volatile Reduction Chamber (VRC)</td> <td data-bbox="1175 978 1360 1037">35 m</td> </tr> <tr> <td data-bbox="808 1037 906 1075">3</td> <td data-bbox="906 1037 1175 1075">Hydro Chlorinator</td> <td data-bbox="1175 1037 1360 1075">35 m</td> </tr> <tr> <td data-bbox="808 1075 906 1113">4</td> <td data-bbox="906 1075 1175 1113">Crude CMS Distillation</td> <td data-bbox="1175 1075 1360 1113">35 m</td> </tr> <tr> <td data-bbox="808 1113 906 1121">5</td> <td data-bbox="906 1113 1175 1121">Heavies CMS Distillation</td> <td data-bbox="1175 1113 1360 1121">35 m</td> </tr> </tbody> </table>	S. N.	Stack Attached to	Stack Height Provided	1	DG Set (750 KVA – 1 No.)	11 m	2	Volatile Reduction Chamber (VRC)	35 m	3	Hydro Chlorinator	35 m	4	Crude CMS Distillation	35 m	5	Heavies CMS Distillation	35 m
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5	Heavies CMS Distillation	35 m																		
16	Online monitoring system shall be installed on VRC stack to monitor HCl, Cl <sub>2</sub> & NO <sub>x</sub> concentrations and arrangement shall be made to reflect monitored data on server of the company, which can be accessed by GPCB on real time basis.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Online Monitoring system has been installed on VRC stack to monitor HCl, Cl<sub>2</sub> &amp; NO<sub>x</sub> concentration and also it is connected with GPCB/CPCB Server.</li> </ul>																		
17	The fugitive emission in the work area environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health).	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Workplace monitoring is being carried out on monthly basis to monitor fugitive emissions in CMS plant through NABL &amp; MoEFCC approved Laboratory (M/s. Kadam Environmental Consultant, Vadodara)</li> <li>• All the parameters are well within the permissible limit.</li> <li>• Work place monitoring reports are attached as <b>Annexure 9.</b></li> </ul>																		
18	Regular performance evaluation of the air pollution control systems shall be undertaken every year to check its adequacy, through credible institutes and its records shall be maintained.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Regular performance evaluation of ETP &amp; STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor (M. S. Patel Department of Civil Engineering, CSPIT, CHARUSAT) and its record is maintained.</li> </ul>																		
19	Regular monitoring of ground level concentration of CS <sub>2</sub> , H <sub>2</sub> S, SO <sub>2</sub> , NO <sub>x</sub> , Cl <sub>2</sub> , PM <sub>10</sub> and PM <sub>2.5</sub> shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Regular monitoring of ground level concentration of CS<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, Cl<sub>2</sub>, HCl, PM<sub>10</sub> and PM<sub>2.5</sub> is carried out through third party in the impact zone and its records are maintained.</li> <li>• If at any stage these levels are found to exceed the prescribed limits, necessary additional control</li> </ul>																		

Sr. No.	EC Conditions	Compliance status												
	standards stipulated by Gujarat Pollution Control Board. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with GPCB.	measures will be provided immediately. <ul style="list-style-type: none"> <li>The location of the monitoring stations and frequency of monitoring are decided in consultation with GPCB.</li> <li>There are 4 nos. of ambient air quality monitoring stations covering all directions in nearby villages (Derol, Sarnar, Argama &amp; Vilayat).</li> <li>Monthly Analysis Report from Kadam Environmental Consultants &amp; Unistar Environment &amp; Research Labs Pvt. Ltd. are attached as <b>Annexure-8</b>.</li> </ul>												
<b>A.1.3 HAZARDOUS/ SOLID WASTE:</b>														
20	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB must be obtained for collection/ treatment/ storage/ disposal of hazardous wastes.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have obtained authorization of the GPCB for collection / treatment / storage / disposal of hazardous wastes.</li> </ul> <table border="1" data-bbox="808 611 1360 695"> <tr> <td><b>Authorization No.</b></td> <td>AWH-98281 &amp; Amendment No. AWH-118058</td> </tr> <tr> <td><b>Validity</b></td> <td>02/03/2024</td> </tr> </table> <ul style="list-style-type: none"> <li>We have provided separate covered storage area for different types of wastes.</li> <li>We are member CHWIF &amp; TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd.</li> <li>Following is the BEIL membership details:</li> </ul> <table border="1" data-bbox="808 831 1360 999"> <tr> <td><b>CHWIF Membership No.</b></td> <td>CI/BD/92 dated 29/01/2022</td> </tr> <tr> <td><b>Booked Quantity</b></td> <td>160 MT/Year</td> </tr> <tr> <td><b>TSDF Membership No.</b></td> <td>Oth/133 dated 02/03/2022</td> </tr> <tr> <td><b>Booked Quantity</b></td> <td>31000 MT/Year</td> </tr> </table> <ul style="list-style-type: none"> <li>Copy of the membership certificate is attached as <b>Annexure 4</b>.</li> <li>Also please note that for HCl, DSA and other haz waste selling under Rule 9 only with GPS AIS 140 Mounted &amp; colour coded vehicles through Manifest system.</li> </ul>	<b>Authorization No.</b>	AWH-98281 & Amendment No. AWH-118058	<b>Validity</b>	02/03/2024	<b>CHWIF Membership No.</b>	CI/BD/92 dated 29/01/2022	<b>Booked Quantity</b>	160 MT/Year	<b>TSDF Membership No.</b>	Oth/133 dated 02/03/2022	<b>Booked Quantity</b>	31000 MT/Year
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21	The Hazardous wastes shall be stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided impervious layer with pucca bottom and leachate collection facility in the separate hazardous waste storage area for storing before disposal.</li> </ul>												
22	The unit shall dispose ETP Sludge and Spent Carbon from Chloromethanes and Fatty Alcohol Plants at the nearest common TSDF.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are member of TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd. Following is the BEIL membership details:</li> </ul> <table border="1" data-bbox="808 1423 1360 1482"> <tr> <td><b>Membership No.</b></td> <td>Oth/133 dated 02/03/2022</td> </tr> <tr> <td><b>Booked Quantity</b></td> <td>31000 MT/Year</td> </tr> </table>	<b>Membership No.</b>	Oth/133 dated 02/03/2022	<b>Booked Quantity</b>	31000 MT/Year								
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23	Exhausted Resin and Spent Catalyst shall be sent back for regeneration or reactivation.	<ul style="list-style-type: none"> <li>Complied</li> <li>Exhausted Resin &amp; Spent Catalyst are being sent back for Regeneration or reactivation.</li> </ul>												
24	Used oil shall be sold only to the registered recyclers.	<ul style="list-style-type: none"> <li>Complied</li> <li>Used Oil is being sold to Registered recycler under Rule 9.</li> </ul>												
25	Discarded Containers / barrels / bags / liners shall be either reused or sold only to the authorized recyclers after decontamination.	<ul style="list-style-type: none"> <li>Complied</li> <li>Discarded Containers / barrels / bags / liners are being sold to authorized recyclers under Rule 9.</li> </ul>												
26	Exhausted Batteries of UPS shall be managed as per the provisions of the Batteries (Management & Handling) Rules, 2001 as amended in 2010	<ul style="list-style-type: none"> <li>Complied</li> <li>Exhausted Batteries of UPS handled as per the provisions of the Batteries (Management &amp; Handling) Rules, 2001 as amended in 2010.</li> </ul>												
27	E-waste from Plant Electronic system shall be managed as per the provisions of the E-waste	<ul style="list-style-type: none"> <li>Complied</li> </ul>												


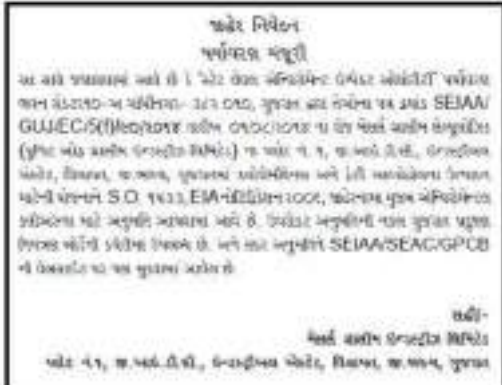
Sr. No.	EC Conditions	Compliance status
	management and handling Rules 2011.	<ul style="list-style-type: none"> <li>E-waste from Plant Electronic system managed as per the provisions of the E-waste management and handling Rules 2011.</li> </ul>
28	Exhausted insulating materials shall be sold to authorized recyclers.	<ul style="list-style-type: none"> <li>Complied</li> <li>Exhausted insulating materials are sold to authorized recyclers under Rule 9.</li> </ul>
<b>A.1.4 SAFETY:</b>		
29	Provisions of the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1986 & Factories Act, 1948 shall be strictly complied with.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are following MSHIC Rules, 1989 and Factories Act, 1948.</li> <li>All the chemicals/ materials are stored in the storage tanks with required material of Construction.</li> <li>Sufficient dykes are provided at Tank storages as per chemical handling and storage guidelines.</li> <li>Fire Hydrant system is provided nearby storage and handling area for emergency purpose.</li> <li>Safety trainings are provided to all the operators and workers working in such areas.</li> <li>Hazard Identification and Risk Assessment (JSA) of all activities carried out and SOPs are prepared accordingly.</li> <li>Safety showers are provided nearby storage areas.</li> </ul>
30	A well designated fire hydrant system shall be installed as per the prevailing standards.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have installed designated fire hydrant system for the Chloromethanes plant.</li> <li>For Fatty Alcohol, suitable technology is not finalized by our technical/ project team hence we have not applied for the CTE of Fatty Alcohol plant and also we had deleting this product in upcoming EC Application.</li> </ul>
31	All the risk mitigation measures, general & specific recommendations mentioned in Chapter 6 of the EIA Report shall be implemented.	<ul style="list-style-type: none"> <li>Complied</li> <li>All the risk mitigation measures, general &amp; specific recommendations mentioned in Chapter 6 of the EIA Report are implemented.</li> </ul>
32	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic/ hazardous chemicals, especially chlorine, hydrogen, HCl etc.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have developed job safety analysis procedure and trainings have been provided to all employees.</li> <li>Proper controls are provided to mitigate any emergency.</li> </ul>
33	Storage and use of hazardous chemicals shall be minimized to the extent possible and all necessary precautions shall be taken to mitigate the risks generated out of it. Storage of hazardous chemicals shall be in multiple small capacity tanks/ containers instead of one single large capacity tank for safety purpose.	<ul style="list-style-type: none"> <li>Complied</li> <li>Storage of hazardous chemicals is minimized and stored in multiple small capacity tanks / containers instead of one single large capacity tank / containers.</li> <li>All the storage tanks fitted with appropriate controls to avoid any leakages. Bund/ dyke walls are provided, for storage tanks for Hazardous Chemicals.</li> </ul>
34	During material transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm 3water	<ul style="list-style-type: none"> <li>Complied</li> <li>For material transfer, we have provided pipelines of required MOC in the plant. We have block the storm water drain connection point in the plant areas.</li> </ul>
35	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/ dyke walls shall be provided for storage tanks for Hazardous Chemicals. Close handling system for chemicals shall be provided.	<ul style="list-style-type: none"> <li>Complied</li> <li>All the storage tanks fitted with appropriate controls to avoid any leakages. Bund/ dyke walls are provided, for storage tanks for Hazardous Chemicals.</li> </ul>

Sr. No.	EC Conditions	Compliance status
36	Tie up shall be done with nearby health care unit for seeking immediate medical attention in the case of emergency, regular medical check-up of the workers and keeping its record etc.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• OHC with availability of para-medical staff &amp; ambulance is already available round the clock.</li> <li>• We have also tied up with M/s. Apex Multispecialty Hospital at Bharuch.</li> </ul>
37	Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided proper job specific PPEs to all the workers and its usage is ensured and supervised regularly.</li> </ul>
38	First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	<ul style="list-style-type: none"> <li>• Complied</li> </ul> <p>We have 60 Nos. of first aid boxes at different locations of our plant containing required antidote for the chemicals used in the plant.</p>
39	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Training is imparted to all the workers at regular intervals for safety and health during chemical handling, Emergency Preparedness, etc.</li> <li>• We have engaged DuPont Safety for implementation of Work place safety &amp; Process Safety management system and to provide training &amp; Awareness of employees in the site.</li> <li>• We have made six different sub committees of Work place safety and Process safety management subcommittees. APEX Committee headed by Unit Head, functional Head and department heads to develop and implement safety management system.</li> </ul>
40	Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Occupational health surveillance of the workers is done and its records are maintained.</li> <li>• Six monthly pre-employment and periodical examination for all the workers is being carried out.</li> <li>• 100% employees undergo with occupational health surveillance every 6 month/ 12 month depending on exposure.</li> <li>• Record is available with Occupational Health Centre. Sample report is attached as <b>Annexure 12.</b></li> </ul>
41	Handling and charging of the chemicals shall be done in such a manner that minimal human exposure occurs.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Handling and charging of the chemicals are in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.</li> </ul>
42	Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are following Central Motor Vehicles Rule - 9 for Hazardous chemical transportation.</li> </ul>
<b>A.1.5 NOISE:</b>		
43	The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• The overall noise level in and around the plant area is kept well within the prescribed standards by providing noise control measures including acoustic insulation, silencers, enclosures etc. on all sources of noise generation.</li> <li>• The ambient noise levels are conforming to the standards prescribed under the Environment (Protection) Act and Rules. Third party ambient noise monitoring is carried out by NABL accredited laboratory.</li> <li>• Noise Monitoring Report attached as <b>Annexure 8.</b></li> </ul>
<b>A.1.6 CLEANER PRODUCTION AND WASTE MINIMIZATION:</b>		
44	The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have carried out Cleaner Production Assessment studies by Gujarat Cleaner Production</li> </ul>

Sr. No.	EC Conditions	Compliance status
	shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.	Centre (Established by Industries & Mines Department, Government of Gujarat).
45	The company shall undertake following waste minimization measures: a) Metering and control of quantities of active ingredients to minimize waste.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided flow meters for wastewater generation.</li> <li>• We have installed RO system for reducing the effluent.</li> <li>• Recycle steam and vapor condensate is used in process &amp; cooling tower.</li> <li>• We use super washed salt to reduce chemical consumption in turn to reduce solid waste generation.</li> </ul>
	b) Reuse of by-products from the process as raw materials substitutes in other process.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Use of waste chlorine gas for producing CMS Products.</li> <li>• Vapor condensate from flaking plant treated by polishing unit and finally used as DM water.</li> </ul>
	c) Use of automated and enclosed filling to minimize spillages.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are using automated and closed filling to minimize spillages.</li> </ul>
	d) Use of close feed system into batch reactors.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are using close feed system into batch reactors.</li> </ul>
	e) Dry cleaning / mopping of floor instead of floor washing.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Floors are cleaned through mopping.</li> </ul>
	f) Use of high pressure hoses for cleaning to reduce wastewater generation.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• High pressure hoses are used for cleaning and reduce the wastewater.</li> </ul>
	g) Regular preventive maintenance for avoiding leakage, spillage etc.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Regular preventive maintenance has been carried out to avoid leakages, spillages etc.</li> </ul>
<b>A.1.7 GREEN BELT AND OTHER PLANTATION:</b>		
46	The unit shall develop and maintain green belt within premises as per the CPCB guidelines. In addition to this, the unit shall also take up adequate plantation on road sides and suitable open areas in the GIDC estate, nearby schools, gram panchayat areas and any other open areas in consultation with the GIDC / local bodies / GPCB and submit an action plan of plantation for next three years to the GPCB.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have developed greenbelt along with boundary wall &amp; planted different plant species in campus area.</li> <li>• Plant species were selected as per the directives of CPCB &amp; DFO.</li> </ul>
47	Total 48000 nos. of trees shall be planted within the premises within next five years in addition to the existing 6113 nos. of trees & shrubs.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Already 40,000 No. of trees have been planted within the premises and in nearby villages.</li> </ul>
48	Drip irrigation system shall be used for the green belt development.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Drip irrigation/ low-volume, low angle sprinklers are used for green belt development.</li> <li>• Total 22,000 m2 area is covered under drip irrigation &amp; low angle sprinkler system.</li> </ul>
<b>B. OTHER CONDITIONS:</b>		
49	In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.	<ul style="list-style-type: none"> <li>• Noted &amp; Complied</li> <li>• All pollution control systems installed in our plant are directly connected with process safety inter locks from DCS.</li> <li>• For ensure, all the safe requirements meet before any start up.</li> </ul>



Sr. No.	EC Conditions	Compliance status
		<ul style="list-style-type: none"> <li>We are also following pre-start up safety review before restart of the system.</li> </ul>
50	The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environment Protection (CREP) published by the Central Pollution Control Board, as may be applicable.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>All the recommendations mentioned in the Charter on Corporate Responsibility for Environment Protection (CREP) has been followed.</li> </ul>
51	A separate Environment Management cell equipped with full-fledged laboratory facilities and qualified personnel shall be set up to carry out the Environment Management and Monitoring functions and a separate budget shall be allocated for this purpose.	<ul style="list-style-type: none"> <li>Complied</li> <li>A separate Environment Management Cell has been equipped with 2 Environment Officers under One Environment Head.</li> <li>Also there is a separate budget allocated for Environment related activities.</li> </ul>
52	The funds earmarked for environment protection measures shall be maintained in a separate account and there shall not be any diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards shall be reported.	<ul style="list-style-type: none"> <li>Complied</li> <li>Separate fund / budget is identified / sanctioned on annual basis for Environmental management.</li> </ul>
53	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided RCC and / acid brick line flooring in the required areas.</li> </ul>
54	Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided pipelines of suitable MOC in the plant which ensures no leakages from the pipes / pumps.</li> </ul>
55	The project management shall also comply with all the environmental protection measures, risk mitigation measures and safeguards recommended in the EIA/ EMP report as well as other proposals made by them.	<ul style="list-style-type: none"> <li>Complied</li> <li>All the environmental protection measures, risk mitigation measures and safeguards recommended in the EIA/ EMP report as well as other proposals are being complied.</li> </ul>
56	The company shall undertake socio-economic developmental / community welfare activities in consultation with the District Development Officer / District Collector.	<ul style="list-style-type: none"> <li>Complied</li> <li>Socio-economic developmental / community welfare activities are being carried out in consultation with the District Development Officer / District Collector.</li> </ul>
57	The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>We have not received any additional condition that may be imposed by the SEAC till date.</li> <li>We ensure that we shall comply with any additional condition that may be imposed by the SEAC or any other competent authority for the purpose of environmental protection.</li> </ul>
58	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.	<ul style="list-style-type: none"> <li>Noted</li> <li>We ensure that we shall not carry out any further expansion or modifications in the plant likely to cause environmental impacts without obtaining prior Environment Clearance from the concerned authority</li> </ul>

Sr. No.	EC Conditions	Compliance status
59	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	<ul style="list-style-type: none"> <li>Complied</li> <li>Separate fund / budget is identified / sanctioned on annual basis for Environmental management.</li> </ul>
60	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA / SEAC / GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have informed the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with GPCB and may also be seen at the website of SEIAA/ SEAC/ GPCB.</li> <li>English and Gujarati Newspaper advertisement of the Environment Clearance is as per below and the same is attached as <b>Annexure-5</b>. Name of Paper: Times of India Date of Issue: 06.08.2014 In: English language Name of Paper: Divya Bhaskar Date of Issue: 06.08.2014 In: Gujarati language</li> </ul>
	 <p><b>PUBLIC NOTICE ENVIRONMENTAL CLEARANCE</b> It is hereby informed that the State Level Environment Impact Assessment Authority, ParyavaranBhavan, Sector 10 - A, Gandhinagar - 382 010, Gujarat vide its letter Ref. No. SEIAA/GUJ/EC/S(1)/90/2014 dated 01/08/2014 has accorded Environment Clearance to M/s. Grasim Cellulosic (A unit of Grasim Industries Ltd.) for installation of Chloromethanes and Fatty Alcohol production unit at Plot No. 1, GIDC Industrial Estate, Vilayat, Dist: Bharuch, Gujarat as per applicable provisions of the S.O. 1533, EIA Notification, 2006. Copies of the clearance letters are available with Gujarat Pollution Control Board and may also be seen on the website of SEIAA/SEAC/GPCB.</p> <p>Sd/- <b>M/s. Grasim Industries Ltd.</b> Plot No. 1, GIDC Industrial Estate, Vilayat, Dist: Bharuch, Gujarat</p>	 <p><b>જાહેર ઘોષણા વાસ્તવિક સ્વચ્છતા</b> આ અહીં જાહેર કરવામાં આવે છે કે રાજ્ય સ્તરે પર્યાવરણ અસર અંકલન અધિકારી, પાર્યાવરણ ભવન, સેક્ટર 10 - A, ગાંધીનગર - 382 010, ગુજરાત દ્વારા તેની પત્ર સંખ્યા SEIAA/GUJ/EC/S(1)/90/2014 તારીખ 01/08/2014 ના અંતર્ગત આપવામાં આવેલી સ્વચ્છતા સંમતિ પત્ર મુજબ M/s. Grasim Cellulosic (A unit of Grasim Industries Ltd.) ના અહીં 1, ગુજરાત સ્ટેટ, ક્લોરોમેથેન અને ફેટી આલ્કોહોલ ઉત્પાદન યુનિટની સ્થાપના માટે સ્વીકૃતિ આપવામાં આવી છે. આ સંબંધેની વિગતો માટે SEIAA/SEAC/GPCB ના વેબસાઇટ પર જાણવા મળેશે.</p> <p>સહી M/s. Grasim Industries Ltd. Plot No. 1, GIDC Industrial Estate, Vilayat, Dist: Bharuch, Gujarat</p>
61	It shall be mandatory for all the project management to submit half yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are submitting half yearly compliance report to SEIAA in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies regularly.</li> </ul>
62	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	<ul style="list-style-type: none"> <li>Noted</li> <li>We shall comply with the stipulations made by the Gujarat Pollution Control Board.</li> </ul>
63	The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>The date of financial closure and final approval of the project by the concerned authorities and the date of starting the project are: <ul style="list-style-type: none"> <li>Date of financial closure: 31st March 2014</li> <li>Date of final approval of the project by the concerned authorities: 26th June 2013</li> </ul> </li> </ul>

<b>Sr. No.</b>	<b>EC Conditions</b>	<b>Compliance status</b>
64	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	<ul style="list-style-type: none"> <li>• Noted</li> <li>• We have been complying the conditions issued by the SEIAA. No suspension order issued by the SEIAA till date.</li> </ul>
65	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act 1974. Hazardous waste (Management Handling and Transboundary Movement) Rules 2008 and the public liability Insurance Act, 1991 along with their amendments and rules.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are complying Water (Prevention &amp; Control of Pollution) Act, 1974, Air (Prevention &amp; Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.</li> </ul>
66	This environmental clearance is valid for five years from the date of issue.	<ul style="list-style-type: none"> <li>• Noted</li> <li>• The EC is valid for 5 years and we are submitting half yearly compliance report to GPCB RO, MoEF RO and SEIAA on regular basis.</li> <li>• We have encased the EC for Chloromethanes project before due date of the EC in the form of CTE.</li> <li>• For Fatty Alcohol, suitable technology is not finalized by our technical/ project team hence we have not applied for the CTE of Fatty Alcohol plant.</li> </ul>
67	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	<ul style="list-style-type: none"> <li>• Not Applicable</li> <li>• There is no appeal against this environmental clearance lie with the National Green Tribunal.</li> </ul>

## Compliance status of Environmental Clearance

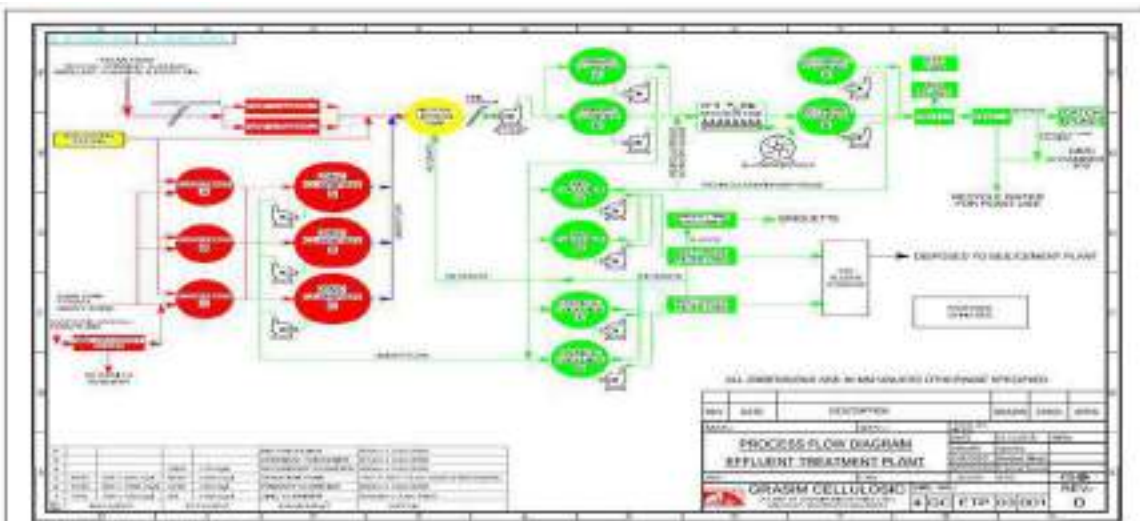
**vide Letter No.: SEIAA/GUJ/EC/5(f) & 4(d)/642/2016 dated  
29th Oct 2016**

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	<p>The proposal is for Environmental Clearance to M/s. Grasim Industries Ltd. for setting up of the proposed expansion of manufacturing of Caustic Soda Lye plant and Synthetic Organic chemical plant located at Plot No. 1, GIDC Industrial Estate, Vilayat, District: Bharuch. It is an existing unit for manufacturing following products, which falls in the category - 5(f) &amp; 4(d) of the schedule of the EIA Notification-2006.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">S. no.</th> <th rowspan="2" style="text-align: center;">Name of Product</th> <th colspan="3" style="text-align: center;">Production capacity (MT/ Annum)</th> </tr> <tr> <th style="text-align: center;">Existing</th> <th style="text-align: center;">Proposed</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Chlorinated Paraffin wax</td> <td style="text-align: center;">36500</td> <td style="text-align: center;">33500</td> <td style="text-align: center;">70000</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Caustic Soda Lye</td> <td style="text-align: center;">219000</td> <td style="text-align: center;">146000</td> <td style="text-align: center;">365000</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Poly Aluminum Chloride</td> <td style="text-align: center;">146000</td> <td style="text-align: center;">104000</td> <td style="text-align: center;">250000</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Aluminum Chloride</td> <td style="text-align: center;">14600</td> <td style="text-align: center;">10400</td> <td style="text-align: center;">25000</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Stable Bleaching Powder</td> <td style="text-align: center;">36500</td> <td style="text-align: center;">24500</td> <td style="text-align: center;">61000</td> </tr> <tr> <td style="text-align: center;">6</td> <td>Hydrogen</td> <td style="text-align: center;">61320000 (Nm3)</td> <td style="text-align: center;">40880000 (Nm3)</td> <td style="text-align: center;">102200000 (Nm3)</td> </tr> <tr> <td style="text-align: center;">7</td> <td>Liquid chlorine/ Sodium Hypochlorite/ Hydrochloric Acid</td> <td style="text-align: center;">197100</td> <td style="text-align: center;">131400</td> <td style="text-align: center;">328500</td> </tr> </tbody> </table>	S. no.	Name of Product	Production capacity (MT/ Annum)			Existing	Proposed	Total	1	Chlorinated Paraffin wax	36500	33500	70000	2	Caustic Soda Lye	219000	146000	365000	3	Poly Aluminum Chloride	146000	104000	250000	4	Aluminum Chloride	14600	10400	25000	5	Stable Bleaching Powder	36500	24500	61000	6	Hydrogen	61320000 (Nm3)	40880000 (Nm3)	102200000 (Nm3)	7	Liquid chlorine/ Sodium Hypochlorite/ Hydrochloric Acid	197100	131400	328500	<ul style="list-style-type: none"> <li>Noted</li> <li>Latitude: 21°46'8" and 21°47'11" North</li> <li>Longitude: 72°53'18" and 72°54'49" East</li> <li>Copy of Environment Clearance is attached as <b>Annexure-1.</b></li> </ul>																											
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<b>A.1</b>	<b>SPECIFIC CONDITION:</b>																																																																							
1	The Unit shall obtain requisite permission from PESO, Nagpur for storage of Chlorine, Hydrogen etc. before commissioning of the project.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have obtained requisite permission from Petroleum &amp; Explosives Safety Organization (PESO), Nagpur before commissioning of the project. Copy of PESO License are attached as <b>Annexure-2.</b></li> </ul>																																																																						
<b>A.2</b>	<b>WATER:</b>																																																																							
2	Total water requirement after proposed expansion shall not	<ul style="list-style-type: none"> <li>Complied</li> </ul>																																																																						


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	<p>exceed 6500 KL/day for the Synthetic Organic Chemicals and Caustic Lye plant. Unit shall recycle / reuse 400 KL/day of waste water within Synthetic Organic Chemicals and Caustic Lye plants. Hence, fresh water requirement shall not exceed 6100 KL/day. Fresh water shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.</p>	<ul style="list-style-type: none"> <li>Average water consumption for April 2022 to September 2022 is 16336 KLD, sourced from GIDC water supply for the Synthetic Organic Chemicals and Caustic Soda Lye plant.</li> </ul> <table border="1" data-bbox="987 422 1404 724"> <thead> <tr> <th rowspan="2">Month</th> <th>Water Consumption</th> <th>Water Recycle / Reuse</th> </tr> <tr> <th>KL/Month</th> <th>KL/Month</th> </tr> </thead> <tbody> <tr> <td>Apr-22</td> <td>483336</td> <td>2022</td> </tr> <tr> <td>May-22</td> <td>521930</td> <td>1444</td> </tr> <tr> <td>June-22</td> <td>492324</td> <td>1564</td> </tr> <tr> <td>July-22</td> <td>498513</td> <td>1908</td> </tr> <tr> <td>Aug-22</td> <td>465180</td> <td>1568</td> </tr> <tr> <td>Sept-22</td> <td>479133</td> <td>2066</td> </tr> <tr> <td><b>Total</b></td> <td><b>2940417</b></td> <td><b>10572</b></td> </tr> <tr> <td><b>Average</b></td> <td><b>490069</b></td> <td><b>1762</b></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>We are recycling ~205 KL/Day of waste water within Synthetic Organic Chemicals and Caustic Soda Lye plants.</li> <li>Following are the GIDC offer cum allotment letter details:</li> </ul> <table border="1" data-bbox="987 905 1404 1392"> <thead> <tr> <th>Sr. no.</th> <th>Letter no.</th> <th>Water supply</th> <th>Effluent discharge</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GIDC/PROJ/MKT/GRASIM/575 Dated 6th December 2006</td> <td>15.60 MLD</td> <td>12.48 MLD</td> </tr> <tr> <td>2</td> <td>GIDC/SE/CG/BRH/1236 Dated 29th December 2016</td> <td>25 MLD</td> <td>19.4 MLD</td> </tr> <tr> <td>3</td> <td>GIDC/ENG/CE/34 Dated 9th October 2017</td> <td>55-56 MLD</td> <td>--</td> </tr> <tr> <td>4</td> <td>GIDC/BRH/DEE (DRG)/659</td> <td>--</td> <td>23 MLD</td> </tr> </tbody> </table> <p>Copy of agreement letter is attached as <b>Annexure-6</b>.</p>	Month	Water Consumption	Water Recycle / Reuse	KL/Month	KL/Month	Apr-22	483336	2022	May-22	521930	1444	June-22	492324	1564	July-22	498513	1908	Aug-22	465180	1568	Sept-22	479133	2066	<b>Total</b>	<b>2940417</b>	<b>10572</b>	<b>Average</b>	<b>490069</b>	<b>1762</b>	Sr. no.	Letter no.	Water supply	Effluent discharge	1	GIDC/PROJ/MKT/GRASIM/575 Dated 6th December 2006	15.60 MLD	12.48 MLD	2	GIDC/SE/CG/BRH/1236 Dated 29th December 2016	25 MLD	19.4 MLD	3	GIDC/ENG/CE/34 Dated 9th October 2017	55-56 MLD	--	4	GIDC/BRH/DEE (DRG)/659	--	23 MLD
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3	<p>The water meter shall be installed and records of daily and monthly water consumption shall be maintained.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>We have installed Water Meter at the inlet. Logbook is maintained to record the water consumption.</li> </ul>																																																	
4	<p>Total industrial waste water generation from Synthetic Organic Chemicals and Caustic Lye plant shall not exceed 600 KL/day.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>Average industrial waste water generation from synthetic organic chemicals and caustic lye plant for April 2022 to September 2022 is 517 KL/Day.</li> </ul> <table border="1" data-bbox="987 1759 1404 1892"> <thead> <tr> <th rowspan="2">Month</th> <th>Waste water generation</th> </tr> <tr> <th>KL/Month</th> </tr> </thead> <tbody> <tr> <td>Apr-22</td> <td>37314</td> </tr> <tr> <td>May-22</td> <td>38492</td> </tr> </tbody> </table>	Month	Waste water generation	KL/Month	Apr-22	37314	May-22	38492																																										
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		<table border="1" data-bbox="987 239 1404 420"> <tr><td>June-22</td><td>40926</td></tr> <tr><td>July-22</td><td>42248</td></tr> <tr><td>Aug-22</td><td>35608</td></tr> <tr><td>Sept-22</td><td>40329</td></tr> <tr><td><b>Total</b></td><td><b>234917</b></td></tr> <tr><td><b>Average</b></td><td><b>39153</b></td></tr> </table> <ul data-bbox="987 420 1404 659" style="list-style-type: none"> <li>Note: Water Consumption and Wastewater generation is as per our existing CCA vide Order No. AWH-98281 dated 29/12/2018 &amp; its amendment vide letter no. GPCB/BRCH-B/CCA-70(6)/ID-41279/526734 dtd. 13-11-2019, which is under prescribed limit.</li> </ul>	June-22	40926	July-22	42248	Aug-22	35608	Sept-22	40329	<b>Total</b>	<b>234917</b>	<b>Average</b>	<b>39153</b>
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5	Unit shall treat the additional effluent in their existing ETP having capacity 35 MLD comprises of primary & secondary treatment plants.	<ul data-bbox="987 659 1404 1226" style="list-style-type: none"> <li>Complied</li> <li>After primary treatment, neutralized effluent is sent to SFD plant ETP comprising of primary &amp; secondary treatment facility.</li> <li>The industrial effluent is treated in the ETP consisting Zinc Clarifier, tanks (3.0 Nos.), Grit Chambers (3.0 Nos.), Primary Clarifier (2.0 Nos.), Equalization Tank, Biological Reactor, Final Clarifiers (2.0 Nos.) Thickeners (2.0 Nos.) Belt Press (2.0 Nos.) and sludge Dryers (6.0 Nos.).</li> <li>ETP is operated regularly and efficiently to achieve the prescribed GPCB norms at the ETP outlet.</li> </ul>												

Effluent Treatment Plant PFD




6	Total quantity waste water discharge of the group companies (i.e. Chemical division + Cellulosic division + Epoxy division) shall not exceeds 19.4 MLD at any time.	<ul data-bbox="987 1797 1404 1879" style="list-style-type: none"> <li>Complied</li> <li>Total quantity waste water discharge of the group</li> </ul>
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Sr. No.	EC Conditions	Compliance Status																		
	The treated waste water conforming to the GPCB/ CPCB/ MoEF&CC norms shall be discharged into the GIDC underground drain for its final disposal into the deep sea.	<p>companies (i.e. Chemical division + Cellulosic division + Epoxy division) does not exceed 19.4 MLD.</p> <ul style="list-style-type: none"> <li>The treated waste water conforming to the GPCB/ CPCB/ MoEF&amp;CC norms are discharged into GIDC underground pipeline for final disposal to deep sea through GIDC.</li> <li>Treated effluent quality report attached as <b>Annexure 7</b>.</li> </ul>																		
7	A Guard/ Polishing Pond shall be provided before discharge of treated effluent into GIDC underground drain. The unit shall provide on line pH meter, TDS meter & TOC meter for online monitoring of the treated effluent.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided 2 Nos. of guard ponds, each of (L: 90m, B: 60m, SWD: 6.5m) equivalent to 50,000 m<sup>3</sup> capacity provided, (suitable for storage of 48 hrs) before discharge of treated effluent into GIDC drain.</li> <li>As per CCA condition, we have installed Online pH meter, flow meter &amp; TOC meter are provided for monitoring of the treated effluent.</li> </ul> 																		
8	Additional domestic waste water (40 KL/day) shall be treated in existing STP (Capacity 140 m <sup>3</sup> /day) and treated sewage shall be used for gardening-plantation within premises.	<ul style="list-style-type: none"> <li>Complied</li> <li>Additional domestic wastewater is treated in STP and average domestic wastewater generation for April 2022 to September 2022 is 211 KL/Day.</li> </ul> <table border="1" data-bbox="987 1455 1403 1738"> <thead> <tr> <th data-bbox="987 1455 1195 1512">Month</th> <th data-bbox="1195 1455 1403 1512">Domestic KL/Month</th> </tr> </thead> <tbody> <tr> <td data-bbox="987 1512 1195 1539">April-22</td> <td data-bbox="1195 1512 1403 1539">6325</td> </tr> <tr> <td data-bbox="987 1539 1195 1566">May-22</td> <td data-bbox="1195 1539 1403 1566">6330</td> </tr> <tr> <td data-bbox="987 1566 1195 1593">June-22</td> <td data-bbox="1195 1566 1403 1593">6328</td> </tr> <tr> <td data-bbox="987 1593 1195 1621">July-22</td> <td data-bbox="1195 1593 1403 1621">6325</td> </tr> <tr> <td data-bbox="987 1621 1195 1648">August-22</td> <td data-bbox="1195 1621 1403 1648">6333</td> </tr> <tr> <td data-bbox="987 1648 1195 1675">September-22</td> <td data-bbox="1195 1648 1403 1675">6258</td> </tr> <tr> <td data-bbox="987 1675 1195 1703"><b>Total</b></td> <td data-bbox="1195 1675 1403 1703"><b>37899</b></td> </tr> <tr> <td data-bbox="987 1703 1195 1738"><b>Average</b></td> <td data-bbox="1195 1703 1403 1738"><b>6317</b></td> </tr> </tbody> </table> <ul style="list-style-type: none"> <li>Note: Water Consumption and Wastewater generation is as per our existing CCA vide Order No. AWH-98281 dated 29/12/2018 &amp; its amendment vide letter no.</li> </ul>	Month	Domestic KL/Month	April-22	6325	May-22	6330	June-22	6328	July-22	6325	August-22	6333	September-22	6258	<b>Total</b>	<b>37899</b>	<b>Average</b>	<b>6317</b>
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		GPCB/BRCH-B/CCA-70(6)/ID-41279/526734 dtd. 13-11-2019, which is under prescribed limit.
9	During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, treated sewage (40 KL/day) shall be stored in guard pond / polishing pond within premises. This additional treated sewage (40 KL/day) shall not be discharged in any case.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• During monsoon season, the treated sewage is stored in existing guard pond / polishing pond.</li> </ul>
10	The unit shall provide adequate effluent treatment plant (ETP) & STP and it shall be operated regularly and efficiently so as to achieve desired norms prescribed by MoEF&CC/ CPCB/ GPCB.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided primary treatment facility (neutralization pit) in our unit and then neutralized effluent is sent to SFD plant ETP comprising of primary &amp; secondary treatment facility. We have installed STP as per following specification: Design Capacity of STP: 1080 m<sup>3</sup>/day. Design Basis: Flow: 1080 m<sup>3</sup>/day. BOD: 250-270 mg/l. COD: 400-600 mg/l TSS: 400 mg/l pH: 6 - 9</li> <li>• We are operating our ETP &amp; STP regularly and efficiently so as to achieve desired norms prescribed by MoEF&amp;CC / CPCB / GPCB.</li> <li>• Domestic waste water quality report attached as <b>Annexure 8.</b></li> </ul>
11	A separate electric meter shall be placed for the ETP & STP system. Proper logbook of ETP & evaporator operations also showing chemicals consumed, treated water reused, power consumed etc. shall be maintained and furnished to the GPCB from time to time.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided metering facility at inlet &amp; outlet of the ETP &amp; STP and maintain the records of the same regularly.</li> <li>• Proper logbooks of ETP operations is maintained, also maintaining chemicals consumed, treated water reused, power consumed etc. and submitted in the Monthly Patrak on GPCB XGN.</li> </ul>
12	Regular performance evaluation of the ETP & STP shall be undertaken every year to check its adequacy, through credible institutes of National repute and its records shall be maintained.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Regular performance evaluation of ETP &amp; STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor (M. S. Patel Department of Civil Engineering, CSPIT, CHARUSAT) and its record is maintained. Copy of is attached as <b>Annexure-13.</b></li> </ul>




Sr. No.	EC Conditions	Compliance Status
13	<p>Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.</p>	<p>Complied  Rainwater is recovered from flat roof tops and stored in a rain water harvesting well near admin building to conserve fresh water.  Photograph of Rain water harvesting in school of Saladara village:</p>
		
14	<p>The unit shall join and participate financially and technically for any common environmental facility/ infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are and will be participating financially and technically for any common environmental facility/ infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt./ GIDC.</li> <li>• We have also invested a special amount for a training &amp; development of education program that has been initiated jointly by Paryavaran Vikas Kendra-Rajkot and Paryavaran Mitra Ahmedabad.</li> </ul>
<b>A.3</b>	<b>AIR:</b>	
15	<p>The excess steam requirement (100 MT/Day) shall be met by generating the same with clean fuel i.e. Hydrogen at the rate of 30000 Nm3 per day in a 10 ton/hour and 10 kg/cm2 capacity of hydrogen boiler.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have installed plant such as PAC, Caustic Soda flakes and Calcium Chloride in which 98% of generated hydrogen is being consumed as a clean fuel.</li> <li>• Hence we do not have sufficient hydrogen to run the boiler based on that we have removed Hydrogen Boiler from our plant and informed to Boiler inspector.</li> </ul>
16	<p>Process emission shall be controlled with the air pollution control equipment's (APCE) as mentioned below.</p>	
	<p>Sodium Hypo stack of Caustic Plant - Alkali scrubber for control of Cl<sub>2</sub>.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided Alkali scrubber for control of Cl<sub>2</sub> in Sodium Hypo Stack.</li> <li>• Online monitoring system is also provided and it is connected to CPCB &amp; GPCB server.</li> </ul>
	<p>HCl stack-1 of Caustic Plant - Water scrubber having</p>	<ul style="list-style-type: none"> <li>• Complied</li> </ul>


Sr. No.	EC Conditions	Compliance Status				
	bubble cap tray absorption system for control of HCl.	<ul style="list-style-type: none"> <li>We have provided separate Water scrubber having bubble cap tray absorption system for control of HCl in both the stacks.</li> <li>Online monitoring system is also provided and it is connected to CPCB &amp; GPCB server.</li> </ul>				
	HCl stack-2 of Caustic Plant - Water scrubber having bubble cap tray absorption system for control of HCl.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided separate Water scrubber having bubble cap tray absorption system for control of HCl in both the stacks.</li> <li>Online monitoring system is also provided and it is connected to CPCB &amp; GPCB server.</li> </ul>				
	Poly Aluminium Chloride Liquid - Water scrubber system for control of HCl & Cl <sub>2</sub> .	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided water scrubber system for control of HCl &amp; Cl<sub>2</sub>.</li> </ul>				
	Poly Aluminium Chloride Powder - 3 stage Water scrubber system for control of HCl & Cl <sub>2</sub> .	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided 3 stage water scrubber system for control of HCl &amp; Cl<sub>2</sub>.</li> </ul>				
	Chlorinated paraffin Plant - Alkali Scrubbing system for control of HCl & Cl <sub>2</sub> .	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided Alkali Scrubbing system for control of HCl &amp; Cl<sub>2</sub>.</li> </ul>				
	Aluminium Chloride - Alkali Scrubbing system for control of HCl & Cl <sub>2</sub> .	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided Alkali Scrubbing system for control of HCl &amp; Cl<sub>2</sub>.</li> </ul>				
	Stable Bleaching Powder - Alkali Scrubbing system for control of HCl & Cl <sub>2</sub> .	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided Alkali Scrubbing system for control of HCl &amp; Cl<sub>2</sub>.</li> </ul>				
<b>Stack Results (Apr, 22 to Sept,22)</b>						
<b>Stack</b>		<b>Range</b>	<b>HCl</b>	<b>Cl<sub>2</sub></b>	<b>HF</b>	<b>PM</b>
Sodium Hypo Stack 1		MIN	-	1.12	-	-
		MAX	-	1.99	-	-
		AVG	-	1.52	-	-
Sodium Hypo Stack 1		MIN	-	1.60	-	-
		MAX	-	1.94	-	-
		AVG	-	1.79	-	-
HCl Stack 1		MIN	10.5	-	-	-
		MAX	12.7	-	-	-
		AVG	11.6	-	-	-
HCl Stack 2		MIN	10.6	-	-	-
		MAX	13.5	-	-	-
		AVG	12.1	-	-	-
HCl Stack 3		MIN	10.7	-	-	-
		MAX	15.2	-	-	-
		AVG	12.4	-	-	-
HCl Stack 4		MIN	10.1	-	-	-
		MAX	14.0	-	-	-
		AVG	11.6	-	-	-
PAC Liquid Plant		MIN	1.1	0.4	-	-
		MAX	3.2	1.0	-	-
		AVG	2.5	0.6	-	-
PAC Powder Plant 1		MIN	2.1	0.5	-	-


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At no time, emission level should go beyond the stipulated standards.</p> </td> <td data-bbox="972 821 1414 1125"> <ul style="list-style-type: none"> <li>Complied</li> <li>The Air Pollution Control Equipment (APCE) attached with different stacks are operated efficiently and effectively to achieve the GPCB/ CPCB / MoEF&amp;CC prescribed norms.</li> <li>We have provided adequate stack height as per prevailing norms for the process emissions.</li> </ul> </td> </tr> <tr> <td data-bbox="203 1125 289 1339">18</td> <td data-bbox="289 1125 972 1339"> <p>Online monitoring system shall be installed to monitor at least SOX &amp; PM concentrations in the flue gas emission and the results shall be displayed at strategic locations in the premises.</p> </td> <td data-bbox="972 1125 1414 1339"> <ul style="list-style-type: none"> <li>Complied</li> <li>We have installed Online monitoring system to monitor SOX, NOX &amp; PM concentrations in both the stacks of power plant.</li> <li>The results are displayed in the DCS system of power plant.</li> </ul> </td> </tr> <tr> <td data-bbox="203 1339 289 1791">19</td> <td data-bbox="289 1339 972 1791"> <p>Adequate air pollution control systems shall be provided as proposed for control of fugitive emission viz. water sprinklers at all coal transfer points and truck unloading points, dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.</p> </td> <td data-bbox="972 1339 1414 1791"> <ul style="list-style-type: none"> <li>Complied</li> <li>We are in planning to install dust tamer in FY 22-23.</li> <li>Water sprinklers are provided to control the fugitive emission at coal storage, coal transfer points and truck unloading area.</li> <li>We have provided dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.</li> <li>Fly ash is stored in silo and transferred in close trucks to avoid any dust emission.</li> </ul> </td> </tr> </table>		MAX	5.4	0.8	-	-	AVG	3.3	0.6	-	-	PAC Powder Plant 2	MIN	1.6	0.5	-	-	MAX	5.4	0.7	-	-	Chlorinated Paraffin Plant	AVG	3.7	0.5	-	-	MIN	2.2	0.3	-	-	Alluminium Chloride	MAX	6.0	0.8	-	-	AVG	3.5	0.6	-	-	Stable Bleaching Powder Plant	MIN	1.6	0.5	-	-	MAX	4.4	0.7	-	-	Phosphoric Acid Plant	AVG	2.6	0.6	-	-	MIN	3.2	0.3	-	-	Calcium Chloride	MAX	6.1	0.5	-	-	AVG	4.9	0.4	-	-	CMS Plant (HCl Scrubber)	MIN	5.9	-	-	-	MAX	8.6	-	-	-	AVG	7.0	-	-	-	MIN	2.4	-	-	14.0	17	<p>The APCE shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB/ CPCB/ MoEF&amp;CC at stack outlets. 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	MAX	5.4	0.7	-	-																																																																																																							
Chlorinated Paraffin Plant	AVG	3.7	0.5	-	-																																																																																																							
	MIN	2.2	0.3	-	-																																																																																																							
Alluminium Chloride	MAX	6.0	0.8	-	-																																																																																																							
	AVG	3.5	0.6	-	-																																																																																																							
Stable Bleaching Powder Plant	MIN	1.6	0.5	-	-																																																																																																							
	MAX	4.4	0.7	-	-																																																																																																							
Phosphoric Acid Plant	AVG	2.6	0.6	-	-																																																																																																							
	MIN	3.2	0.3	-	-																																																																																																							
Calcium Chloride	MAX	6.1	0.5	-	-																																																																																																							
	AVG	4.9	0.4	-	-																																																																																																							
CMS Plant (HCl Scrubber)	MIN	5.9	-	-	-																																																																																																							
	MAX	8.6	-	-	-																																																																																																							
	AVG	7.0	-	-	-																																																																																																							
	MIN	2.4	-	-	14.0																																																																																																							
17	<p>The APCE shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB/ CPCB/ MoEF&amp;CC at stack outlets. Adequate stack height as per prevailing norms shall be provided for the process emissions. At no time, emission level should go beyond the stipulated standards.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>The Air Pollution Control Equipment (APCE) attached with different stacks are operated efficiently and effectively to achieve the GPCB/ CPCB / MoEF&amp;CC prescribed norms.</li> <li>We have provided adequate stack height as per prevailing norms for the process emissions.</li> </ul>																																																																																																										
18	<p>Online monitoring system shall be installed to monitor at least SOX &amp; PM concentrations in the flue gas emission and the results shall be displayed at strategic locations in the premises.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>We have installed Online monitoring system to monitor SOX, NOX &amp; PM concentrations in both the stacks of power plant.</li> <li>The results are displayed in the DCS system of power plant.</li> </ul>																																																																																																										
19	<p>Adequate air pollution control systems shall be provided as proposed for control of fugitive emission viz. water sprinklers at all coal transfer points and truck unloading points, dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>We are in planning to install dust tamer in FY 22-23.</li> <li>Water sprinklers are provided to control the fugitive emission at coal storage, coal transfer points and truck unloading area.</li> <li>We have provided dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.</li> <li>Fly ash is stored in silo and transferred in close trucks to avoid any dust emission.</li> </ul>																																																																																																										

Sr. No.	EC Conditions	Compliance Status																																																																																																																																																																					
	 <p data-bbox="305 661 716 688">Water Sprinkling System at Coal Yard</p>																																																																																																																																																																						
20	<p data-bbox="305 695 959 814">The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety &amp; Health).</p>	<ul data-bbox="992 695 1404 989" style="list-style-type: none"> <li>• Complied</li> <li>• Fugitive emissions in work zone environment &amp; storage area are monitored by third party on monthly basis and are well within GPCB stipulated norms.</li> <li>• Work place monitoring is summarized as per below table and reports are attached as <b>Annexure-9</b>.</li> </ul>																																																																																																																																																																					
	<table border="1" data-bbox="305 1058 1404 1686"> <thead> <tr> <th colspan="7" data-bbox="656 1058 1055 1079">Workplace Results (Apr, 22 to Sept, 22)</th> </tr> <tr> <th data-bbox="418 1079 613 1100">Station</th> <th data-bbox="630 1079 716 1100">Range</th> <th data-bbox="753 1079 862 1100">Total Dust</th> <th data-bbox="948 1079 992 1100">SO2</th> <th data-bbox="1045 1079 1089 1100">Nox</th> <th data-bbox="1143 1079 1187 1100">HCl</th> <th data-bbox="1240 1079 1284 1100">Cl2</th> </tr> <tr> <th colspan="2" data-bbox="483 1100 548 1121">Limits</th> <th data-bbox="786 1100 829 1121">10</th> <th data-bbox="948 1100 964 1121">5</th> <th data-bbox="1045 1100 1062 1121">6</th> <th data-bbox="1143 1100 1159 1121">-</th> <th data-bbox="1240 1100 1256 1121">9</th> </tr> <tr> <th colspan="2" data-bbox="483 1121 548 1142">Units</th> <th data-bbox="753 1121 862 1142">mg/m3</th> <th data-bbox="915 1121 1024 1142">mg/m3</th> <th data-bbox="1045 1121 1154 1142">mg/m3</th> <th data-bbox="1143 1121 1159 1142">-</th> <th data-bbox="1240 1121 1349 1142">mg/m3</th> </tr> </thead> <tbody> <tr> <td data-bbox="418 1184 500 1205" rowspan="3">CA Plant</td> <td data-bbox="630 1163 667 1184">Min</td> <td data-bbox="786 1163 829 1184">0.73</td> <td data-bbox="948 1163 992 1184">0.12</td> <td data-bbox="1045 1163 1089 1184">0.21</td> <td data-bbox="1143 1163 1187 1184">0.08</td> <td data-bbox="1240 1163 1284 1184">0.34</td> </tr> <tr> <td data-bbox="630 1184 667 1205">Max</td> <td data-bbox="786 1184 829 1205">1.2</td> <td data-bbox="948 1184 992 1205">0.9</td> <td data-bbox="1045 1184 1089 1205">1.0</td> <td data-bbox="1143 1184 1187 1205">0.4</td> <td data-bbox="1240 1184 1284 1205">0.3</td> </tr> <tr> <td data-bbox="630 1205 667 1226">Avg</td> <td data-bbox="786 1205 829 1226">0.9</td> <td data-bbox="948 1205 992 1226">0.4</td> <td data-bbox="1045 1205 1089 1226">0.5</td> <td data-bbox="1143 1205 1187 1226">0.2</td> <td data-bbox="1240 1205 1284 1226">0.3</td> </tr> <tr> <td data-bbox="418 1247 500 1268" rowspan="3">SBP Plant</td> <td data-bbox="630 1226 667 1247">Min</td> <td data-bbox="786 1226 829 1247">0.7</td> <td data-bbox="948 1226 992 1247">0.1</td> <td data-bbox="1045 1226 1089 1247">0.2</td> <td data-bbox="1143 1226 1187 1247">0.1</td> <td data-bbox="1240 1226 1284 1247">0.3</td> </tr> <tr> <td data-bbox="630 1247 667 1268">Max</td> <td data-bbox="786 1247 829 1268">1.4</td> <td data-bbox="948 1247 992 1268">0.8</td> <td data-bbox="1045 1247 1089 1268">1.2</td> <td data-bbox="1143 1247 1187 1268">0.3</td> <td data-bbox="1240 1247 1284 1268">0.3</td> </tr> <tr> <td data-bbox="630 1268 667 1289">Avg</td> <td data-bbox="786 1268 829 1289">0.9</td> <td data-bbox="948 1268 992 1289">0.4</td> <td data-bbox="1045 1268 1089 1289">0.6</td> <td data-bbox="1143 1268 1187 1289">0.1</td> <td data-bbox="1240 1268 1284 1289">0.3</td> </tr> <tr> <td data-bbox="380 1331 537 1352" rowspan="3">PAC Powder New</td> <td data-bbox="630 1310 667 1331">Min</td> <td 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</tr> <tr> <td data-bbox="630 1499 667 1520">Max</td> <td data-bbox="786 1499 829 1520">1.4</td> <td data-bbox="948 1499 992 1520">0.7</td> <td data-bbox="1045 1499 1089 1520">1.1</td> <td data-bbox="1143 1499 1187 1520">0.3</td> <td data-bbox="1240 1499 1284 1520">0.3</td> </tr> <tr> <td data-bbox="630 1520 667 1541">Avg</td> <td data-bbox="786 1520 829 1541">0.9</td> <td data-bbox="948 1520 992 1541">0.4</td> <td data-bbox="1045 1520 1089 1541">0.6</td> <td data-bbox="1143 1520 1187 1541">0.2</td> <td data-bbox="1240 1520 1284 1541">0.3</td> </tr> <tr> <td data-bbox="358 1562 558 1583" rowspan="3">Chemical Dosing Area</td> <td data-bbox="630 1541 667 1562">Min</td> <td data-bbox="786 1541 829 1562">0.7</td> <td data-bbox="948 1541 992 1562">0.2</td> <td data-bbox="1045 1541 1089 1562">0.3</td> <td data-bbox="1143 1541 1187 1562">0.1</td> <td data-bbox="1240 1541 1284 1562">0.4</td> </tr> <tr> <td data-bbox="630 1562 667 1583">Max</td> <td data-bbox="786 1562 829 1583">1.5</td> <td 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Area	Min	0.7	0.2	0.3	0.1	0.4	Max	1.5	0.8	1.1	0.5	0.4	Avg	0.9	0.5	0.6	0.3	0.4	CPW (Paraffin Storage Area)	Min	0.7	0.2	0.2	0.1	0.3	Max	1.1	0.8	1.0	0.3	0.3	Avg	0.8	0.4	0.5	0.2	0.3
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21	<p data-bbox="305 1692 954 1812">Regular performance evaluation of the air pollution control systems shall be undertaken every year to check its adequacy, through credible institutes of national repute, and its records shall be maintained.</p>	<ul data-bbox="992 1692 1404 1894" style="list-style-type: none"> <li>• Complied</li> <li>• Regular performance evaluation of ETP &amp; STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor (M. S. Patel)</li> </ul>																																																																																																																																																																					

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22	Regular monitoring of ground level concentration of PM10, PM2.5, SO2, Cl2, HCl & VOC shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by Gujarat Pollution Control Board. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with GPCB.	<ul style="list-style-type: none"> <li>Complied</li> <li>Regular monitoring of ground level concentration of CS2, SO2, NOX, Cl2, HCl, PM10 and PM2.5 is carried out through third party in the impact zone and its records are maintained.</li> <li>If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures will be provided immediately.</li> <li>The location of the monitoring stations and frequency of monitoring are decided in consultation with GPCB.</li> <li>There are 4 nos. of ambient air quality monitoring stations covering all directions in nearby villages (Derol, Sarnar, Argama &amp; Vilayat).</li> <li>Monthly Analysis Report from Kadam Environmental Consultants &amp; Unistar Environment &amp; Research Labs Pvt. Ltd. are attached as <b>Annexure-8</b></li> <li>Ambient Air Monitoring Report is summarized as per below table:</li> </ul>																																																																																																																																
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24	Fugitive emissions of VOC's must be regularly monitored. Sensors for detecting VOC's shall be provided at strategic locations. Leak Detection and Repair (LDAR) Programme shall be implemented to control VOC emissions.	<ul style="list-style-type: none"> <li>• Not Applicable</li> <li>• Volatile Organic Compounds are not used in our plant hence we are not monitoring VOC's.</li> </ul>								
25	All the vessels used in the manufacturing process shall be closed to reduce the fugitive emission.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• All the vessels used in the manufacturing process are closed to reduce the fugitive emission.</li> </ul>								
<b>A.4 SOLID / HAZARDOUS WASTE:</b>										
26	<p>The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have obtained authorization of the GPCB for collection / treatment / storage / disposal of hazardous wastes.</li> </ul> <table border="1" data-bbox="987 667 1403 726"> <tr> <td><b>Authorization No.</b></td> <td>AWH-98281</td> </tr> <tr> <td><b>Validity</b></td> <td>02/03/2024</td> </tr> </table> <ul style="list-style-type: none"> <li>• We have provided separate covered storage area for different types of wastes. Photograph of the waste storage area as per below:</li> <li>• We are member TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd.</li> <li>• Following is the BEIL membership details:</li> </ul> <table border="1" data-bbox="987 1024 1403 1138"> <tr> <td><b>Membership No.</b></td> <td>Oth/133 dated 28/02/2021</td> </tr> <tr> <td><b>Booked Quantity</b></td> <td>24300 MT/Year</td> </tr> </table> <ul style="list-style-type: none"> <li>• Copy of the membership certificate is attached as <b>Annexure-4.</b></li> </ul>	<b>Authorization No.</b>	AWH-98281	<b>Validity</b>	02/03/2024	<b>Membership No.</b>	Oth/133 dated 28/02/2021	<b>Booked Quantity</b>	24300 MT/Year
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<p>Waste Storage Area</p> 										
27	Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided impervious layer with pucca bottom and leachate collection facility in the separate hazardous waste storage area for storing before disposal.</li> <li>• Photograph of sludge storage area:</li> </ul>								

Sr. No.	EC Conditions	Compliance Status						
								
28	ETP waste, Brine / process Sludge, Spent Resin & Spent carbon from filters will be disposed off at the nearby common TSDF.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are member of TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd. Following is the BEIL membership details: <table border="1" data-bbox="987 1125 1401 1236"> <tr> <td><b>Membership No.</b></td> <td>Oth/133 dated 28/02/2021</td> </tr> <tr> <td><b>Booked Quantity</b></td> <td>24300 MT/Year</td> </tr> </table> </li> </ul> <p>Copy of the membership certificate is attached as <b>Annexure-4</b>.</p>	<b>Membership No.</b>	Oth/133 dated 28/02/2021	<b>Booked Quantity</b>	24300 MT/Year		
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29	Discarded barrels / containers / bags / liners shall be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are disposing Discarded barrels / containers / bags / liners to GPCB approved registered recyclers only.</li> </ul>						
30	Used oil shall be sold only to the registered recyclers.	<ul style="list-style-type: none"> <li>Complied</li> <li>Used Oil is sold to Registered recyclers only.</li> </ul>						
31	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are a member of TSDF &amp; CHWIF site operated by M/s. BEIL Infrastructure Ltd.</li> <li>Following is the membership details: <table border="1" data-bbox="987 1724 1401 1890"> <tr> <td><b>CHWIF Membership No.</b></td> <td>CI/BD/92 dated 29/01/2022</td> </tr> <tr> <td><b>Booked Quantity</b></td> <td>160 MT/Year</td> </tr> <tr> <td><b>TSDF</b></td> <td>Oth/133 dated</td> </tr> </table> </li> </ul>	<b>CHWIF Membership No.</b>	CI/BD/92 dated 29/01/2022	<b>Booked Quantity</b>	160 MT/Year	<b>TSDF</b>	Oth/133 dated
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Sr. No.	EC Conditions	Compliance Status																						
		Membership No.	02/03/2022																					
		Booked Quantity	31000 MT/Year																					
32	Vehicles used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.	<ul style="list-style-type: none"> <li>• Copy of the membership certificate is attached as <b>Annexure-4.</b></li> </ul>																						
																								
33	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/ CHWIF.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have explored Nano technology such as Sulphate Extraction System to reduce the quantity of sludge generated from Chlor-alkali plant by 30%. Further we have also installed sludge dryer for drying of sludge.</li> </ul>																						
Hazardous Waste Generation & Disposal is summarized as per below table:																								
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Apr-22	1122	1743	1806	2716	0	0	0	0																																																																																																	
May-22	1204	878	1976	1796	0	0	0	0																																																																																																	
June-22	1556	2065	1646	71	0	0	0	0																																																																																																	
Jul-22	1247	1130	1600	1208	0	0	0	0																																																																																																	
Aug-22	1112	407	1708	2032	0	0	0	0																																																																																																	
Sept-22	817	14	1421	1600	0	0	0	0																																																																																																	
<b>Total</b>	<b>7058</b>	<b>6237</b>	<b>10157</b>	<b>9423</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>																																																																																																	
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<b>A.5</b>	<b>SAFETY:</b>																																																																																																								
34	The company shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended.			<ul style="list-style-type: none"> <li>Complied</li> <li>We are following MSHIC Rules, 1989 and Factories Act, 1948.</li> <li>All the chemicals/ materials are stored in the storage tanks with required material of Construction.</li> <li>Sufficient dykes are provided at Tank storages as per chemical handling and storage guidelines.</li> <li>Fire Hydrant system is provided nearby storage and handling area for emergency purpose.</li> <li>Safety trainings are provided to</li> </ul>																																																																																																					

Sr. No.	EC Conditions	Compliance Status
		<p>all the operators and workers working in such areas.</p> <ul style="list-style-type: none"> <li>• Hazard Identification and Risk Assessment (JSA) of all activities carried out and SOPs are prepared accordingly.</li> <li>• Safety showers are provided nearby storage areas.</li> </ul>
35	<p>The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, as amended in 2000 and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We are complying with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, as amended in 2000 and the Public Liability Insurance Act for handling of hazardous chemicals etc. has been obtained. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities obtained before commissioning of the project. Copy of PLI policy is attached as <b>Annexure-10</b>.</li> <li>• Requisite On-site and Off-site Disaster Management Plans prepared and implemented.</li> </ul>
36	<p>All the recommendations/ commitments made in the revised EIA report of the project prepared by M/s. Anand Consultants, Ahmedabad and submitted vide letter No. NIL dated 29/06/2016 shall be implemented in letter and spirit.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• All the recommendations/ commitments made in the revised EIA report of the project prepared by M/s. Anand Consultants, Ahmedabad have been implemented.</li> </ul>

Sr. No.	EC Conditions			Compliance Status	
Description	Type of pollutant / Wastes	Source	Pollution control Arrangement / mitigation measures		Compliance measure
Air Environment	PM, SO <sub>2</sub> , Nox	Boiler	<ul style="list-style-type: none"> <li>• ESP and low Nox burner are provided to control the particulate matter and Nox respectively</li> <li>• Lime stone are added to reduce SO<sub>2</sub> emissions</li> </ul>		<ul style="list-style-type: none"> <li>• We have installed ESP &amp; Low Nox Burner with our boiler stack to control the particulate matter and Nox respectively.</li> <li>• We are using lime stone to reduce emission of SO<sub>2</sub></li> </ul>
	CL <sub>2</sub> , HCL	Process	<ul style="list-style-type: none"> <li>• Alkali scrubber and waste scrubber are provided to control the process gas emission</li> </ul>		<ul style="list-style-type: none"> <li>• We have installed Alkali Scrubber &amp; Water Scrubber to reduce process gas emission</li> </ul>
	HCL, CL <sub>2</sub>	Fugitive emission from equipment leak valves, flanges, pump seal, compressors, sampling connection, open ended lines	<ul style="list-style-type: none"> <li>• Leak proof technology for valve and pumps</li> <li>• Plugs, caps and blinds for open ended lines .</li> <li>• Rupture discs and soft seals for pressure valves .</li> <li>• Dual mechanical seal with Non – VOC barrier fluid / degassing system .</li> <li>• Closed loop sampling system</li> <li>• Enclosure of seal area double condenser system are provided .</li> <li>• The vents of the secondary condenser connected with the scrubber .</li> </ul>		<ul style="list-style-type: none"> <li>• We have installed Leak proof technology for valve and pumps</li> <li>• We have provided Plugs, caps and blinds for open ended lines</li> <li>• We have provided Rupture discs and soft seals for pressure valves</li> <li>• We have provided Dual mechanical seal with Non – VOC barrier fluid / degassing system</li> <li>• Closed loop sampling system is provided</li> <li>• Enclosure of seal area double condenser system are provided</li> </ul>
	CO <sub>2</sub> and other gases	Fugitive emission from sources such as ope surfaces, ETP, sufaces impoundments, retention ponds.	<ul style="list-style-type: none"> <li>• Covering of all open surfaces wherever possible .</li> <li>• Sensors are provided in work place area .</li> </ul>		<ul style="list-style-type: none"> <li>• The vents of the secondary condenser connected with the scrubber</li> <li>• All open surfaces are covered</li> <li>• Sensors have been provided in work place area.</li> </ul>
Water Environment	Low pollution potential	Domestic waste water	<ul style="list-style-type: none"> <li>• Domestic effluent is in Sewage Treatment Plant ( STP) and treated wastewater is used for gardening purposes .</li> </ul>		<ul style="list-style-type: none"> <li>• Domestic effluent is treated in Sewage Treatment Plant (STP) and treated wastewater is used for gardening purposes.</li> </ul>
Noise Environment	Structure - borne noise: the vibration transmitted may activate the building where it mouted without proper installation. Air borne noise due to air turbulence at equipment / structure and etc.	Vechile , Transportation, Water Cooling Towers, Air - cooled chillers, Fans, Ducts, Others plant equipment & machinery .	<ul style="list-style-type: none"> <li>• To reduce the noise generation during the transportation activities the vechile are kept periodically services and maintained as per the requirement of latest trends in automobile industry .</li> <li>• Acoustic mat on the water surface is provided to reduce the water splashing noise .</li> <li>• All the vibrating parts is checked periodically and serviced to reduce the noise generation .</li> <li>• Complete enclosure with silencers at condenser fan outlets and at air inlets of the enclosure is fabricated .</li> <li>• Green belt is developed around the plant peripheral which act as a curtain / barrier between the plant and near by buildings.</li> </ul>		<ul style="list-style-type: none"> <li>• Vehicles are kept periodically services and maintained to reduce the noise generation during the transportation</li> <li>• Acoustic mat on the water surface have been provided to reduce the water splashing noise</li> <li>• All the vibrating parts is checked periodically and serviced to reduce the noise generation</li> <li>• Complete enclosure with silencers at condenser fan outlets and at air inlets of the enclosure is fabricated</li> <li>• Green belt is being developed around the plant peripheral.</li> </ul>
Biological Environment	Particulate Emission	Manufacturing process and other ancillary activites	<ul style="list-style-type: none"> <li>• Green belt is developed maintained (as per EB expert and CPCB guidelines ) within the premises / around the premises to control the expected pollutant due to proposed project activity as well as to improve the aesthetic.</li> <li>• Characteristic of plant mainly considered for affecting absorption of pollutant gases and removal of dust particle are as follows</li> </ul>		<ul style="list-style-type: none"> <li>• Green belt is developed &amp; maintained as per EB expert and CPCB guidelines.</li> </ul>
Land Environment	Gaseous / Paticulate emission	Manufacturing process Transportation	<ul style="list-style-type: none"> <li>• Treated effluent is meeting / conforming the stipulated standards / norms and is used for gardening / plantation proposes remnant is disposed in to sea through GIDC Vilayat pipe line .</li> <li>• Pollution control devices / measure are installed / implemented properly to treat air &amp; liquid effluent it is periodical checked / maintained. Solid / hazardous waste is collected , stored in a designated storage area with proper flooring before its final disposal</li> </ul>		<ul style="list-style-type: none"> <li>• Treated effluent is meeting / conforming the stipulated standards / norms is disposed in to sea through GIDC Vilayat pipe line and treated domestic wastewater is used for gardening / plantation within premises.</li> <li>• Online Air &amp; Water Monitoring System is installed for continuous monitoring. Solid / hazardous waste is being collected, stored in a designate storage area with proper flooring before its final disposal.</li> </ul>
37	All necessary precautionary shall be taken to avoid any kind of accident during storage and handling of toxic/ hazardous chemicals, especially chlorine, hydrogen, CS <sub>2</sub> , HCl etc.			<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have developed job safety analysis procedure and trainings have been provided to all employees. Proper controls are provided to mitigate any emergency.</li> </ul>	
38	Storage of flammable chemicals shall be sufficiently away from the production area.			<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided tanks and vessels to store hazardous chemicals with proper controls such as Dyke wall, Level Transmitters, safety valves and interlocks are provided in DCS.</li> <li>• Photograph of tank:</li> </ul>	

Sr. No.	EC Conditions	Compliance Status
		
39	Sufficient no. of fire extinguishers shall be provided near the plant and storage area.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Sufficient nos. of Fire extinguishers are provided.</li> </ul>
40	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic/ hazardous chemicals.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• All necessary precautionary measures have been taken to avoid any kind of accident during storage and handling of toxic/ hazardous chemicals</li> </ul>
41	All the toxic/ hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• All the toxic/ hazardous chemicals stored in optimum quantity and all necessary permissions in this regard obtained before commencing the expansion activities.</li> </ul>
42	The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have identified the environment protection measures &amp; risks and take mitigate measures accordingly.</li> </ul>
43	Only flame proof electrical fittings shall be provided in the plant premises.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Flame proof electrical fittings are provided in the required plant area.</li> </ul>
44	Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks/ containers instead of one single large capacity tank / containers.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Storage of hazardous chemicals is minimized and stored in multiple small capacity tanks / containers instead of one single large capacity tank / containers.</li> </ul>
45	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/ dyke walls shall be provided, for storage tanks for Hazardous Chemicals.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• All the storage tanks fitted with appropriate controls to avoid any leakages. Bund/ dyke walls are provided, for storage tanks for Hazardous Chemicals. Photograph of storage tanks:</li> </ul>

Sr. No.	EC Conditions	Compliance Status
		
46	<p>Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Handling and charging of the chemicals are in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.</li> </ul>
47	<p>Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• OHC with availability of para-medical staff &amp; ambulance is available round the clock.</li> <li>• We have also tied up with M/s. Apex Multispecialty Hospital at Bharuch.</li> </ul>
48	<p>Personal Protective Equipment's shall be provided to workers and its usage shall be ensured and supervised.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have provided proper job specific PPEs to all the workers and its usage is ensured and supervised regularly.</li> </ul>
49	<p>First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• We have 58 Nos. of first aid boxes at different locations of our plant containing required antidote for the chemicals used in the plant.</li> </ul>
50	<p>Training shall be imparted to all the workers on safety and health aspects of chemicals handling.</p>	<ul style="list-style-type: none"> <li>• Complied</li> <li>• Training is imparted to all the workers at regular intervals for safety and health during chemical handling, Emergency Preparedness, etc.</li> <li>• We have engaged DuPont Safety for implementation of Work place safety &amp; Process Safety management system and to provide training &amp; Awareness of employees in the site.</li> <li>• We have made six different sub committees of Work place safety and Process safety management subcommittees. APEX Committee headed by Unit Head, functional Head and department heads to develop and implement safety</li> </ul>

Sr. No.	EC Conditions	Compliance Status
		management system. <ul style="list-style-type: none"> <li>Please find below training calendar:</li> </ul>
	 <p>The image shows a 'Monthly Training Calendar - September '22' with a grid of training topics and dates. The header includes the 'LEARNING' logo. The calendar lists various safety and health training sessions throughout the month, such as 'Safety Awareness', 'Fire Safety', and 'Occupational Health &amp; Safety'. A 'CONTINUOUS IMPROVEMENT' logo is visible at the bottom right of the calendar.</p>	
51	<p>Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act &amp; Rules.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>Occupational health surveillance of the workers is done and its records are maintained.</li> <li>Six monthly pre-employment and periodical examination for all the workers is being carried out.</li> <li>100% employees undergo with occupational health surveillance every 6 month/ 12 month depending on exposure. Record is available with Occupational Health Centre. Sample report is attached as <b>Annexure-12</b>.</li> </ul>
52	<p>Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act &amp; Rules.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>We are following Central Motor Vehicles Rule - 9 for Hazardous chemical transportation.</li> <li>Photograph of tanker:</li> </ul>
	 <p>The photograph shows several tanker trucks parked in front of a large industrial building. One prominent blue tanker truck is in the center, and another brown one is on the left. The building has multiple bays and a sign that is partially visible.</p>	

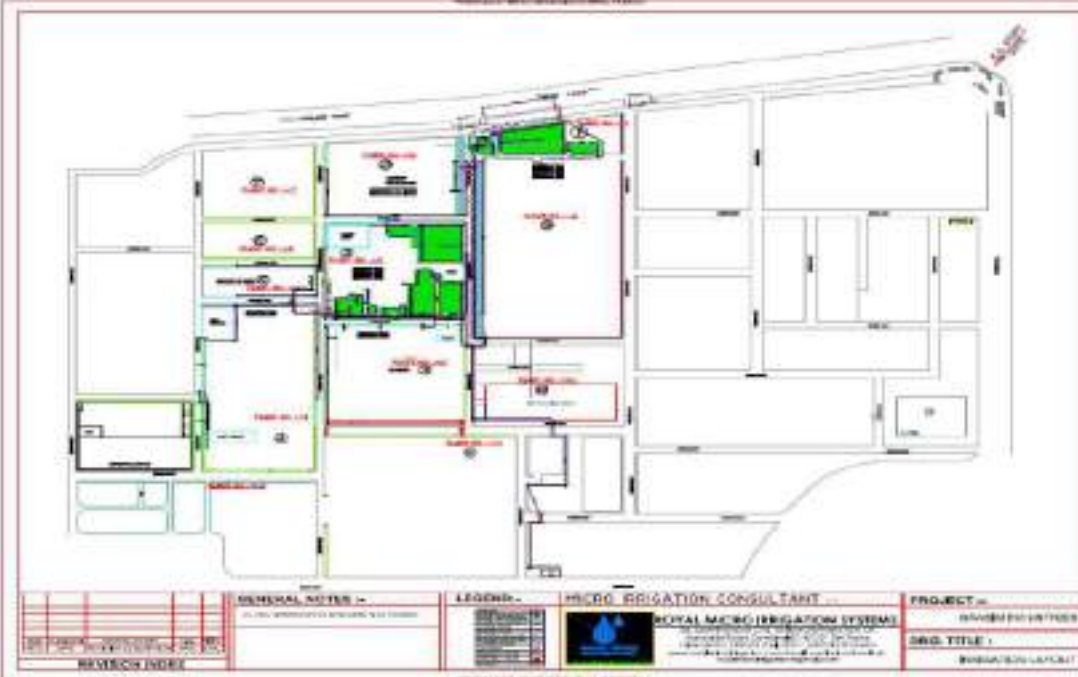
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53	The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.	<ul style="list-style-type: none"> <li>Complied</li> <li>The company will implement all preventive and mitigation measures suggested in the Risk Assessment Report.</li> </ul>																																																																																
54	Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.	<ul style="list-style-type: none"> <li>Complied</li> <li>Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others are obtained prior to commissioning of the project.</li> </ul>																																																																																
<b>A.6 NOISE:</b>																																																																																		
55	The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	<ul style="list-style-type: none"> <li>Complied</li> <li>The overall noise level in and around the plant area is kept well within the prescribed standards by providing noise control measures including acoustic insulation, silencers, enclosures etc. on all sources of noise generation.</li> <li>The ambient noise levels are conforming to the standards prescribed under the Environment (Protection) Act and Rules. Third party ambient noise monitoring is carried out by NABL accredited laboratory.</li> <li>Monthly Analysis Report from Kadam Environmental Consultants are attached as <b>Annexure-8</b>.</li> <li>Noise Monitoring Report is summarized as per below table:</li> </ul> <table border="1" data-bbox="987 1268 1344 1894"> <thead> <tr> <th colspan="4" data-bbox="992 1268 1339 1318"><b>Noise Results (Apr, 22 to Sept, 22)</b></th> </tr> <tr> <th colspan="4" data-bbox="992 1318 1339 1346"><b>Reading dB(A)</b></th> </tr> <tr> <th data-bbox="992 1346 1089 1394">Station</th> <th data-bbox="1089 1346 1187 1394">Range</th> <th data-bbox="1187 1346 1268 1394">Day</th> <th data-bbox="1268 1346 1339 1394">Night</th> </tr> </thead> <tbody> <tr> <td data-bbox="992 1394 1089 1463" rowspan="3">Nr. 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Sr. No.	EC Conditions	Compliance Status			
		Fibre Main Gate	AVG	53	50
		Fibre Material Gate	MIN	51	50
	MAX		66	59	
	AVG		56	53	
<b>A.7</b>	<b>ENERGY CONSERVATION:</b>				
56	The project proponent shall install energy efficient devices and appliances conforming to the Bureau of Energy Efficiency norms.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have installed energy efficient devices and appliances as per the Bureau of Energy Efficiency norms.</li> <li>We have installed IE3 class energy efficient motors, Electrolyser elements are of 6th generation type which are most energy efficient elements. We have installed LED lights and all mechanical equipments are with latest technology and are of better efficiency.</li> </ul>			
57	The energy audit shall be conducted at regular intervals and the recommendations of the audit report shall be implemented.	<ul style="list-style-type: none"> <li>Complied</li> <li>The energy audit is being conducted as per BEE guidelines.</li> <li>M&amp;V audit conducted for PAT cycle-2.</li> <li>We are ISO 50001:2011 certified industry.</li> <li>Copy of certificate is attached as <b>Annexure-17.</b></li> </ul>			
58	The project proponent shall implement the application of solar energy which shall be utilized as solar lighting for illumination of common areas, lighting of internal roads and passages in addition to utilization of solar water heating system.	<ul style="list-style-type: none"> <li>Complied</li> <li>Solar landscaping lights are installed for Admin Building and roof mounted solar panels are also installed.</li> </ul>			
59	The transformers and motors shall have minimum efficiency of 85%.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>All transformers are of higher efficiency &gt; 98 %</li> </ul>			
60	Variable frequency drives shall be installed.	<ul style="list-style-type: none"> <li>Complied</li> <li>40 nos. of Variable frequency drivers are installed for energy saving.</li> </ul>			
61	Energy conservation measures shall include use of electronic lighting system, use of CFL tubes to minimize energy use, use of programmable timers for pumping system and lighting, water level controllers for water pumps, centralized cooling etc.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have only LED light fixtures across the site.</li> </ul>			
62	Energy saving practices as follows shall be practiced. Constant monitoring of energy consumption and defining targets for energy conservation.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have energy meters and energy monitoring system for measuring energy.</li> </ul>			
	Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort level.	<ul style="list-style-type: none"> <li>Complied</li> <li>Light fixtures have been installed as per lux level requirement in the different area.</li> </ul>			





Sr. No.	EC Conditions	Compliance Status
	Use of solar cells for lighting.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have installed solar cells on admin building terrace.</li> </ul>
	Use of solar water heater for canteen & washing area.	<ul style="list-style-type: none"> <li>We are exploring for the possibilities.</li> </ul>
	Proper load factor shall be maintained by the unit.	<ul style="list-style-type: none"> <li>We are maintaining the load factor.</li> </ul>
	Provision of day light roof to utilize maximum natural light in the production plant instead of electrical lighting.	<ul style="list-style-type: none"> <li>We have provided day light roof such as new work shop, PAC plant etc.</li> </ul>
	Use of electronic ballast to save energy.	<ul style="list-style-type: none"> <li>We have installed LED lights.</li> </ul>
	Automatic switching system for lighting & water tank pumping shall be used.	<ul style="list-style-type: none"> <li>Timers have been installed for switching on/ off plant lighting.</li> </ul>
	To the maximum extent possible and technically feasible, energy efficient equipment like motors, pumps, air-conditioning systems shall be selected.	<ul style="list-style-type: none"> <li>We are practicing to use technically feasible, energy efficient equipment like motors, pumps, air-conditioning systems etc.</li> </ul>
	Gravity flow shall be preferred wherever possible to save pumping energy.	<ul style="list-style-type: none"> <li>We have designed our plant accordingly.</li> </ul>
	Promoting awareness on energy conservation.	<ul style="list-style-type: none"> <li>We are conducting training and awareness programs to promote energy conservation.</li> </ul>
	Training to the staff on methods of energy conservation and to be vigilant for this.	<ul style="list-style-type: none"> <li>We are practicing special suggestion scheme for energy conservation/ energy saving and trainings are also conducted at regular intervals.</li> </ul>
<b>A.7</b>	<b>CLEANER PRODUCTION AND WASTE MINIMIZATION:</b>	
63	The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have carried out Cleaner Production Assessment studies by Gujarat Cleaner Production Centre (Established by Industries &amp; Mines Department, Government of Gujarat).</li> </ul>
64	The company shall undertake following waste minimization measures:	
(i)	Metering and control of quantities of active ingredients to minimize waste.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided flow meters for wastewater generation.</li> <li>We have installed RO system for reducing the effluent.</li> <li>Recycle steam and vapor condensate is used in process &amp; cooling tower.</li> <li>We use super washed salt to reduce chemical consumption in turn to reduce solid waste generation.</li> </ul>
(ii)	Reuse of by-products from the process as raw materials substitutes in other process.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are using Hydrogen as a clean fuel for producing Caustic Soda flakes &amp; Poly Aluminum Chloride.</li> <li>Use of waste chlorine gas for</li> </ul>

Sr. No.	EC Conditions	Compliance Status
		producing 32% HCl. <ul style="list-style-type: none"> <li>Vapor condensate from flaking plant treated by polishing unit and finally used as DM water.</li> <li>By-product HCl from CPW Plant is used in PAC plant as raw material.</li> </ul>
(iii)	Use of automated and enclosed filling to minimize spillages.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are using automated and closed filling to minimize spillages.</li> </ul>
(iv)	Use of close feed system into batch reactors.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are using close feed system into batch reactors.</li> </ul>
(v)	Dry cleaning / mopping of floor instead of floor washing.	<ul style="list-style-type: none"> <li>Complied</li> <li>Floors are cleaned through mopping.</li> </ul>
(vi)	Use of high pressure hoses for cleaning to reduce wastewater generation.	<ul style="list-style-type: none"> <li>Complied</li> <li>High pressure hoses are used for cleaning and reduce the wastewater.</li> </ul>
<b>A.8</b>	<b>GREEN BELT AND OTHER PLANTATION:</b>	
64	<p>The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in the GIDC estate, nearby schools, gram panchayat areas and any other open areas in consultation with the GIDC/ local bodies/ GPCB and submit an action plan of plantation for next three years to the GPCB.</p>	<ul style="list-style-type: none"> <li>Complied</li> <li>We have developed greenbelt along with boundary wall &amp; planted different plant species in campus area.</li> <li>Following are the list of plant species.</li> <li>Plant species were selected as per the directives of CPCB &amp; DFO.</li> </ul>
<p><b>Existing Plantation Species:</b>            Neem (Azadirachta indica), Kasood (Cassia siamea), Pine/Junglisaru (Casuarina equisetifolia), Orchid tree (Bauhinia blakeana), Gulmohar (Delonix regia), Rain tree (Samanea saman), Yellow Gulmohar (Peltophorum ferrugineum), Bottle brush (Callistemon sp.), Earleaf Acacia (Acacia auriculiformis), Kadamb (Neolamarckia cadamba), Basant Rani (Tabebuia rosea), Safeda (Eucalyptus), Bougainvillea spectabilis, Lawn Plantation and Shrubbery.            The Existing Spices for plantation are Selected by following CPCB guidelines.</p> <p><b>Proposed Plantation Species:</b>            Neem (Azadirachta indica), Kasood (Cassia siamea), Pine/Junglisaru (Casuarina equisetifolia), Orchid tree (Bauhinia blakeana), Saptarni (Alstonia scholaris), Gulmohar (Delonix regia), Rain tree (Samanea saman), Shisham (Dalbergia sissoo), Bel (Aegle marmelos), Arjun tree (Terminalia arjuna), Cassia fistula (Amaltas), Yellow Gulmohar (Peltophorum ferrugineum), Bottle brush (Callistemon sp.), Kadamb (Neolamarckia cadamba), Semal/Kapok (Bombax ceiba), Jamun (Syzygium cumini), Apple blossom tree (Cassia javanica), Sausage tree (Kigelia pinnata), Basant Rani (Tabebuia rosea), Morpankhi (Thuja occidentalis), Safeda (Eucalyptus), Guh babool (Acacia farnesiana), Kaner (Nerium indicum), Champa (Plumeria rubra), Holy basil (Ocimum tenuiflorum), Jarul (Lagerstroemia speciosa), Bougainvillea spectabilis, Lemon (Citrus lemon), Sankuppi (Clerodendrum inerme), Lawn Plantation and Shrubbery etc.            Gaseous emission (SO<sub>2</sub> &amp; NO<sub>x</sub>) tolerant species: Neem (Azadirachta indica), Bel (Aegle marmelos), Kasood (Cassia siamea), Earleaf Acacia (Acacia auriculiformis), Saptarni (Alstonia scholaris), Aldu (Ailanthus excelsa), Siris (Albizia lebbeck), Shisham (Dalbergia sissoo), Pipal (Ficus religiosa), White fig (Ficus infectoria), Maulsari (Mimusops elengi), Kaner (Nerium indicum), Jarul (Lagerstroemia speciosa) etc.</p>		

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65	<p>Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development.</p>		<ul style="list-style-type: none"> <li>Complied</li> <li>Drip irrigation/ low-volume, low angle sprinklers are used for green belt development.</li> <li>Total 22,000 m2 area is covered under drip irrigation &amp; low angle sprinkler system.</li> </ul>																																				
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<b>B</b>	<b>OTHER CONDITIONS:</b>																																						
66	<p>In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.</p>		<ul style="list-style-type: none"> <li>Complied</li> <li>All pollution control systems installed in our plant are directly connected with process safety inter locks from DCS.</li> <li>For ensure, all the safe requirements meet before any start up.</li> <li>We are also following pre-start up safety review before restart of the system.</li> </ul>																																				
67	<p>All the recommendations / commitments made in the EIA report of the project prepared by M/s. Anand Consultants, Ahmedabad and submitted vide letter no. NIL dated 29/06/2016 shall be implemented in letter and spirit.</p>		<ul style="list-style-type: none"> <li>Complied</li> <li>Recommendations made in the EIA/ EMP were submitted &amp; implemented.</li> </ul>																																				

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68	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are complying stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.</li> <li>CCA Compliance Report is attached as <b>Annexure-14</b>.</li> </ul>
69	During material transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.	<ul style="list-style-type: none"> <li>Complied</li> <li>For material transfer, we have provided pipelines of required MOC in the plant. We have block the storm water drain connection point in the plant areas.</li> </ul>
70	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided RCC and / acid brick line flooring in the required areas.</li> <li>Photograph of RCC flooring:</li> </ul> 
71	Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have provided pipelines of suitable MOC in the plant which ensures no leakages from the pipes / pumps.</li> </ul>
72	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.	<ul style="list-style-type: none"> <li>Complied</li> <li>All future expansion or modifications in the plant will be carried out after obtaining prior Environment Clearance from the concerned authority.</li> </ul>
73	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous and other wastes (Management and Transboundary Movement) Rules 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are complying Water (Prevention &amp; Control of Pollution) Act, 1974, Air (Prevention &amp; Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 2003 and the Public Liability Insurance Act, 1991 along with their amendments and rules.</li> </ul>
74	The company shall undertake socio-economic	<ul style="list-style-type: none"> <li>Complied</li> </ul>

Sr. No.	EC Conditions	Compliance Status																								
	developmental/ community welfare activities as per the CSR Rules 2014.	<ul style="list-style-type: none"> <li>Socio-economic developmental / community welfare activities are being carried out as per CSR Rules 2014.</li> <li>CSR activities is summarized as per below table and the same is attached as <b>Annexure-15</b></li> </ul>																								
75	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	<ul style="list-style-type: none"> <li>Complied</li> <li>Separate fund / budget is identified / sanctioned on annual basis for Environmental management.</li> <li>A year wise expenditure on environmental safeguards is also reported.</li> </ul> <table border="1" data-bbox="987 695 1406 1094"> <thead> <tr> <th colspan="3" data-bbox="987 695 1406 747">Fund Utilized for Environment Management</th> </tr> <tr> <th data-bbox="987 747 1040 842">Sr. No.</th> <th data-bbox="1040 747 1320 842">Particulars</th> <th data-bbox="1320 747 1406 842">Value (in Cr)</th> </tr> </thead> <tbody> <tr> <td data-bbox="987 842 1040 877">1</td> <td data-bbox="1040 842 1320 877">CTE / CCA Application</td> <td data-bbox="1320 842 1406 877">0.15</td> </tr> <tr> <td data-bbox="987 877 1040 926">2</td> <td data-bbox="1040 877 1320 926">GPCB sampling &amp; analysis charges</td> <td data-bbox="1320 877 1406 926">0.05</td> </tr> <tr> <td data-bbox="987 926 1040 974">3</td> <td data-bbox="1040 926 1320 974">Schedule-I Environment Audit</td> <td data-bbox="1320 926 1406 974">0.5</td> </tr> <tr> <td data-bbox="987 974 1040 1022">4</td> <td data-bbox="1040 974 1320 1022">Monthly Monitoring by Third party</td> <td data-bbox="1320 974 1406 1022">0.5</td> </tr> <tr> <td data-bbox="987 1022 1040 1058">5</td> <td data-bbox="1040 1022 1320 1058">Waste Management</td> <td data-bbox="1320 1022 1406 1058">12</td> </tr> <tr> <td data-bbox="987 1058 1040 1094">6</td> <td data-bbox="1040 1058 1320 1094">Green Belt Development</td> <td data-bbox="1320 1058 1406 1094">0.5</td> </tr> </tbody> </table>	Fund Utilized for Environment Management			Sr. No.	Particulars	Value (in Cr)	1	CTE / CCA Application	0.15	2	GPCB sampling & analysis charges	0.05	3	Schedule-I Environment Audit	0.5	4	Monthly Monitoring by Third party	0.5	5	Waste Management	12	6	Green Belt Development	0.5
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76	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with GPCB and may also be seen at the website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter in at least two local newspapers that are widely circulated in the region, one of which shall be in Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	<ul style="list-style-type: none"> <li>Complied</li> <li>We have informed the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with GPCB and may also be seen at the website of SEIAA/SEAC/GPCB.</li> <li>English and Gujarati Newspaper advertisement of the Environment Clearance is as per below and the same is attached as <b>Annexure-5</b>.</li> </ul> <p data-bbox="987 1520 1328 1547">Name of Paper: Times of India</p> <p data-bbox="987 1547 1279 1575">Date of Issue: 06.11.2016</p> <p data-bbox="987 1575 1214 1602">In: English language</p> <p data-bbox="987 1602 1373 1629">Name of Paper: Gujarati Samachar</p> <p data-bbox="987 1629 1279 1656">Date of Issue: 07.11.2016</p> <p data-bbox="987 1656 1224 1684">In: Gujarati language</p>																								

Sr. No.	EC Conditions	Compliance Status
		
77	The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>We have not received any additional condition that may be imposed by the SEAC till date.</li> <li>We ensure that we shall comply with any additional condition that may be imposed by the SEAC or any other competent authority for the purpose of environmental protection.</li> </ul>
78	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>We are submitting half yearly compliance report to SEIAA in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies regularly.</li> </ul>
79	Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	<ul style="list-style-type: none"> <li>Noted</li> <li>The data submitting herewith are factual and are not false / fabricated.</li> </ul>
80	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>We are complying all the conditions stipulated by the Gujarat Pollution Control Board.</li> </ul>
81	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	<ul style="list-style-type: none"> <li>Noted</li> <li>We have been complying the conditions issued by the SEIAA.</li> <li>No suspension order issued by the SEIAA till date.</li> </ul>
82	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.	<ul style="list-style-type: none"> <li>Noted</li> <li>We are implementing conditions stipulated by the board in a time bound manner.</li> </ul>
83	The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	<ul style="list-style-type: none"> <li>Noted &amp; Complied</li> <li>The date of financial closure and final approval of the project by the concerned authorities and the date of starting the project are:</li> <li>Date of financial closure: 31st</li> </ul>

<b>Sr. No.</b>	<b>EC Conditions</b>	<b>Compliance Status</b>
		March 2018 <ul style="list-style-type: none"> <li>• Date of final approval of the project by the concerned authorities: 3rd April 2017</li> </ul>
84	This environmental clearance is valid for seven years from the date of issue.	<ul style="list-style-type: none"> <li>• Noted</li> <li>• The EC is valid for 7 years and we are submitting half yearly compliance report to GPCB RO, MoEF RO and SEIAA on regular basis.</li> <li>• Before due date of the EC, we have encased the same via CTE and CCA.</li> </ul>
85	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	<ul style="list-style-type: none"> <li>• Complied</li> <li>• There is no appeal against this environmental clearance lie with the National Green Tribunal.</li> </ul>

**Compliance status of Environmental Clearance**  
**vide Letter No.: SEIAA/GUJ/EC/1(d)/287/2019 dated 4<sup>th</sup> Feb 2019**

Sr. No.	EC Conditions	Compliance Status															
1	<p>The proposal is for Environmental Clearance to M/s. Grasim Industries Ltd., for expansion of Captive Power Plant within the existing premises located at Plot No. -1, GIDC Industrial Estate, P.O.-Vilayat, Ta. Vagra, Dist.: Bharuch. It is an existing unit for manufacturing following, which falls in the category -1(d) of the schedule of the EIA Notification-2006.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="text-align: center;">Sr. No</th> <th rowspan="2" style="text-align: center;">Name of Product/ Activity</th> <th colspan="3" style="text-align: center;">Quantity (MT/Month)</th> <th rowspan="2" style="text-align: center;">End-use of product</th> </tr> <tr> <th style="text-align: center;">Existing</th> <th style="text-align: center;">Proposed</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">Captive Power Plant (CPP)</td> <td style="text-align: center;">96 MW</td> <td style="text-align: center;">45 MW</td> <td style="text-align: center;">141 MW</td> <td style="text-align: center;">Power Generation for Captive use</td> </tr> </tbody> </table>	Sr. No	Name of Product/ Activity	Quantity (MT/Month)			End-use of product	Existing	Proposed	Total	1	Captive Power Plant (CPP)	96 MW	45 MW	141 MW	Power Generation for Captive use	<ul style="list-style-type: none"> <li>• Noted</li> <li>• Copy of Environment Clearance is attached as <b>Annexure-1.</b></li> <li>• We have obtained CTE vide letter No. GPCB/ PCB ID - 41279/15743 dated 15/02/2020. Copy of CTE is attached as <b>Annexure-16.</b></li> <li>• Photographs of Power Plant Project Construction Work is attached as <b>Annexure-18.</b></li> </ul>
Sr. No	Name of Product/ Activity			Quantity (MT/Month)				End-use of product									
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1	Captive Power Plant (CPP)	96 MW	45 MW	141 MW	Power Generation for Captive use												
<b>A.</b>	<b>CONDITIONS :</b>																
<b>A.1</b>	<b>SPECIFIC CONDITION :</b>																
2	Unit shall comply the emission standards mentioned in the Notification by MoEF&CC vide no. S.O. 3305 (E) dated 07.12.2015 and amended time to time.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>															
3	Unit shall comply all the conditions stipulated in Coal Handling Guidelines published by GPCB.	<ul style="list-style-type: none"> <li>• We shall comply with the Coal Handling Guidelines after commissioning of the captive power plant project.</li> </ul>															
4	The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/ or any other statutory authority.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>															
5	The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>															
6	Complete Zero Liquid Discharge [ZLD] status shall be maintained all the time for CPP.	<ul style="list-style-type: none"> <li>• We shall maintain Complete Zero Liquid Discharge [ZLD] status after commissioning of the captive power plant project.</li> </ul>															
7	All measures shall be taken to prevent soil and ground water contamination.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>															
8	There shall be no drainage connection to discharge waste water from the premises.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the</li> </ul>															



Sr. No.	EC Conditions	Compliance Status
		captive power plant project.
<b>A.2</b>	<b>WATER:</b>	
9	The fresh water requirement for the proposed expansion shall not exceed 14883 KL/day. Unit shall reuse 11689 KLD [5870 KLD steam condensate from boiler for Boiler make-up, 4518 KLD permeate from RO plant for cooling tower make-up, washing and DM plant, 1301 KLD reject from RO plant for dust suppression to coal handling area (828 KLD), Sprinkling on fly ash (428 KLD) & Road cleaning (45 KLD)] within premises. Hence, fresh water requirement shall not exceed 4495 KLD and it shall be met through GIDC water supply system. Permission from the Concern authority for additional water requirement shall be obtained.	<ul style="list-style-type: none"> <li>• Fresh Water requirement for captive power plant shall be met through GIDC Water supply only.</li> <li>• We have obtained CTE for captive power plant vide letter No. GPCB/ (PCB ID -41279/15743 dated 15/02/2020.</li> </ul>
10	Metering of water shall be done and its records shall be maintained. No ground water shall be trapped in any case for meeting the project requirements.	<ul style="list-style-type: none"> <li>• We shall install Meters and shall maintain the record of the same on regular basis.</li> <li>• Fresh Water requirement for captive power plant shall be met through GIDC Water supply only</li> </ul>
11	Unit shall reuse 5870 KLD of Boiler condensate for Boiler feed water.	<ul style="list-style-type: none"> <li>• We shall reuse boiler condensate water after commissioning of the captive power plant project.</li> </ul>
12	The industrial effluent generation after proposed expansion in power plant shall not exceed 6505 KL/day.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
13	Entire quantity of waste water shall be subjected to Primary ETP (Cap. 500 KLD X 2) followed by RO plant.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
14	RO permeate (5204 KLD) shall be reused for cooling tower make-up (4000 KLD), washing (75 KLD), DM plant (443 KLD) and gardening plantation (686 KLD) within premises.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
15	RO reject (1301 KLD) shall be reused for dust suppression to coal handling area (828 KLD), Sprinkling on fly ash (428 KLD) & Road cleaning (45 KLD) within premises.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
16	Complete Zero Liquid Discharge (ZLD) shall be maintained and there shall be no discharge of industrial effluent in any case.	<ul style="list-style-type: none"> <li>• We shall maintain Complete Zero Liquid Discharge [ZLD] status after commissioning of the captive power plant project.</li> </ul>
17	Domestic wastewater generation shall not exceed 6.4 KL/day for proposed project and it shall be treated in STP. Treated sewage	<ul style="list-style-type: none"> <li>• We shall comply with the condition after</li> </ul>

Sr. No.	EC Conditions	Compliance Status																																								
	shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.	commissioning of the captive power plant project.																																								
18	During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>																																								
19	Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>																																								
20	The unit shall provide metering facility at the inlets and outlets of the collection cum reuse system of waste water and maintain records of the same.	<ul style="list-style-type: none"> <li>We shall install Meters and shall maintain the record of the same on regular basis.</li> </ul>																																								
21	The unit shall provide adequate effluent treatment plant (ETP) with RO system for treatment of industrial effluent and it shall be operated regularly and efficiently so as to achieve Zero Liquid Discharge (ZLD) for CPP by reusing entire waste water within premises.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>																																								
22	The unit shall provide metering facility at the inlet and outlet of the ETP & RO system and maintain records for the same.	<ul style="list-style-type: none"> <li>We shall install Meters and shall maintain the record of the same on regular basis.</li> </ul>																																								
23	Proper logbooks of ETP, chemical consumption, quantities and qualities of effluent reuse, power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>																																								
<b>A.3 AIR:</b>																																										
24	Unit shall not exceed fuel consumption for steam boiler and stand-by DG set as mentioned below: <table border="1" data-bbox="337 1262 1062 1654"> <thead> <tr> <th data-bbox="337 1262 402 1388">Sr. No.</th> <th data-bbox="402 1262 521 1388">Source of emission with capacity</th> <th data-bbox="521 1262 623 1388">Stack Height (meter)</th> <th data-bbox="623 1262 711 1388">Name of the fuel</th> <th data-bbox="711 1262 813 1388">Quality of fuel MT/hr &amp; MT/day</th> <th data-bbox="813 1262 948 1388">Type of emissions i.e. Air Pollutants</th> <th data-bbox="948 1262 1062 1388">Air pollution Control Measures (APCM)</th> </tr> </thead> <tbody> <tr> <td colspan="7" data-bbox="337 1388 1062 1413"><b>Existing</b></td> </tr> <tr> <td data-bbox="337 1413 402 1482">1</td> <td data-bbox="402 1413 521 1482">Boiler 1 &amp; 2 (2 x 175 TPH)</td> <td data-bbox="521 1413 623 1482">125</td> <td data-bbox="623 1413 711 1482" rowspan="2">Coal</td> <td data-bbox="711 1413 813 1482" rowspan="2">100 MT/hr</td> <td data-bbox="813 1413 948 1482">SPM, SO<sub>2</sub>, NO<sub>x</sub></td> <td data-bbox="948 1413 1062 1482">ESP and Low NO<sub>x</sub> burners</td> </tr> <tr> <td data-bbox="337 1482 402 1551">2</td> <td data-bbox="402 1482 521 1551">Boiler 3 &amp; 4 (2 x 175 TPH)</td> <td data-bbox="521 1482 623 1551">125</td> <td data-bbox="813 1482 948 1551">SPM, SO<sub>2</sub>, NO<sub>x</sub></td> <td data-bbox="948 1482 1062 1551">ESP and Low NO<sub>x</sub> burners</td> </tr> <tr> <td colspan="7" data-bbox="337 1551 1062 1577"><b>Proposed</b></td> </tr> <tr> <td data-bbox="337 1577 402 1654">3</td> <td data-bbox="402 1577 521 1654">Boiler-5 (175 TPH)</td> <td data-bbox="521 1577 623 1654">125</td> <td data-bbox="623 1577 711 1654">Coal</td> <td data-bbox="711 1577 813 1654">29.16 MT/hr</td> <td data-bbox="813 1577 948 1654">SPM, SO<sub>2</sub>, NO<sub>x</sub></td> <td data-bbox="948 1577 1062 1654">ESP and Low NO<sub>x</sub> burners</td> </tr> </tbody> </table>	Sr. No.	Source of emission with capacity	Stack Height (meter)	Name of the fuel	Quality of fuel MT/hr & MT/day	Type of emissions i.e. Air Pollutants	Air pollution Control Measures (APCM)	<b>Existing</b>							1	Boiler 1 & 2 (2 x 175 TPH)	125	Coal	100 MT/hr	SPM, SO <sub>2</sub> , NO <sub>x</sub>	ESP and Low NO <sub>x</sub> burners	2	Boiler 3 & 4 (2 x 175 TPH)	125	SPM, SO <sub>2</sub> , NO <sub>x</sub>	ESP and Low NO <sub>x</sub> burners	<b>Proposed</b>							3	Boiler-5 (175 TPH)	125	Coal	29.16 MT/hr	SPM, SO <sub>2</sub> , NO <sub>x</sub>	ESP and Low NO <sub>x</sub> burners	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
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25	Unit shall provide adequate APCM with flue gas generation sources as mentioned above:	<ul style="list-style-type: none"> <li>We shall provide adequate APCM with flue gas generation before commissioning of the captive power plant project.</li> </ul>																																								
26	There shall be no process gas emission from existing as well as from the proposed project.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>																																								

Sr. No.	EC Conditions	Compliance Status
27	Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
28	A long term study of radio activity and heavy metals contents on coal/ lignite to be used shall be carried out through a reputed institute and results thereof analysed regularly and reported along with monitoring reports thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal/ lignite and fly ash (including bottom ash) shall be put in place.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
29	Height of flue gas stacks attached to Boilers shall be minimum 125 meters.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
30	A flue gas stack of 125 m height shall be provided with online monitoring system to existing Steam Boiler. Mercury emissions from stacks shall also be monitored on periodic basis.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
31	High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standard prescribed in the Environment {Protection) Rules, 1986 as amended from time to time, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified standards or boiler shall shut down totally.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
32	Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a reputed institute / organization.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
33	Lime stone injection technology shall be adopted to control SO <sub>2</sub> and it shall be ensured that SO <sub>2</sub> levels in the ambient air do not exceed the prescribed standards.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
34	The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
35	Online monitoring system shall be installed to monitor the SO <sub>x</sub> , NO <sub>x</sub> and SPM in the flue gas stack. An arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.	<ul style="list-style-type: none"> <li>We shall install Online monitoring system to monitor the SO<sub>x</sub>, NO<sub>x</sub> and SPM in the flue gas stack after commissioning of the captive power plant project.</li> </ul>
36	Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the</li> </ul>

Sr. No.	EC Conditions	Compliance Status
		captive power plant project.
37	Handling of the fly ash shall be through a closed pneumatic system.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
38	Ash shall be handled only in dry state.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
39	The unit shall strictly comply with the Fly Ash Notification under the EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	<ul style="list-style-type: none"> <li>We shall comply with the Fly Ash Notification under the EPA after commissioning of the captive power plant project.</li> </ul>
40	The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
(i)	All handling & transport of coal shall be exercised through covered coal conveyors only.	
(ii)	Enclosure shall be provided at Coal loading and unloading operations.	
(iii)	Water shall be sprinkled on Coal stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.	
(iv)	All transfer points shall be fully enclosed.	
(v)	Adequate dust suppression/ extraction system at crusher house as well as for the Coal/ Lignite stock yard and other vulnerable areas shall be provided to abate dust nuisance.	
(vi)	Accumulated coal dust/ fly ash on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.	
(vii)	Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.	
(viii)	Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.	
(ix)	Coal/ Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.	
(x)	A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.	
41	Regular monitoring of ground level concentration of PM2.5, PM10, NOx, SO2 and Hg shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
<b>A.4 SOLID / HAZARDOUS WASTE:</b>		
42	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in	<ul style="list-style-type: none"> <li>We shall comply with the condition after</li> </ul>

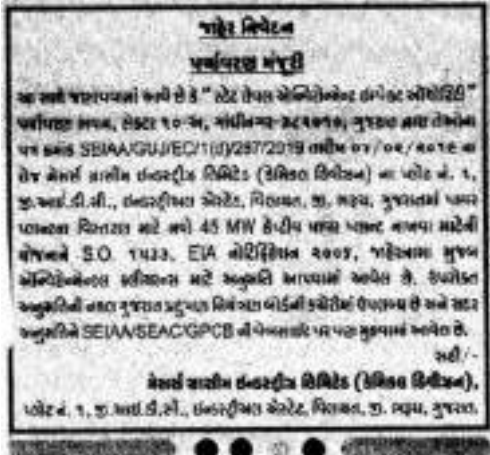
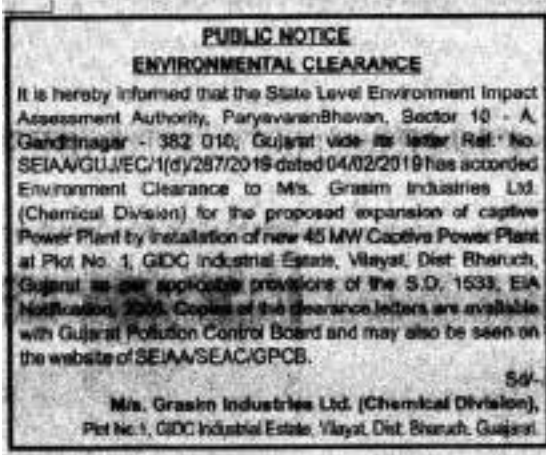
Sr. No.	EC Conditions	Compliance Status
	accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.	commissioning of the captive power plant project.
43	Hazardous waste sludge shall be packed and stored in separate designated hazardous waste storage facility with imperious bottom and leachate collection facility, before its disposal.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
44	ETP waste & spent resin shall be disposed off to authorized TSDF site.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
45	Used oil shall be sold to only to the registered recyclers/rerefiners.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
46	Discarded containers / barrels / bags / liners shall be sold only to the authorized registered recycler.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
47	For storage of fly ash, closed silos of adequate capacity shall be provided. No ash pond shall be constructed in the project.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
48	Fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc. The unit shall strictly comply with the Fly Ash Notification under EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
49	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
50	Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
<b>A.5 SAFETY:</b>		
51	The project management shall strictly comply with the provisions made in the Factories Act, 1948 as well as Manufacture, Storage and Impact of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
52	Necessary precautions like continuous monitoring of hot spots [ignited lignite] using temperature detection systems, water sprinklers, avoiding stacking of lignite near steam pipeline etc. shall be made for storing lignite to prevent fire hazard.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
53	All the risk mitigation measures, general & specific recommendations mentioned in Risk Assessment Report shall be implemented.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>

Sr. No.	EC Conditions	Compliance Status
54	A well designed fire hydrant system shall be installed as per the prevailing standards.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
55	Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
56	First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity at all the times.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
57	Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the factories act & rules.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
58	Flameproof fillings shall be provided in the plant area.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
59	Adequate firefighting facilities shall be provided at the proposed power plant.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
60	Proper ventilation shall be provided in the work area.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
61	All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
62	The project management shall prepare a detailed Disaster Management Plan (DMP) for the project as per the guidelines from Directorate of Industrial Safety and Health.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
<b>A.6 NOISE:</b>		
63	To minimize the noise pollution the following noise control measures shall be implemented:	
(i)	Selection of any new plant equipment shall be made with specification of low noise levels.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
(ii)	Manufacturers/ suppliers of major noise generating machines/ equipments like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible before supply and installation to mitigate the noise generation and to comply with the national/ international regulatory norms with respect to noise generation for individual units.	
(iii)	Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.	

Sr. No.	EC Conditions	Compliance Status
(iv)	Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.	
(v)	Employees shall be provided with ear protection measures like earplugs or earmuffs.	
(vi)	Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.	
(vii)	Construction equipment generating minimum noise and vibration shall be chosen.	
(viii)	Ear plugs and/ muffs shall be made compulsory for the construction workers working near the noise generating activities/ machines/ equipment.	
(ix)	Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate .	
(x)	Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.	
(xi)	Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.	
(xii)	Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.	
64	The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration dampers etc. On all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
<b>A.7 GREEN BELT AND OTHER PLANTATION:</b>		
65	The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
66	Drip irrigation/ low-volume, low-angle sprinkler system shall be used for the green belt development within the premises	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
<b>B OTHER CONDITIONS:</b>		
67	Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA.III dated 09/0812018.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
68	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
69	In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>

Sr. No.	EC Conditions	Compliance Status
70	All the recommendations mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Anand Environmental Consultants Pvt. Ltd. Ahmedabad and commitments made during presentation before SEAC, proposed in the EIA report shall be strictly adhered to in letter and spirit.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
71	All the recommendations of CREP guidelines as may be applicable from time to time shall be followed vigorously.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
72	A separate environment management cell with qualified staff shall be set up for information of the stipulated environmental safeguards.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
73	The project authorities must strictly adhere to the stipulations made by the Gujarat pollution control board (GPCB) state Government and any statutory authority.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
74	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
75	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
76	The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
77	Unit shall comply provisions of MoEFCC's O.M. No.22-6512017-IA.III dated 01/05/2018 regarding Corporate Environment Responsibility (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per the said OM dated 01/05/2018 for various activities therein.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
78	The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
79	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
80	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	



Sr. No.	EC Conditions	Compliance Status
	<ul style="list-style-type: none"> <li>Complied</li> <li>We have informed the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with GPCB and may also be seen at the website of SEIAA/ SEAC/ GPCB.</li> <li>English and Gujarati Newspaper advertisement of the Environment Clearance is as per below and the same is attached as <b>Annexure-5</b>.</li> </ul> <p>Name of Paper: Times of India Date of Issue: 09/02/2019 In: English language</p> <p>Name of Paper: Divya Bhaskar Date of Issue: 09/02/2019 In: Gujarati language</p> <div style="display: flex; justify-content: space-around;">   </div>	
81	The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
82	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
83	Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
84	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
85	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
86	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>

<b>Sr. No.</b>	<b>EC Conditions</b>	<b>Compliance Status</b>
87	The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
88	This environmental clearance is valid for seven years from the date of issue.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
89	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 Days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
90	Submission of any false or misleading information or data which is material to screening or seeping or appraisal or decision on the application makes this environment clearance cancelled.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>

**Compliance status of Environmental Clearance vide Letter No.:**  
**SEIAA/GUJ/EC/1(d)&4(d)/764/2021 dated 10<sup>th</sup> Jun 2021**

Sr. No	EC Conditions							Compliance Status
1	<p>The proposal is for environmental clearance to M/s. Grasim Chemicals Ltd. For expansion of setting up of Chlor Alkali Plant and Captive Power plant (CPP) at Plot No.-1, GIDC Industrial Estate, Vill: Vilayat Tal: Vagra &amp; Dist: Bharuch, Gujarat. It is proposed in existing unit for manufacturing following products, which falls in the category - 1(d) &amp; 4(d) of the schedule of the EIA Notification-2006.</p>							<ul style="list-style-type: none"> <li>Noted.</li> <li>EC copy is attached as <b>Annexure 1.</b></li> </ul>
	Sr. no	Name of Product	CA S no. / CI no.	Quantity (MT/Month)			End-use of product	
			Existin g	Propos ed	Total			
1	Caustic Soda Lye	13 10-73-2	30416.67	12166.67	42583.33	Manufacture of pulp and paper, alumina, soap and detergents, petroleum products and chemical production. Other application include water treatment, food, textile, metal processing, minning, glass making and others.		
2	Hydrogen	13 33-74-0	8516666.67 (Nm <sup>3</sup> )	3406666.67 (Nm <sup>3</sup> )	11923333.33 (Nm <sup>3</sup> )	Industrial application such as refining, treating metals and food processing. It is also used as alternate fuel in industries.		
3	Liquid Chlorine/ Sodium Hypochlorite/ Hydrochloric Acid	77 82-50-5	27375	20865.83	48240.83	It is disinfectant. It is used to treat drinking water and swimming pool water. It is also used to make hundreds of consumer products from paper to paints,		

Sr. No	EC Conditions						Compliance Status	
							and from textiles to insecticides. About 20% of chlorine produced is used to make PVC. It can be used Vinyls, Chloromethanes, CPW, Organics Chemicals	
4	Aluminium Chloride	7746-70-0	2083.33	416.67	2500		It finds application in the chemical industry as a catalyst for Friedel Crafts reactions, both acylations and alkylations. It can be used in Agrochemicals, Pigments and Dyes, Pharma, Coating Industries.	
5	Sodium Sulphate	7757-82-6	0	222.67	222.67		Sodium sulfate used to dry organic liquids. As a filter in powered home laundry detergents.	
6	Captive Power plant	---	141 MW	35 MW	176 MW		Power Generation	
<p>The project activity is covered in 1(d) &amp; 4(d) and is of 'B' category. Since the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(ii) of the Environment Assessment notification-2006.</p> <p>The SEAC, Gujarat vide their letter dated 03/05/2021 has recommended to the SEIAA, Gujarat to grant the Environment Clearance for the above-mentioned project based on its meeting held on 01/03/2021. The proposal was considered by SEIAA, Gujarat in its meeting held on 03/05/2021 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.</p>								
<b>A</b>	<b>CONDITIONS :</b>							
<b>A.1</b>	<b>SPECIFIC CONDITION :</b>							

Sr. No	EC Conditions	Compliance Status
2	All the issues raised in the earlier public hearing dated 21.08.2018 shall be comprehensively addressed/ complied with in a time bound manner.	<ul style="list-style-type: none"> <li>Complied</li> <li>All the issues raised in the earlier public hearing dated 21.08.2018 are comprehensively addressed/ complied with in a time bound manner.</li> </ul>
3	Total Sulphur content of fuel use in CPP shall not exceed 0.8% at any point of time.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the CPP.</li> </ul>
4	Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the CPP.</li> </ul>
5	Unit shall comply Coal handling Guidelines published by GPCB.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the CPP.</li> </ul>
6	Project proponent (PP) shall maintain Complete Zero Liquid Discharge [ZLD] status all the time and there shall be no drainage connection from the premises and wastewater discharge outside premises by any means for CPP all the time.	<ul style="list-style-type: none"> <li>We shall comply with the condition after commissioning of the CPP.</li> </ul>
7	Unit shall install CEMS [Continuous Emission Monitoring System] in line to CPCB directions to all SPCB vide letter no. B-9016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/ emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/ CPCB on real time basis. [For Small/ Large/ Medium (Red Category) & Whichever ( Air emission & Effluent discharge) is applicable].	<ul style="list-style-type: none"> <li>For existing scenario, Unit has already installed CEMS in line to CPCB directions to all SPCB vide letter no. B-9016/04/06PCI-1/5401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/ emission from respective project and an arrangement is also done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/ CPCB on real time basis. And same will be complied before commissioning of proposed project</li> </ul>
8	PP shall pursue health check-ups of the workers on regular basis and shall provide adequate personal protective equipments.	<ul style="list-style-type: none"> <li>We are carrying out check-ups of the workers on regular basis and providing adequate personal protective equipments &amp; same shall be complied after commissioning of proposed project</li> </ul>
9	Unit shall comply the emission standards mentioned in the notification by MoEF&CC vide no. S.O. 3305 ( E ) dated 07/12/2015 and amended time to time.	<ul style="list-style-type: none"> <li>Unit shall comply the condition after commissioning of proposed project</li> </ul>
10	Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.	<ul style="list-style-type: none"> <li>Transportation route for vehicles carrying Fly Ash and Coal will have least minimum pass near human habitation.</li> </ul>
11	Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.	<ul style="list-style-type: none"> <li>Unit shall comply the condition after commissioning of project</li> </ul>

Sr. No	EC Conditions	Compliance Status
12	A long term study or radio activity and heavy metals contents on coal/ lignite to be used shall be carried out through a reputed institute and results thereof analyzed regularly and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal/ lignite and fly ash (Including bottom ash) shall be put in place.	<ul style="list-style-type: none"> <li>Unit shall comply the condition after commissioning of project</li> </ul>
13	A flue gas stack of 125 m height shall be provided with online monitoring system to proposed Steam Boiler. Mercury emissions from stacks shall also be monitored on periodic basis.	<ul style="list-style-type: none"> <li>Unit shall comply the condition after commissioning of project</li> </ul>
14	High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standards prescribed in the Environment (Protection) Rules, 1986 as amended from time to time, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified standards or boiler shall shut down totally.	<ul style="list-style-type: none"> <li>Unit shall comply the condition after commissioning of project</li> </ul>
15	Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a reputed institute/ organization.	<ul style="list-style-type: none"> <li>Unit shall comply the condition after commissioning of project</li> </ul>
16	Lime stone injection technology shall be adopted to control SO <sub>2</sub> and it shall be ensured that SO <sub>2</sub> levels in the ambient air do not exceed the prescribed standards.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of project</li> </ul>
17	The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of project</li> </ul>
18	The PP shall develop green belt within premises and nearby villages (154057.21 Sq. m i.e. 33% of the total plot area) as committed before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of project</li> </ul>
<b>Safety &amp; Health</b>		
19	PP shall provide Occupational Health Center (OHC) as per the under the Gujarat Factories Rule 68-I.	<ul style="list-style-type: none"> <li>OHC is equipped with fully fledged OHC &amp; same shall be complied after commissioning of proposed project</li> </ul>
20	PP shall obtain fire safety certificate/ Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules/ Gujarat Fire Prevention and Life Safety Measures Act, 2016.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
21	PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in manufacturing area in case of any emergency or accident.	<ul style="list-style-type: none"> <li>Unit is carrying out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in manufacturing area in case of any emergency or accident &amp; same shall be complied after</li> </ul>

Sr. No	EC Conditions	Compliance Status
		commissioning of proposed project.
22	PP shall install adequate fire hydrant system within premises and separate storage of water for the same shall be ensured by PP.	<ul style="list-style-type: none"> <li>We have already installed adequate fire hydrant system within premises and separate storage of water for existing scenario &amp; same shall be complied after commissioning of proposed project.</li> </ul>
23	PP shall take all the necessary steps for human safety within premises to ensure that not any harm is caused to any worker/ employee or labour within premises.	<ul style="list-style-type: none"> <li>We have taken all the necessary steps for human safety within premises to ensure that not any harm is caused to any worker/ employee or labour within premises &amp; same shall be complied after commissioning of proposed project.</li> </ul>
24	Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.	<ul style="list-style-type: none"> <li>Flame proof electrical fittings are provided in the plant premises &amp; same shall be complied after commissioning of proposed project.</li> </ul>
<b>A.2 WATER :</b>		
25	Total water requirement for the project shall not exceed 24,768 KLD. Unit shall reuse 13,488 KLD of treated industrial effluent within premises, Hence. Fresh water requirement shall not exceed 11,280 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
26	The industrial effluent generation from the project shall not exceed 8,313 KLD.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
27	8,313 KLD. Total industrial effluent shall be treated in ETP consists of primary, secondary & tertiary treatment units. Out of 8313 KLD, Treated effluent, 600 KLD shall be disposed into deep sea, 7713 KLD shall be treated in RO Plants.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
28	5566 KLD. RO reject shall be used within premises and 686 KLD, RO permeate shall be reused for gardening/ plantation.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
29	1301 KLD, RO reject shall be used in coal yard, dust/ ash suppression and road cleaning and 140 KLD, RO reject shall be treated in MEE followed by ATFD. 112 KLD, MEE condensate shall be reused within premises.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
30	Domestic wastewater generation shall not exceed 129.40 KL/day for proposed project and it shall be treated in STP. It shall not be disposed of into soak pit. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
31	During monsoon season when treated sewage may not be required for the plantation/ Gardening/ Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>

Sr. No	EC Conditions					Compliance Status																																																																							
32	Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.					<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>																																																																							
33	The unit shall provide metering facility at the inlet of ETP, MEE, STP and RO and maintain records for the same.					<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>																																																																							
34	Proper logbooks of ETP, MEE, STP and RO; chemical consumption in effluent treatment; quantity & quality of treated effluent; power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.					<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>																																																																							
<b>A.3 AIR:</b>																																																																													
35	Unit shall not exceed fuel consumption for boilers, Flaker Plant and DG set as mentioned below:																																																																												
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Sr. No	EC Conditions						Compliance Status
36	Unit shall provide adequate APCM with flue gas generation sources as mentioned above:						<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
37	Unit shall provide adequate APCM with process gas generation sources as mentioned below:						<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
	<b>EXISTING Process Gas Emission</b>						
	1	Sodium Hypo Stack 1 (Caustic Plant)	--	35	Cl <sub>2</sub>	Alkali Scrubber	
	2	HCl stack 1 (Caustic Plant)	--	35	HCl	Water scrubber having bubble cap tray absorption system.	
	3	HCl stack 2 (Caustic Plant)	--	35			
	4	Poly Aluminium Chloride Plant		35	HCl Cl <sub>2</sub>	Water scrubber system	
	5	Chlorinated Paraffin plant	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system	
	6	Aluminium Chloride	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system	
	7	Stable Bleaching Powder	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system	
	8	Sodium Hypo stack 2 (Caustic Plant)	--	35	Cl <sub>2</sub>	Alkali Scrubber	
	9	HCl stack 3 (Caustic Plant)	--	35	HCl	Water scrubber having bubble cap tray absorption system.	
	10	HCl stack 4 (Caustic Plant)	--	35			
	11	Poly Aluminium Chloride Liquid	--	35	HCl Cl <sub>2</sub>	Water scrubber system	
	12	Poly Aluminium Chloride Powder	--	35		3 stage water scrubber system	
	13	Chlorinated Paraffin plant	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system	
	14	Aluminium Chloride	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system	
	15	Stable Bleaching Powder	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system	
<b>Proposed</b>							
Not any							
38	The fugitive emission in the work zone environment shall be monitored. The emission shall conform to standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.						<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
39	Internal roads shall be either concreted or asphalted or reduce the fugitive emission during vehicular movement.						
40	Air borne dust shall be controlled with water sprinklers locations in the plant.						
41	A green belt shall be developed all around the plant boundary and also along to mitigate fugitive & transport dust emission.						
42	Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.						
43	Regular monitoring of ground level concentration of PM10, PM2.5, SO <sub>2</sub> , NO <sub>x</sub> , Cl <sub>2</sub> and VOCs shall be carried out in the GPCB. If at any stage these levels are found to exceed the						<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>

Sr. No	EC Conditions							Compliance Status	
.	prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.								
<b>A.4 SOLID/ HAZARDOUS WASTE:</b>									
44	All the hazardous waste management shall be taken care as mentioned below:								
	Sr. no.	Type/ Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Product Rules.	Quantity (MT/Annum)			Management of HW	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
Existing	Proposed	Total							
1	ETP Sludge	ETP	35.3	1524.50 MT	2557 MT	4081.5 MT	Will be collected stored, transported & Disposed at authorized TSDF site.		
2	Spent Resin	From Chlor Alkali Plant	35.2	0.42 MT	0.33 MT	0.75 MT	Will be collected stored, transported & Disposed at designated CHWIF site.		
3	Spent Carbon	From Chlor Alkali Plant	36.2	0.33 MT	0.07 MT	0.40 MT	Will be collected stored, transported & Disposed at designated CHWIF site.		
4	Used Oil	From lubrication or D.G. set	5.1	128 KL	100 KL	228 KL	Will be collected, stored and sold to authorized recycler.		
5	Discarded Containers	From Manufacturing	33.1	1680 Nos.	318 Nos.	1998 Nos.	Will be collected decontamination, stored and reused/sold to authorized recycler.		
6	Discarded bags/Liners	From Manufacturing	33.1	41.8 MT	54.2 MT	96 MT			

Sr. No	EC Conditions								Compliance Status
	7	Dilute Sulphuric Acid (75%-88%)	From Chlor Alkali Plant	B-15	0 MT	11.500 MT	11.500 MT	Collection, storage, transportation and will be sold to Authorized actual users having Rule-9 permission	
	<b>Non-hazardous waste</b>								
	8	Brine/Processes Sludge	--		6066 MT	2934 MT	9000 MT	Will be collected stored, transported & disposed off to secured landfill site.	
	9	Fly Ash	--		111600 MT	27702 MT	139302 MT	Sold fly ash to M/s. Anmol & Co., J.K Lakshmi Cement, Ambuja Cement	
45	Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes(Management and Transboundary Movement) Rules 2016.								Noted.
46	Unit shall explore the possibilities for environment friendly methods like co-processing of hazardous waste for disposal of incinerable & fillable wastes before sending to CHWIF & TSDF sites respectively.								Noted.
47	The company shall strictly comply with the rules and regulations with regards to handling and disposal of hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection/ treatment/ storage / disposal of hazardous wastes.								Noted.
48	Hazardous waste sludge shall be packed and stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.								<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
49	Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed. Handling of the fly ash shall be through a closed pneumatic system. Ash shall be handled only in dry state.								<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
50	The fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc. The unit shall strictly comply with the Fly Ash Notification under EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.								<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
<b>A.5</b>	<b>OTHER:</b>								

Sr. No	EC Conditions	Compliance Status
51	The project proponent shall allocate the separate fund of Rs. 2.18 Crore as committed before SEAC. The entire activities proposed under CER shall be part of the Environment Management Plan (EMP) as per the MoEF&CC's OM no. F. No. 22-65/2017-IA.III dated 30.09.2020. This shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to the District Collector. The monitoring report shall be posted on the website of the project proponent.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
52	All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Anand Environmental Consultants Pvt. Ltd. Ahmedabad and submitted by project proponent commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
53	The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
54	In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.	Noted
55	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	Noted
56	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environmental Clearance from the concerned authority.	<ul style="list-style-type: none"> <li>No further expansion or modifications in the plant likely to cause environmental impacts will be carried out without obtaining prior Environmental Clearance from the concerned authority.</li> </ul>
57	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted
58	The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
<b>B. GENERAL CONDITIONS :</b>		
<b>B.1 CONSTRUCTION PHASE</b>		
59	Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
60	Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>

Sr. No	EC Conditions	Compliance Status
61	All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
62	First Aid Box shall be made readily available in adequate quantity at all the times.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
63	The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be complied in letter and spirit.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
64	Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
65	Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
66	Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
67	All topsoil excavated during construction activity shall be used in horticultural/ landscape development within the project site.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
68	Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighbouring communities.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
69	Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete (RMC] and lead free paints in the project.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
70	Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E.P. Act, 1986 and its subsequent amendments from time to time.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
71	"Wind - breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided. Individual building within the project site shall also be provided with barricades.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
72	"No uncovered vehicles carrying construction material and waste shall be permitted."	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
73	"No loose soil or sand or construction & demolition waste or any other construction material that cause dust shall be left uncovered, Uniform piling and proper storage of sand to avoid fugitive emissions shall be ensured."	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>

Sr. No	EC Conditions	Compliance Status
74	Roads leading to or at construction site must be paved and blacktopped (i.e. – metallic roads).	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
75	No excavation of soil shall be carried out without adequate dust mitigation measures in place.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
76	Dust mitigation measure shall be displayed prominently at the construction site for easy public viewing.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
77	Grinding and cutting of building materials in open area shall be prohibited.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
78	Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
79	Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site. (If applicable).	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
<b>B.2 OPERATION PHASE:</b>		
<b>B.2 .1 WATER:</b>		
80	The water meter shall be installed and records of daily and monthly water consumption shall be maintained.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
81	All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
<b>B.2 .2 AIR:</b>		
82	In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & it's APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
83	Acoustic enclosure shall be provided to the DG sets (If applicable) to mitigate the noise pollution and shall conform to the FPA Rules for air and noise emission standards.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
84	Stack/ Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/ Process gas emission.	Noted
85	Flue gas emission & Process gas emission (If any) shall conform to the standards prescribed by the GPCB/ CPCB/ MoEF&CC. At no time, emission level should go beyond the stipulated standards.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
86	All the reactors/ vessels used in the manufacturing process shall be closed to reduce the fugitive emission.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>

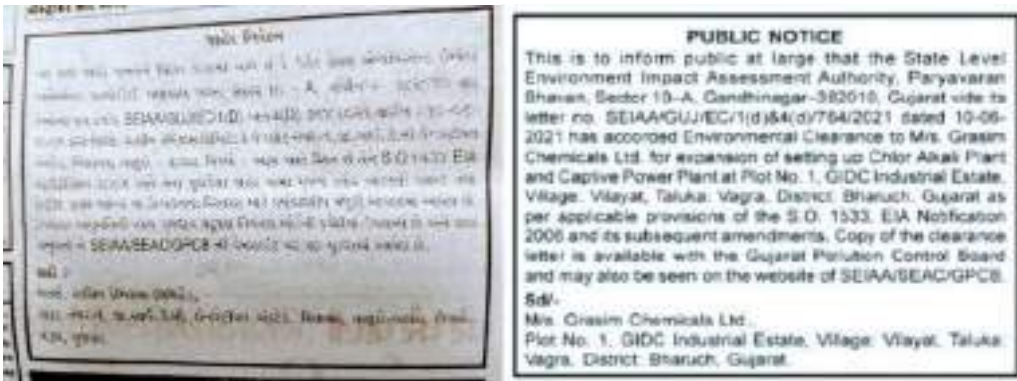
Sr. No	EC Conditions	Compliance Status
<b>B.2.3</b>	<b>HAZARDOUS/ SOLID WASTE:</b>	
87	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection/ treatment/ storage/ disposal of hazardous wastes.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
88	Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
89	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
90	Trucks/ Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
91	The design of the Trucks/ tankers shall be such that there is no spillage during transportation	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
92	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/ CHWIF.	Noted.
93	Management of fly ash (If any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
<b>B.2.4</b>	<b>SAFETY:</b>	
94	The occupier/ manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963	Noted
95	The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
96	Main entry and exit shall be separate and clearly marked in the facility .	Noted.
97	Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.	Noted.
98	Storage of flammable chemicals shall be sufficiently away from the production area.	Noted.
99	Sufficient number of fire extinguishers shall be provided near the plant and storage area.	Noted.
100	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.	Noted.
101	All the toxic/ hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before</li> </ul>

Sr. No	EC Conditions	Compliance Status
	regard shall be obtained before commencing the expansion activities.	commissioning of proposed project
102	The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.	Noted
103	Only flame proof electrical fittings shall be provided in the plant premises.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
104	Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks/ containers instead of one single large capacity tank/ containers.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
105	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/ dyke walls shall be provided for storage tanks for Hazardous Chemicals.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
106	Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
107	Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.	Noted
108	Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.	Noted
109	First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	Noted
110	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	Noted
111	Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.	Noted
112	Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	Noted
113	The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
114	Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition before commissioning of proposed project</li> </ul>
<b>B.2 .5</b>	<b>NOISE:</b>	
115	The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
<b>B.2 .6</b>	<b>CLEANER PRODUCTION AND WASTE MINIMISATION:</b>	
116	The unit shall undertake the Cleaner Production Assessment study through a reputed institute/ organization and shall form a CP team in the company.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>



Sr. No	EC Conditions	Compliance Status
	The recommendations thereof along with the compliance shall be furnished to the GPCB.	
117	The company shall undertake various waste minimization measures such as :	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
118	Metering and control of quantities of active ingredients to minimize waste.	
119	Reuse of by-products from the process as raw materials or as raw materials substitutes.	
120	Use of automated and close filling to minimize spillages.	
121	Use of close feed system into batch reactors.	
122	Venting equipment through vapour recovery system.	
123	Use of high pressure hoses for cleaning to reduce wastewater generation.	
124	Recycling of washes to subsequent batches.	
125	Recycling of steam condensate.	
126	Sweeping/ mopping of floor instead of floor washing to avoid effluent generation.	
127	Regular preventive maintenance for avoiding leakage, spillage etc.	
<b>B.2.7</b>	<b>GREEN BELT AND OTHER PLANTATION:</b>	
128	The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC/ GPCB and submit an action plan of plantation for next three years to the GPCB.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
129	Drip irrigation/ low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
<b>B.3</b>	<b>OTHER CONDITION:</b>	
130	Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MOEF&CC vide no. F. No. 22-34/2018-IA,III dated 09/08/2018 for Pharmaceutical and Chemical industries mentioned at (Sr. no. XX).	Noted
131	The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEFCC's Office Memorandum No. F.No.22-65/2017-IA.II dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEFCC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
132	Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.	<ul style="list-style-type: none"> <li>Unit shall comply with the condition after commissioning of proposed project</li> </ul>
133	The unit shall join and participate financially and technically for any common environmental facility/ infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.	Noted

Sr. No	EC Conditions	Compliance Status
134	Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.	Noted
135	The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.	Noted
136	All the commitments/ undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.	Noted
137	The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.	Noted
138	In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.	Noted
139	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	Noted
140	During material transfer there shall be no spillages and garland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.	Noted
141	Pucca flooring/ impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	Noted
142	Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly.	Noted
143	No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.	Noted
144	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted
145	The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.	Noted
146	The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.	Noted
147	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Noted
148	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB	

Sr. No	EC Conditions	Compliance Status
	<p>and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.</p> <ul style="list-style-type: none"> <li>• Complied</li> <li>• We have informed the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with GPCB and may also be seen at the website of SEIAA/ SEAC/ GPCB.</li> <li>• English and Gujarati Newspaper advertisement of the Environment Clearance is as per below and the same is attached as <b>Annexure-5</b>.</li> </ul> <p>Name of Paper: Times of India Date of Issue: 15/06/2021 In: English language</p> <p>Name of Paper: Divya Bhaskar Date of Issue: 15/06/2021 In: Gujarati language</p> 	
149	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	<ul style="list-style-type: none"> <li>• We are submitting half-yearly compliance report regularly</li> </ul>
150	Concealing factual data or submission of false/ fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the captive power plant project.</li> </ul>
151	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the project.</li> </ul>
152	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Noted
153	The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the project.</li> </ul>
154	The project authorities shall inform the GPCB, Regional Office of MOEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	<ul style="list-style-type: none"> <li>• We shall comply with the condition after commissioning of the project.</li> </ul>
155	This environmental clearance is valid for seven years from the date of issue.	Noted
156	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a	Noted

<b>Sr. No</b>	<b>EC Conditions</b>	<b>Compliance Status</b>
.	period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	
157	Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.	Noted



# GUJARAT POLLUTION CONTROL BOARD

## PARYAVARAN BHAVAN

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By R.P.A.D.  
CONSOLIDATED CONSENT AND AUTHORIZATION (CC & A - Amendment)

CCA AMENDMENT NO: AWH - 118058

NO: GPCB/BRCH-B/CCA- 70(8)A/ID-41279/6 + 5546

DT:18/06/2022

To,  
M/s. Grasim Industries Ltd Chemical Division  
Plot No: 1,  
GIDC Industrial Estate Vilayat,  
Tal: Vagra, Dist-Bharuch.

**SUB:** Amendment in Consolidated Consent & Authorization (CC&A) under various Environmental Acts/ Rules.

**REF:** [1] Your application No. 202404 dated 27/09/2021.  
[2] CCA No. AWH - 98281 dated: 29/01/2019 (CCA Renewal )  
[3] CCA - Amendment No. AWH - 103311 dated: 13/11/2019

Sir,

This has reference to the CCA order No: AWH-103311, issued vide letter no. GPCB/BRCH/CCA-70(6)/ID-41279/526734, dated 13/11/2019 under the provisions of the various Environmental Act/ Rules, which stands amended as under.

The Validity of this order shall be up to 02/03/2024.

1. The list of proposed products to be manufactured shall be as follows:

Sr. No.	Products	Quantity (MT/Annum)		
		Existing	Proposed	Total
1	Caustic Soda Lye	365000	-	365000
2	Hydrogen	102200000 (Nm <sup>3</sup> /Annum)	-	102200000 (Nm <sup>3</sup> /Annum)
3	Liquid Chlorine / Sodium Hypochlorite / Hydro Chloric Acid	328500	-	328500
4	Poly Aluminium Chloride	250000	-	250000
5	Chlorinated Paraffin Wax	70000	-	70000
6	Aluminium Chloride	25000	-	25000
7	Stable Bleaching Powder	61000	-	61000
8	Phosphoric Acid	35000	-	35000
9	Calcium Chloride	87600	-	87600
10	Captive Power Plant	96 MW	-	96 MW
11	Aluminium Chloro Hydrate (Super)	5000	-	5000

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*Clean Gujarat Green Gujarat*

ISO - 9001 - 2008 & ISO - 14001 - 2004 Certified Organisation

	Coagulant)			
12	Calcium Hypochlorite (High Strength Bleaching Powder-HSBP)	24000	-	24000
<b>Proposed</b>				
13	Methyl Chloride			
14	Methylene Chloride (50% to 80% of total production)			
15	Chloroform (15% to 40% of total production)		54000	54000
16	Carbon Tetra Chloride (5% to 10% of total production)			

## 2. Specific conditions:

- a) Unit shall not carry out any construction activities and production which attracts provisions of Environment Clearance without obtaining EC from competent authority under EIA notification dated 14/09/2006 and amended thereafter.
- b) Unit shall use fresh raw material only.
- c) Unit shall sell out their hazardous waste to authorized endusers who is having authorization with valid CCA and rule 9 permission to receive this waste. Unit shall make MoU with such authorized endusers and submit MoU.
- d) All the efforts shall be made to send hazardous waste to cement industry for Co-processing first & there after it shall be disposed through other option.
- e) Unit shall follow spent solvent management guideline framed by board and shall make MoU with outside distillation units, if any. Also submit the prescribed forms as per guideline.
- f) Unit shall strictly follow the Solid Fuel guideline framed by Board and shall install APCM as per guideline.
- g) Unit shall follow coal handling guideline framed by Board and provide close ash handling facility.
- h) Unit shall strictly follow the Fly Ash Notification for disposal of generated ash.
- i) Unit shall install online Continuous Emission Monitoring Systems (CEMS) and link it with the server of GPCB for real time data transfer for boiler more than 8 TPH capacity or equivalent capacity of TFH.

## 3. CONDITION UNDER THE WATER ACT:

- 3.1 The condition No. 2.1 for Water Consumption under Water Act of the CCA order No: AWH-103311, issued vide letter no. GPCB/ BRCH/ CCA-70(6)/ ID- 41279/526734, dated: 13/11/2019 is amended and shall now be read as under.
  - a. Domestic: 471KL/Day (Existing 466 KLD + Proposed 5 KLD)



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b. Industrial: 18598 KL/Day (Existing 18059 KLD + Proposed 539.5 KLD)  
**Total: 19069.5KL/Day (Existing 18,525 KLD + Proposed 544.5 KLD)**

3.2 The condition No. 2.2 for Wastewater Generation under Water Act of the CCA order No: GPCB/ BRCH/ CCA-70(6)/ ID- 41279/526734, dated: 13/11/2019 is amended and shall now be read as under,

a. Domestic: 356.8 KL/Day (Existing 352.8 KLD + Proposed 4KLD)

b. Industrial: 5884.5 KL/Day (Existing 5623 KLD + Proposed 261.5 KLD)

**Total: 6241.3 KL/Day (Existing 5975.8 KLD + Proposed 265.5 KLD)**

3.3 Mode of disposal of wastewater:

- After proposed expansion, addition waste water generation shall be 261.50 KLPD, out of which from cooling (147 KLD) and from process (20 KLD) shall be taken to RO plant. RO permeate of 117 KLD shall be reused in process and RO reject (50 KLD) shall be used for coal sprinkling.
- Existing disposal mode of treated effluent shall remain as per previous CCA.**
- Total 356.80 KLD domestic sewage shall be treated in STP and treated waste water shall be used for gardening purpose after conforming following prescribed norms.

Parameters	GPCB Norms
pH	6.5 to 9
TSS	< 100 mg/l
Fecal Coliform (Most Probable Number per 100 milliliter, MPN/100ml)	<1000 MPN/100ml
BOD (3 days 27° degree C)	30 mg/l

#### 4. CONDITIONS UNDER THE AIR ACT:

4.1 The condition No. 3.1 for Fuel Consumption under Air Act of the CCA order No: AWH-103311, issued vide letter no. GPCB/ BRCH/ CCA-70(6)/ ID- 41279/526734, dated: 13/11/2019 is amended and shall now be read as under.

Sr. No.	Name of fuel	Quantity		
		Existing	Proposed	Total
1	Coal	72000 MT/Month	--	72,000 MT/Month
2	HSD	2200 Lit/hr	200 Lit/hr	2400 Lit/hr
3	Hydrogen	--	200 Nm <sup>3</sup> /hr	200 Nm <sup>3</sup> /hr

4.2 The condition No. 3.2 for Flue gas stacks under Air Act of the CCA order No: AWH-103311, issued vide letter no. GPCB/ BRCH/ CCA-70(6)/ ID- 41279/526734, dated: 13/11/2019 is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height in Meter	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
Existing					

1	Boiler 1 & 2	125	ESP & low NOx burner	PM SO <sub>x</sub> NO <sub>x</sub>	150mg/Nm <sup>3</sup> 100 ppm 50 ppm
2	Boiler 3 & 4	125		PM SO <sub>x</sub> NO <sub>x</sub>	150mg/Nm <sup>3</sup> 100 ppm 50 ppm
3	D. G. Sets (1875 KVA - 4 Nos.)	36	--	PM SO <sub>x</sub> NO <sub>x</sub>	150mg/Nm <sup>3</sup> 100 ppm 50 ppm
4	D. G. Sets (750 KVA - 3 Nos.)	11	--	PM SO <sub>x</sub> NO <sub>x</sub>	150mg/Nm <sup>3</sup> 100 ppm 50 ppm
5	Stack attached to primary coal crusher -1	22.4	Bag filter	PM	150mg/Nm <sup>3</sup>
6	Stack attached to primary coal crusher -2	30.3	Bag filter	PM	150mg/Nm <sup>3</sup>
<b>Proposed</b>					
7	D. G. Sets (750 KVA - 1Nos.)	11	--	PM SO <sub>x</sub> NO <sub>x</sub>	150mg/Nm <sup>3</sup> 100 ppm 50 ppm
8	Volatile Reduction Chamber (VRC)	35	Water and Caustic scrubber	NO <sub>x</sub> HCl Cl <sub>2</sub>	50ppm 20 mg/m <sup>3</sup> 9 mg/m <sup>3</sup>

- 4.3 The condition No. 3.3 for Process gas stacks under Air Act of the CCA order No: AWH-103311, issued vide letter no. GPCB/ BRCH/ CCA-70(6)/ ID- 41279/526734, dated: 13/11/2019 is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height in Meter	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
<b>Existing</b>					
1.	Sodium Hypo stack-1 (Caustic Plant)	35	Alkali Scrubber	Cl <sub>2</sub>	9 mg/Nm <sup>3</sup>
2.	HCl stack-1 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system	HCl	35 mg/Nm <sup>3</sup>
3.	HCl stack-2 (Caustic Plant)	35			
4.	Poly Aluminium Chloride	35	Water scrubber system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>





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	Liquid-1				
5.	Chlorinated Paraffin Plant	35	Alkali scrubbing system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
6.	Aluminium Chloride	35	Alkali scrubbing system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
7.	Stable Bleaching Powder Plant	35	Alkali scrubbing system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
8.	Phosphoric Acid Plant	35	Water Scrubber	HCl HF	20 mg/Nm <sup>3</sup> 6 mg/Nm <sup>3</sup>
9.	Calcium Chloride	35	Water Scrubber	HCl	20 mg/Nm <sup>3</sup>
10.	Sodium Hypo stack-2 (Caustic Plant)	35	Alkali Scrubber	Cl <sub>2</sub>	9 mg/Nm <sup>3</sup>
11.	HCl stack-3 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system	HCl	35 mg/Nm <sup>3</sup>
12.	HCl stack-4 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system		
13.	Poly Aluminium Chloride Liquid-2	35	Water scrubber system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
14.	Poly Aluminium Chloride Powder-1	35	3 stage water scrubber	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
15.	Chlorinated Paraffin Plant	35	Alkali scrubbing system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
16.	Aluminium Chloride	35	Alkali scrubbing system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
17.	Stable Bleaching Powder Plant	35	Alkali scrubbing system	HCl Cl <sub>2</sub>	20 mg/Nm <sup>3</sup> 9 mg/Nm <sup>3</sup>
18.	Vent attached to Reactor	35	--	H <sub>2</sub> gas	--
19.	Vent attached to dryer-1 (HSBP)	21	Bag Filter	PM	150 mg/Nm <sup>3</sup>
20.	Vent attached	21	Bag Filter	PM	150 mg/Nm <sup>3</sup>

	to dryer-2 (HSBP)				
21.	Vent attached to reaction vessel-1 (HSBP)	21	Water / Caustic Scrubber	Cl <sub>2</sub>	9 mg/Nm <sup>3</sup>
22.	Vent attached to reaction vessel-2 (HSBP)	21	Water / Caustic Scrubber	Cl <sub>2</sub>	9 mg/Nm <sup>3</sup>
<b>Proposed</b>					
23	Hydro Chlorinator - CMS plant	35	Alkali Scrubber	HCl	20 mg/Nm <sup>3</sup>
24	Crude CMS Distillation - CMS Plant	35	Condenser and guard condenser with cooling water circulation & chilled circulation	VOC	1 µg/m <sup>3</sup>
25	Heavies CMS Distillation - CMS Plant	35	Condenser and guard condenser with cooling water circulation & chilled circulation	VOC	1 µg/m <sup>3</sup>

- 4.4 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

Sr. No.	Parameters	Permissible Limit (microgram /M <sup>3</sup> )	
		Annual	24 Hours Average
1.	Particulate Matter (PM <sub>10</sub> )	60	100
2.	Particulate Matter (PM <sub>2.5</sub> )	40	60
3.	Oxides of Sulphur (SO <sub>x</sub> )	50	80
4.	Oxides of Nitrogen (NO <sub>x</sub> )	40	80

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.
- 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

- 4.5 Unit shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified in condition as above.

- 5 **CONDITIONS UNDER HAZARDOUS & OTHER WASTES (MANAGEMENT & TRANSBOUNDARY MOVEMENT) RULES, 2016**

- 5.1 Unit shall comply with provisions of Hazardous & Other Wastes (Management & Transboundary Movement) Rules-2016.



# GUJARAT POLLUTION CONTROL BOARD

## PARYAVARAN BHAVAN

Sector-10-A, Gandhinagar-382 010

Phone : (079) 23226295

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Website : [www.gpcb.gov.in](http://www.gpcb.gov.in)

5.2 The condition No. 6.2 under authorization for Hazardous & other wastes of the CCA order No: AWH-103311, issued vide letter no. GPCB/ BRCH/ CCA-70(6)/ ID-41279/526734, dated: 13/11/2019 is amended and shall now be read as under.

Sr. No.	Name of Haz. Waste	Category Number	Quantity in MT/Year			Facility
			Exl.	Pro.	Total	
1	Chemical sludge from Waste water treatment	35.3	40160	55	40215	Collection, Storage, Transportation and Disposal at approved TSDF.
2	Spent Carbon	36.2	0.33	40	40.33	Collection, Storage, Transportation and Disposal at approved TSDF site
3	Used Spent Oil	5.1	100.5 KL	0.5 KL	101 KL	Collection, storage, Reuse, Transportation and Disposal by sending to authorized recyclers/refiners
4	Spent ion exchange resin	35.2	0.33	0.67	1	Collection, Storage, Transportation and Disposal at approved TSDF site
5	Discarded container	33.1	1700 Nos.	300 Nos.	2000 Nos.	Collection, storage, Decontamination/D etoxification, Reuse, Transportation and Disposal by sending to authorized recyclers/refiners
	Bags / Liners		25	0	25	
6	Incinerable Waste	36.1	37	105	142	Collection, Storage, Transportation and Disposal at approved CHWIF site.
7	Spent Acid * (HCl)	B15	1,15,500	27,000	1,42,500	Collection, Storage, Transportation through pipeline and disposal by consuming (60,000 MT/year) in-house in manufacturing process of Poly Aluminum Chloride.

						Collection, Storage, Transportation and disposal by sending (82,500 MT/Annum) to Actual users/end-user having rule-9 permission & valid CCA after making MOU.
8	Spent Acid ** (Dilute Sulphuric Acid)	815	7500	8000	15,500	Collection, Storage, Transportation and Disposal by sending to authorized Actual users/end-user having rule-9 permission & valid CCA after making MOU.
9	Bleaching Liquid (consists of 3% Hypo, 10% CaCl <sub>2</sub> , 65% to 75% water)	--	60,000	--	60,000	Collection, Storage, Transportation and Disposal by sending to authorized Actual users/end-user having rule-9 permission & valid CCA after making MOU.
40	Sodium Chloride (consist of 90% NaCl)	--	6000	--	6000	Collection, Storage, Transportation and Disposal at approved TSDF site
11	Residue/sludge & filter cake	16.2	6066	--	6066	Collection, Storage, Transportation and Disposal at approved TSDF site.
Proposed						
12	Spent Catalyst	17.2	0	25	25	Collection, Storage, Transportation and Disposal at approved TSDF site
13	Aluminum Dross Waste	-	0	50	50	Collection, Storage, Transportation and Disposal at approved TSDF site
14	Batteries	-	0	100 Nos.	100 Nos.	Collection, Storage, Transportation and Disposal as per the



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						batteries Management and Handling Rules, 2010
15	E-Waste	-	0	1	1	Collection, Storage, Transportation and Disposal as per the E-waste management Rules- 2016
16	Insulating Material	-	0	25	25	Collection, storage, Reuse, Transportation and Disposal at approved TSDP.
<b>Non hazardous waste</b>						
1	Fly Ash	--	86,400	--	86,400	Collection, Storage, Transportation and Disposal by sending to brick manufacturing as per fly ash notification.

- 6 All other conditions of the CCA order No: CCA order No: AWH-103311, issued vide letter no. GPCB/ BRCH/ CCA-70(6)/ ID- 41279/526734, dated: 13/11/2019 shall remain same.

FOR AND ON BEHALF OF  
GUJARAT POLLUTION CONTROL BOARD

*IRFAN*  
(IRFAN KAGZI)  
ENVIRONMENT ENGINEER





No. SEIAA/GUJ/EC/1(d),4(d)&5(f)/ /2011

Date:  
Time Limit

**Sub: Environment Clearance for the proposed Expansion : Putting Chlor-alkali unit with value added products (as a backward integration of VSF plant) along with expansion of captive power plant from 25 MW to 85 MW at located at Plot No. 1, GIDC Industrial Estate, Vilayat - 392 140, Tal. Vagra, Dist. Bharuch by M/s. Grasim Cellulosic (A Unit of Grasim Industries Ltd.)..... in Category 1(d), 4(d) & 5(f) of Schedule annexed with EIA Notification dated 14/9/2006.**

Dear Sir,

This has reference to your application in Application Form-I along with Pre - feasibility Report , EIA Report and Copy of MoU between the coal supplier and the company submitted vide letter dated 02/04/2011 submitted to the SEAC, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance for **Expansion : Putting Chlor-alkali unit with value added products (as a backward integration of VSF plant) along with expansion of captive power plant from 25 MW to 85 MW at located at Plot No. 1, GIDC Industrial Estate, Vilayat - 392 140, Tal. Vagra, Dist. Bharuch by M/s. Grasim Cellulosic (A Unit of Grasim Industries Ltd.).** M/s. Grasim Cellulosic obtained environmental clearance in the year 2008 for manufacturing of VSF, CS<sub>2</sub>, Sulphuric Acid, Sodium Sulphate and captive power at Vilayat Vagra. In addition to above products, it is now proposed to expand the project by putting Chlor-alkali unit as a backward integration to Viscose Staple Fibre (VSF) with forward integration chlorine products. The proposal also includes expansion of power plant from 25 MW to 85 MW. Bipolar Membrane Cell technology shall be adopted for the Chlor-alkali unit. The applicant has applied for Expansion following Product.

**Product :**

Sr. No.	Product	Capacity
1	Caustic Soda Lye	219000 TPA (600 TPD)
2	Liquid Chlorine / Hydrochloric Acid	197100 TPA (540 TPD)
3	Hydrogen	61320000 Nm <sup>3</sup> /Year (168000 Nm <sup>3</sup> /day)
4	Chlorosulphonic Acid	73000 TPA (200 TPD)
5	Sulphuric Acid	36500 TPA (100 TPD)
6	Carbon Disulphide	31025 TPA (85 TPD)
7	Liquid Poly Aluminium Chloride	146000 TPA (400 TPD)
8	Staple Bleaching Powder	36500 TPA (100 TPD)
9	Chlorinated Paraffin	36500 TPA (100 TPD)
10	Aluminium Chloride	14600 TPA (40 TPD)
11	Power Generation	60 MW

The project activity is covered in 1(d), 4(d) & 5(f) and is of 'B' Category. Since the unit is located in the notified industrial estate, it does not need Public Consultation as per Para 7(i) III. Stage (3) (b) – Public Consultation of EIA Notification, 2006.

The SEAC, Gujarat had recommended to the SEIAA, Gujarat, to grant the Environment Clearance to this project for the above-mentioned products. The proposal was considered by SEIAA, Gujarat in its meeting held on 12.05.2011 at Gandhinagar. Since the EIA Report was found to be adequate and complete and the public consultation is not required for the project, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following Specific and General conditions.:

**A. SPECIFIC CONDITIONS:**

1. The unit shall obtain requisite permission from PESO, Nagpur for storage of chlorine, hydrogen etc. before commissioning of the project.

**A.1 WATER:**

2. No ground water shall be used for the project. Entire water requirement of 35000 KLD after the proposed expansion shall be met through the GIDC water supply only.
3. The industrial effluent generation from the project shall not exceed 25600 KLD after the proposed expansion.
4. The industrial effluent shall be treated in the ETP consisting of Zinc Clarifier Tanks (3 no.), Grit Chambers (3 no.), Primary Clarifier (2 no.), Equalization Tank, Biological Reactor, Final Clarifiers (2 no.), Thickeners (2 no.), Belt Press (2 no.) and Sludge Dryers (6 no.) etc. The ETP shall be operated regularly and efficiently so as to achieve the GPCB norms at the ETP outlet.
5. The treated waste water conforming to the GPCB norms shall be discharged into the GIDC underground drain for its final disposal into the deep sea.
6. A Guard / Polishing Pond shall be provided before discharge of treated effluent into GIDC underground drain. The unit shall provide on line pH meter, TDS meter & TOC meter for online monitoring of the treated effluent.
7. The domestic wastewater generation shall not exceed 800 KLD after the proposed expansion.
8. The domestic wastewater shall be treated in the adequate STP. The STP shall be operated regularly and efficiently so as to achieve the GPCB norms at the STP outlet.
9. The treated domestic wastewater conforming to the GPCB norms shall be utilized for gardening / plantation within premises. However during the rainy season, it shall be transferred to the ETP for its discharge into the GIDC underground drain.
10. The unit shall provide metering facility at the inlets and outlets of the ETP & STP and maintain the records of the same.
11. Proper logbooks of ETP & STP operation and also showing the quantity of effluent generated, discharged into GIDC underground drain, utilized for plantation / gardening etc. shall be maintained and furnished to the GPCB from time to time.
12. Regular performance evaluation of the ETP & STP shall be undertaken every year to check its adequacy, through credible institutes like L.D. College of Engineering, NPC or such other institutes of similar repute, and its records shall be maintained.
13. Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
14. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.

**A.2 AIR:**

15. Process emission shall be controlled with the air pollution control equipments (APCE) as mentioned below.
  - a. Poly Aluminium Chloride Plant - Water scrubber for absorption of HCl vapor
  - b. Caustic Soda Plant - Water scrubber having bubble cap tray system for absorption of HCl



- vapour & three tower systems with alkali scrubber for absorption of unreacted chlorine to produce sodium hypochlorite.
- c. Bleaching Powder Plant, Aluminium Chloride Plant and Chlorinated Paraffin Plant – Alkali scrubbers of absorption of Cl<sub>2</sub> emission.
  - d. Sulphuric Acid Plant – DCDA system in manufacturing and scrubbing system.
  - e. Chlorosulphonic Acid Plant – Acid scrubber for absorption of SO<sub>3</sub> emission.
16. The APCE shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB at stack outlets. Adequate stack height as per prevailing norms shall be provided for the process emissions.
  17. Natural gas shall be used as a raw material in the CS<sub>2</sub> plant. Thus, there shall be no CS<sub>2</sub> & H<sub>2</sub>S emission from the CS<sub>2</sub> Plant.
  18. Imported Coal to the tune of 1700 TPD shall be used as a fuel in the proposed 60 MW Power Plant. Stack of 175 meter height shall be provided for the proposed power plant.
  19. High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the power plant. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standard, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified norms or boiler shall shut down totally.
  20. There shall be one extra field in the ESP to ensure that even though one field goes out of order, the prescribed standard of PM is met with. In case of failure of two or more fields of the ESP, the unit shall immediately shut down the power plant.
  21. Online monitoring system shall be installed to monitor at least SO<sub>x</sub> & PM concentrations in the flue gas emission and the results shall be displayed at strategic locations in the premises.
  22. The company shall prepare schedule, carry regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.
  23. Adequate air pollution control systems shall be provided as proposed for control of fugitive emission viz. water sprinklers at all coal transfer points and truck unloading points, dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.
  24. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health).
  25. Regular performance evaluation of the air pollution control systems shall be undertaken every year to check its adequacy, through credible institutes like L.D. College of Engineering, NPC or other such other institutes of similar repute, and its records shall be maintained.
  26. Regular monitoring of ground level concentration of CS<sub>2</sub>, H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>x</sub>, Cl<sub>2</sub>, HCl, PM<sub>10</sub> and PM<sub>2.5</sub> shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by Gujarat Pollution Control Board. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with GPCB.

### **A.3 HAZARDOUS /SOLID WASTE:**

27. The company must strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008, as may be amended from time to time. Authorization from the GPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.
28. The hazardous wastes shall be stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
29. The unit shall dispose its ETP sludge, brine / process sludge, spent resin, spent catalyst and spent

carbon at the nearest common TSDF. The unit shall obtain membership of the nearest common TSDF for disposal of the aforesaid solid wastes.

30. Discarded containers / barrels / bags / liners shall be either reused or sold only to the authorized recyclers after decontamination.
31. Used oil shall be sold only to the registered recyclers.
32. Fly ash shall be handled in dry state and handling of the fly ash shall be done through a closed pneumatic system.
33. At least seven days storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed for storage of fly ash.
34. The ash shall be supplied to the manufacturers of ash based products such as cement, concrete blocks, bricks, panels, etc. The unit shall strictly comply with the Fly Ash Notification under the E.P.Act and it shall be ensured that there is 100% utilization of ash to be generated from the unit.

#### **A.4 SAFETY:**

35. Provisions of the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1986 & Factories Act, 1948 shall be strictly complied with.
36. A well designed fire hydrant system shall be installed as per the prevailing standards.
37. All the risk mitigation measures, general & specific recommendations mentioned in Chapter 6 of the EIA Report shall be implemented.
38. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals, especially chlorine, hydrogen, CS<sub>2</sub>, HCl etc.
39. Storage and use of hazardous chemicals shall be minimized to the extent possible and all necessary precautions shall be taken to mitigate the risk generated out of it. Storage of hazardous chemicals shall be in multiple small capacity tanks / containers instead of one single large capacity tank for safety purpose.
40. During material transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
41. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals. Close handling system for chemicals shall be provided.
42. Tie up shall be done with nearby health care unit for seeking immediate medical attention in the case of emergency, regular medical check up of the workers and keeping its record etc.
43. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.
44. First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
45. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
46. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
47. Handling and charging of the chemicals shall be done in such a manner that minimal human exposure occurs.
48. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.

#### **A.5 NOISE:**

49. To minimize the noise pollution the following noise control measures shall be implemented:
  - ✓ Selection of any new plant equipment shall be made with specification of low noise levels.
  - ✓ Manufacturers / suppliers of major noise generating machines / equipments like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible before supply and installation to mitigate the noise generation and to comply with the national / international regulatory norms with respect to noise generation for individual units

- ✓ Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.
  - ✓ Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.
  - ✓ Employees shall be provided with ear protection measures like earplugs or earmuffs.
  - ✓ Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.
  - ✓ Construction equipment generating minimum noise and vibration shall be chosen.
  - ✓ Ear plugs and/muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.
  - ✓ Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.
  - ✓ Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.
  - ✓ Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.
  - ✓ Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.
50. The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration dampers etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.

#### **A.6 ENERGY CONSERVATION :**

51. The project proponent shall install energy efficient devices and appliances conforming to the Bureau of Energy Efficiency norms.
52. The energy audit shall be conducted at regular intervals and the recommendations of the audit report shall be implemented.
53. The project proponent shall implement the application of solar energy which shall be utilized as solar lighting for illumination of common areas, lighting of internal roads and passages in addition to utilization of solar water heating systems.
54. The transformers and motors shall have minimum efficiency of 85 %.
55. Variable frequency drives shall be installed.
56. Energy conservation measures shall include use of electronic lighting system, use of CFL tubes to minimize energy use, use of programmable timers for pumping system and lighting, water level controllers for water pumps, centralized cooling etc.
57. Energy saving practices as follows shall be practiced:-
- Constant monitoring of energy consumption and defining targets for energy conservation.
  - Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort level.
  - Use of solar cells for lighting.
  - Use of solar water heater for canteen & washing area.
  - Proper load factor shall be maintained by the unit.
  - Provision of day light roof to utilize maximum natural light in the production plant instead of electrical lighting.
  - Use of electronic ballast to save energy.
  - Automatic switching system for lighting & water tank pumping shall be used.
  - To the maximum extent possible and technically feasible, energy efficient equipment like motors, pumps, air conditioning systems shall be selected.
  - Gravity flow shall be preferred wherever possible to save pumping energy.
  - Promoting awareness on energy conservation.
  - Training to the staff on methods of energy conservation and to be vigilant for this.

#### **A.6 CLEANER PRODUCTION AND WASTE MINIMISATION:**

58. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
59. The company shall undertake following waste minimization measures:
- Metering and control of quantities of active ingredients to minimize waste.
  - Reuse of by-products from the process as raw materials or raw materials substitutes in other process.
  - Use of automated and enclosed filling to minimize spillages.
  - Use of close feed system into batch reactors.
  - Dry cleaning / mopping of floor instead of floor washing
  - Use of high pressure hoses for cleaning to reduce wastewater generation
  - Regular preventive maintenance for avoiding leakage, spillage etc.

#### **A.7 GREEN BELT AND OTHER PLANTATION:**

60. The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in the GIDC estate, nearby schools, gram panchayat areas and any other open areas in consultation with the GIDC / local bodies / GPCB and submit an action plan of plantation for next three years to the GPCB.
61. Minimum of 15000 trees shall be planted every year up to five years and budget of Rs. 10 lacs per annum shall be earmarked for the green belt development, as committed by the project proponent.
62. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development.

#### **B. GENERAL CONDITIONS:**

63. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
64. The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environment Protection (CREP) published by the Central Pollution Control Board, as may be applicable.
65. A separate Environment Management Cell equipped with full fledged laboratory facilities and qualified personnel shall be set up to carry out the Environment Management and Monitoring functions and a separate budget shall be allocated for this purpose.
66. The funds earmarked for environment protection measures shall be maintained in a separate account and there shall not be any diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards shall be reported.
67. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
68. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.
69. All the recommendations made in the EIA/EMP submitted by the project proponent shall be strictly implemented.
70. The applicant shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
71. No further expansion or modifications in the plant shall be carried out without prior approval of the MoEF/ SEIAA, as the case may be. In case of deviations or alterations in the project proposal from those submitted to MoEF/ SEIAA/ SEAC for clearance, a fresh reference shall be made to the SEIAA/ SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
72. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The

funds so provided shall not be diverted for any other purpose.

73. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
74. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
75. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
76. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
77. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
78. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
79. This Environmental Clearance is valid for five years from the date of issue.

With regards,

Yours sincerely,

**(R.G.SHAH)**  
**Member Secretary**

**Issued to:**

**M/s. Grasim Industries Limited (Unit : Grasim Cellulosic),  
P.O. Birladham, Nagda – 456 331,  
Dist. Ujjain (M.P.).**

Copy to:-

1. The Secretary, Department of Environment and Forests, Govt. of Gujarat, Secretariat, Gandhinagar-382010.
2. The Chairman, Central Pollution Control Board , Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010.
6. Select File.

**(R.G.SHAH)**  
**Member Secretary**



No. SEIAA/GUJ/EC/1(d),4(d)&5(f)/ /2012

Date:

**Amendment to Environment Clearance Order No:-**

(Under the provision of Environmental Impact Assessment (EIA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (EIA) Notification, 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Environment Clearance granted to Grasim Cellulosic (A Unit of Grasim Industries Ltd.) for expansion by putting Chlor-alkali unit with value added products (as a backward integration of VSF plant) along with expansion of captive power plant from 25 MW to 85 MW, vide order no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011, is being subjected to amendment for the following condition only.

And whereas SEIAA has granted Environment Clearance vide office order letter no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011, under the provisions of the aforesaid Notification.

And whereas SEIAA has received recommendation from SEAC, for the amendment of Environment Clearance of this SEIAA under the provision of the aforesaid Notification. The proposal was considered by SEIAA, Gujarat in its meeting held on 15.03.2012 at Gandhinagar. Environment Clearance is hereby amended as under, subjected to amendment for the following condition only.

The Environment Clearance order no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011 shall be read henceforth as under.

1. In the second paragraph, increase in power generation shall be read as “**25 MW to 96 MW**” instead of “25 MW to 85 MW”.
2. In the Table of Products, at serial number 11, Power Generation shall be read as “**96 MW [Total Capacity After Expansion]**” instead of 60 MW.
3. The condition no. 18 shall be amended as below :

***18. Imported Coal to the tune of 1700 TPD shall be used as a fuel in the proposed 96 MW Power Plant. Two stacks, each of 125 meter height shall be provided for the proposed power plant.***

The other conditions of the Environment Clearance order no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011 shall remain unchanged.

The Environment Clearance is subject to the conditions as may be specified in the rules from time to time under the Environmental Impact Assessment (EIA) Notification, 2006 and Environment

(Protection) Rules, 1986.

With regards,

Yours sincerely,

**(R.G.SHAH)**  
**Member Secretary**

***Issued to:***

**Mr. S. S. Maru, Sr. Executive President,  
Grasim Industries Limited (Unit : Grasim Cellulosic),  
P.O. Birladham, Nagda – 456 331,  
Dist. Ujjain (M.P.)**

Copy to:-

1. The Secretary, Department of Environment and Forests, Govt. of Gujarat, Secretariat, Gandhinagar-382010.
2. The Chairman, CPCB , Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010.
6. Select File.

**(R.G.SHAH)**  
**Member Secretary**



No. SEIAA/GUJ/EC/1(d),4(d)&5(f)/ /2012

Date:

**Amendment to Environment Clearance Order No:-**

(Under the provision of Environmental Impact Assessment (EIA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (EIA) Notification, 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Environment Clearance granted to Grasim Cellulosic (A Unit of Grasim Industries Ltd.) for expansion by putting Chlor-alkali unit with value added products (as a backward integration of VSF plant) along with expansion of captive power plant from 25 MW to 85 MW, vide order no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011, is being subjected to amendment for the following condition only.

And whereas SEIAA has granted Environment Clearance vide office order letter no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011, under the provisions of the aforesaid Notification.

And whereas SEIAA has received recommendation from SEAC, for the amendment of Environment Clearance of this SEIAA under the provision of the aforesaid Notification. The proposal was considered by SEIAA, Gujarat in its meeting held on 15.03.2012 at Gandhinagar. Environment Clearance is hereby amended as under, subjected to amendment for the following condition only.

The Environment Clearance order no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011 shall be read henceforth as under.

1. In the second paragraph, increase in power generation shall be read as **“25 MW to 96 MW”** instead of “25 MW to 85 MW”.
2. In the Table of Products, at serial number 11, Power Generation shall be read as **“96 MW [Total Capacity After Expansion]”** instead of 60 MW.
3. The condition no. 18 shall be amended as below :

**18. Imported Coal to the tune of 1700 TPD shall be used as a fuel in the proposed 96 MW Power Plant. Two stacks, each of 125 meter height shall be provided for the proposed power plant.**

The other conditions of the Environment Clearance order no. SEIAA / GUJ / EC / 1(d), 4(d) & 5(f) / 96 / 2011 dated 30-05-2011 shall remain unchanged.

The Environment Clearance is subject to the conditions as may be specified in the rules from time to time under the Environmental Impact Assessment (EIA) Notification, 2006 and Environment



(Protection) Rules, 1986.

With regards,

Yours sincerely,

**(R.G.SHAH)**  
**Member Secretary**

**Issued to:**

**Mr. S. S. Maru, Sr. Executive President,  
Grasim Industries Limited (Unit : Grasim Cellulosic),  
P.O. Birladham, Nagda – 456 331,  
Dist. Ujjain (M.P.)**

Copy to:-

1. The Secretary, Department of Environment and Forests, Govt. of Gujarat, Secretariat, Gandhinagar-382010.
2. The Chairman, CPCB , Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010.
6. Select File.

**(R.G.SHAH)**  
**Member Secretary**



No. SEIAA/GUJ/EC/5(f)/

/2014

Date:

Time Limit

Sub: Environment Clearance for - M/s. Grasim Cellulosic (A Unit of Grasim Industries Ltd.) located at Plot No. 1, GIDC Industrial Estate, Vilayat - 392 140, Tal. Vagra, Dist. Bharuch..... in Category 5 (f) of Schedule annexed with EIA Notification dated 14/9/2006.

Dear Sir,

This has reference to your application along with Form-I vide letter dated 21/09/2012, additional information / documents vide letter dated 07/07/2014 submitted to the SEAC, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance for - M/s. Grasim Cellulosic (A Unit of Grasim Industries Ltd.) located at Plot No. 1, GIDC Industrial Estate, Vilayat - 392 140, Tal. Vagra, Dist. Bharuch. Grasim Cellulosic is proposing to manufacture the following products as a forward integration to their existing Chlor-alkali plant, which falls in the category - 5(f) of the schedule of the EIA Notification-2006:

Sr No	Name of Product	Quantity (MT/Month)	
		Product	By-Product
<b>Chloromethanes</b>			
1	Methyl Chloride	Produced as 1 <sup>st</sup> step of manufacturing of all other product	
2	Methylene Chloride (50 % to 80 % of total production )	4500	--
3	Chloroform (15% to 40 % of total production)		
4	Carbon Tetra Chloride (5 % to 10 % of total production)		
5	Hydrochloric Acid	--	2250
<b>FATTY ALCOHOLS</b>			
<b>A) FATTY ALCOHOL MANUFACTURING PLANT</b>			
6	Fatty Alcohol	2700	--
7	Crude Alcohol Refining (Light)	--	25
8	Crude Alcohol Refining (Heavies)	--	144
<b>B) FATTY ALCOHOL FRACTIONATION PLANT</b>			
9	Fractionated Fatty Alcohol – Light Cut Alcohol	541	5
10	Fractionated Fatty Alcohol – Middle Cut Alcohol	199	
11	Fractionated Fatty Alcohol - Light	13	

As the proposed project is situated in the notified industrial estate, it falls in Category B as per the schedule of the EIA Notification-2006.

The project activity is covered in 5(f) and is of 'B' Category. Since, the proposed project is located in the notified industrial area, public consultation is not required as per paragraph 7(i) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project. The proposal was considered by SEIAA, Gujarat in its meeting held on 28.07.2014 at Ahmedabad. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

**A.1 CONDITIONS WITH WHICH ENVIRONMENT CLEARANCE IS GRANTED :**

**A. 1.1 WATER:**

1. Fresh water requirement for Chloromethanes and Fatty Alcohol Plants shall not exceed 553 KL/day and it shall be met only through GIDC water supply only. Metering of water shall be done and its records shall be maintained. No ground water shall be used for the project.

2. Cooling tower blow down to the tune of 275 KL/day and 20 KL/day of waste water from VRC Unit & Heat Recovery Unit shall be treated by RO system. RO reject to the tune of 88 KL/day shall be treated in the ETP whereas RO permeate to the tune of 207 KL/day shall be reused back in process plants.
3. Industrial effluent generated from process of Fatty Alcohols - 25 KL/day & Chloromethane (Hydro Chlorination & Photo Chlorination) - 60 KL/day, VRC Unit & Heat Recovery Unit - 30 KL/day, RO reject - 88 KL/day and safety showers - 4.5 KL/day; hence total 207.5 KL/day shall be treated in the ETP consisting of primary, secondary and tertiary treatment facilities.
4. Domestic wastewater generation shall be 12.5 KL/day and it shall be treated in the ETP along with the industrial wastewater.
5. The ETP shall be operated regularly and efficiently so as to achieve the GPCB norms at the ETP outlet.
6. The treated waste water conforming to the GPCB norms shall be discharged into the GIDC underground drain for its final disposal in deep sea.
7. A Guard / Polishing Pond shall be provided before discharge of treated effluent into GIDC underground drain.
8. Online monitoring system shall be provided at final outlet of the ETP for pH, TDS & TOC parameters and arrangement shall be made to reflect monitored data on server of the company, which can be accessed by the GPCB on real time basis. The unit shall also provide metering facility at the inlets and outlets of the ETP and maintain the records of the same.
9. Proper logbooks of ETP operation and also showing the quantity of effluent generated, discharged into GIDC underground drain, utilized for plantation / gardening etc. shall be maintained and furnished to the GPCB from time to time.
10. Regular performance evaluation of the ETP shall be undertaken every year to check its adequacy, through credible institute and its records shall be maintained.
11. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.

#### **A.1.2 AIR :**

12. Hydrogen gas shall be used as a fuel in Volatile Reduction Chamber (VRC) whereas HSD shall be used as a fuel in the D.G. Set of 750 KVA proposed for new plants.
13. Process emission shall be controlled with the air pollution control equipments (APCE) as mentioned below.
  - a. Hydro Chlorinator of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.
  - b. Crude CMS Distillation Column of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.
  - c. Heavies CMS Distillation Column of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.
  - d. Volatile Reduction Chamber (VRC) of Chloromethanes Plant – Water and Caustic Scrubber for control of NO<sub>x</sub>, HCl & Cl<sub>2</sub>.
  - e. Methanol Column DT 111 of Fatty Alcohol Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.
  - f. Crude Alcohol Let Down Drum S1301 of Fatty Alcohol Plant – Water Seal and Flame Arrester for control of VOC.
  - g. Product Alcohol Let Down Drum S1301 of Fatty Alcohol Plant – Water Seal and Flame Arrester for control of VOC.
14. In Chloromethanes Plant, all vents after guard condenser shall be directed to Volatile Reduction Chamber (VRC) Unit, where gases shall be incinerated. Water Scrubber followed by Caustic Scrubber shall be provided for control of emission from VRC.
15. The APCE shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB at stack outlets. Adequate stack height as per prevailing norms shall be provided for process and flue gas emissions.
16. Online monitoring system shall be installed on VRC stack to monitor HCl, Cl<sub>2</sub> & NO<sub>x</sub> concentrations and arrangement shall be made to reflect monitored data on server of the company, which can be accessed by the GPCB on real time basis
17. The fugitive emission in the work area environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health).
18. Regular performance evaluation of the air pollution control systems shall be undertaken every year to check its adequacy, through credible institute and its records shall be maintained.
19. Regular monitoring of ground level concentration of CS<sub>2</sub>, H<sub>2</sub>S, SO<sub>2</sub>, NO<sub>x</sub>, Cl<sub>2</sub>, HCl, PM<sub>10</sub> and PM<sub>2.5</sub> shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by Gujarat Pollution Control Board. If at any stage these levels are found to exceed the prescribed limits,

necessary additional control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with GPCB.

#### **A.1.3 HAZARDOUS / SOLID WASTE:**

20. The company must strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous Waste (Management, Handling and Transboundary Movement) Rules 2008, as may be amended from time to time. Authorization from the GPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.
21. The hazardous wastes shall be stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.
22. The unit shall dispose ETP sludge and Spent Carbon from Chloromethanes and Fatty Alcohol Plants at the nearest common TSDF.
23. Exhausted Resin and Spent Catalyst shall be sent back for regeneration or reactivation.
24. Used oil shall be sold only to the registered recyclers.
25. Discarded containers / barrels / bags / liners shall be either reused or sold only to the authorized recyclers after decontamination.
26. Exhausted Batteries of UPS shall be managed as per the provisions of the Batteries (Management and Handling) Rules, 2001 as amended in 2010.
27. E-Waste from Plant Electronic system shall be managed as per the provisions of the E-waste Management and Handling Rules 2011.
28. Exhausted Insulating Materials shall be sold to authorized recyclers.

#### **A1..4 SAFETY:**

29. Provisions of the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1986 & Factories Act, 1948 shall be strictly complied with.
30. A well designed fire hydrant system shall be installed as per the prevailing standards.
31. All the risk mitigation measures, general & specific recommendations mentioned in Chapter 6 of the EIA Report shall be implemented.
32. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals, especially chlorine, hydrogen, HCl etc.
33. Storage and use of hazardous chemicals shall be minimized to the extent possible and all necessary precautions shall be taken to mitigate the risk generated out of it. Storage of hazardous chemicals shall be in multiple small capacity tanks / containers instead of one single large capacity tank for safety purpose.
34. During material transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
35. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals. Close handling system for chemicals shall be provided.
36. Tie up shall be done with nearby health care unit for seeking immediate medical attention in the case of emergency, regular medical check up of the workers and keeping its record etc.
37. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.
38. First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
39. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
40. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
41. Handling and charging of the chemicals shall be done in such a manner that minimal human exposure occurs.
42. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.

#### **A.1.5 NOISE:**

43. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

#### **A.1.6 CLEANER PRODUCTION AND WASTE MINIMISATION:**

44. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
45. The company shall undertake following waste minimization measures:
  - a) Metering and control of quantities of active ingredients to minimize waste.
  - b) Reuse of by-products from the process as raw materials or raw materials substitutes in other process.
  - c) Use of automated and enclosed filling to minimize spillages.

- d) Use of close feed system into batch reactors.
- e) Dry cleaning / mopping of floor instead of floor washing
- f) Use of high pressure hoses for cleaning to reduce wastewater generation
- g) Regular preventive maintenance for avoiding leakage, spillage e.

**A.1.7 GREEN BELT AND OTHER PLANTATION:**

- 46. The unit shall develop and maintain green belt within premises as per the CPCB guidelines. In addition to this, the unit shall also take up adequate plantation at suitable open land on road sides and other open areas within the Nandesari Industrial Area or in nearby locality or schools in consultation with the GIDC / Gram Panchayat / GPCB and submit an action plan of plantation for next three years to the GPCB.
- 47. Total 48000 nos. of trees shall be planted within the premises within next five years in addition to the existing 6113 nos. of trees & shrubs.
- 48. Drip irrigation system shall be used for the green belt development.

**B. OTHER CONDITIONS:**

- 49. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
- 50. The company shall strictly follow all the recommendations mentioned in the Charter on Corporate Responsibility for Environment Protection (CREP) published by the Central Pollution Control Board, as may be applicable.
- 51. A separate Environment Management Cell equipped with full fledged laboratory facilities and qualified personnel shall be set up to carry out the Environment Management and Monitoring functions and a separate budget shall be allocated for this purpose.
- 52. The funds earmarked for environment protection measures shall be maintained in a separate account and there shall not be any diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards shall be reported.
- 53. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
- 54. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.
- 55. The project management shall also comply with all the environment protection measures, risk mitigation measures and safeguards recommended in the EIA / EMP report as well as other proposals made by them.
- 56. The company shall undertake socio-economic developmental / community welfare activities in consultation with the District Development Officer / District Collector.
- 57. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
- 58. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
- 59. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
- 60. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
- 61. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
- 62. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
- 63. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- 64. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
- 65. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- 66. This environmental clearance is valid for five years from the date of issue.
- 67. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of

30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

With regards,  
Yours sincerely,

**(N.K. PATEL)**  
**Member Secretary**

*Issued to:*

**Mr. K. C. Jhanwar, Group Executive President,  
Grasim Industries Limited – Chemical Division,  
P.O. Birladham, Nagda – 456 331,  
Dist. Ujjain (M.P.).**

Copy to:-

1. The Secretary, SEAC, C/O. G.P.C.B. Gandhinagar - 382010.
2. The Chairman, Central Pollution Control Board , Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010
6. Select File

**(N.K. PATEL)**  
**Member Secretary**



No. SEIAA/GUJ/EC/5(1)&4(D)64/2016

Date: 29 OCT 2016 By R P A D

Sub: Environment Clearance to M/s. Grasim Industries Ltd. for setting up of the proposed expansion of manufacturing of Caustic Soda Lye plant and Synthetic organic chemical plant located at Plot No:1, GIDC Industrial Estate, Vilayat, Dist: Bharuch. In Category 5(1)&4(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIAG/JMD/2/1212/2016 and File No. SIAG/JR606/2016.

Dear Sir,

This has reference to your application along with EIA Report dated 19/05/2016 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 31/08/2016 to the SEAC.

The proposal is for Environmental Clearance to M/s. Grasim Industries Ltd. for setting up of the proposed expansion of manufacturing of Caustic Soda Lye plant and Synthetic organic chemical plant located at Plot No:1, GIDC Industrial Estate, Vilayat, Dist: Bharuch. It is an existing unit for manufacturing following products, which falls in the category - 5(1)&4(d) of the schedule of the EIA Notification-2006:

Sr. No.	Name of Product	Production Capacity (MT/Annum)		
		Existing	Proposed	Total
1	Chlorinated Paraffin Wax	36500	33500	70000
2	Caustic Soda Lye	215000	146000	365000
3	Poly Aluminum Chloride	146000	104000	250000
4	Aluminum Chloride	14600	10400	25000
5	Stable Bleaching Powder	36500	24500	61000
6	Hydrogen	61320000 (Nm <sup>3</sup> )	40830000 (Nm <sup>3</sup> )	102200000 (Nm <sup>3</sup> )
7	Liquid Chlorine / Sodium Hypochlorite Hydrochloric Acid	197100	131400	328500

The project activity is covered in 5(1)&4(d) and is of 'B' Category. Since, the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(i) (B) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated 16/10/2016 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 07/09/2016. The proposal was considered by SEIAA, Gujarat in its meeting held on 29/10/2016 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

**2. CONDITIONS**

**A. SPECIFIC CONDITION**

1. The unit shall obtain requisite permission from PESO, Napor for storage of chlorine, hydrogen etc. before commissioning of the project.

**A.3 WATER**

2. Total water requirement after proposed expansion shall not exceed 8500 KL/day for the Synthetic Organic Chemicals and Caustic Lye plant. Unit shall recycle/reuse 400 KL/day of waste water within Synthetic Organic Chemicals and Caustic Lye plants. Hence, fresh water requirement shall not exceed 6100 KL/day. Fresh water shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.
3. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
4. Total industrial waste water generation from Synthetic Organic Chemicals and Caustic Lye plant shall not exceed 600 KL/day.
5. Unit shall treat the additional effluent in their existing ETP having capacity 35 MLD comprises of primary & secondary

MEMBER SECRETARY  
State Level Environment

Impact Assessment Authority  
(SEIAA, Gujarat)

Gujarat Pollution Control Board,  
"Paryavaran Bhawan"  
Sector-10-A, Gandhinagar-10

Gujarat Pollution Control Board, "Paryavaran Bhawan" Sector-10 A, Gandhinagar-382010  
Phone No.:- (079) 232-32132, 232-41514 Fax No.:- (079) 232-22784  
E-mail : mssseiaa@gmail.com. Website:- www.seiaa.gujarat.gov.in

6. Total quantity waste water discharge of the group companies (i.e. Chemical division + Cellulosic division + Epoxy division) shall not exceeds 19.4 MLD at any time. The treated waste water conforming to the GPCB/CPCB/MoEF&CC norms shall be discharged into the GIDC underground drain for its final disposal into the deep sea.
7. A Guard / Polishing Pond shall be provided before discharge of treated effluent into GIDC underground drain. The unit shall provide on line pH meter, TDS meter & TOC meter for online monitoring of the treated effluent.
8. Additional domestic waste water (40 KL/day) shall be treated in existing STP (Capacity 140 m3/day) and treated sewage shall be used for gardening-plantation within premises.
9. During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, treated sewage (40 KL/day) shall be stored in guard pond / polishing pond within premises. This additional treated sewage (40 KL/day) shall not be discharged in any case.
10. The unit shall provide adequate effluent treatment plant (ETP) & STP and it shall be operated regularly and efficiently so as to achieve desired norms prescribed by MoEF&CC/CPCB/GPCB
11. A separate electric meter shall be placed for the ETP & STP system. Proper logbook of ETP & evaporator operations also showing chemicals consumed, treated water reused, power consumed etc. shall be maintained and furnished to the GPCB from time to time.
12. Regular performance evaluation of the ETP & STP shall be undertaken every year to check its adequacy, through credible institutes of national repute and its records shall be maintained.
13. Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off pre-treatment must be done to remove suspended matter.
14. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the GIDC or GPCB or any such authority created for this purpose by the Govt. / GIDC.

#### **ATLAS**

15. The excess steam requirement (100 MT/day) shall be met by generating the same with clean fuel i.e. Hydrogen at the rate of 30000 Nm3 per day in a 10 ton/hour and 10 kg/cm2 capacity of hydrogen boiler.
16. Process emission shall be controlled with the air pollution control equipments (APCE) as mentioned below
  - a. Sodium Hypo stack of Caustic Plant- Alkali scrubber for control of Cl2
  - b. HCl stack-1 of Caustic Plant - Water scrubber having bubble cap tray absorption system for control of HCl.
  - c. HCl stack-2 of Caustic Plant - Water scrubber having bubble cap tray absorption system for control of HCl.
  - d. Poly Aluminium Chloride Liquid - Water scrubber system for control of HCl & Cl2.
  - e. Poly Aluminium Chloride Powder - 3 stage Water scrubber system for control of HCl & Cl2.
  - f. Chlorinated paraffin Plant - Alkali Scrubbing system for control of HCl & Cl2.
  - g. Aluminium Chloride - Alkali Scrubbing system for control of HCl & Cl2.
  - h. Staple Bleaching Powder - Alkali Scrubbing system for control of HCl & Cl2.
17. The APCE shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB/CPCB/MoEF&CC at stack outlets. Adequate stack height as per prevailing norms shall be provided for the process emissions. At no time, emission level should go beyond the stipulated standards
18. Online monitoring system shall be installed to monitor at least SOx & PM concentrations in the flue gas emission and the results shall be displayed at strategic locations in the premises.
19. Adequate air pollution control systems shall be provided as proposed for control of fugitive emission viz. water sprinklers at all coal transfer points and truck unloading points, dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.
20. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health)
21. Regular performance evaluation of the air pollution control systems shall be undertaken every year to check its adequacy, through credible institutes of national repute, and its records shall be maintained
22. Regular monitoring of ground level concentration of PM10, PM2.5, SO2, Cl2, HCl & VOC shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by Gujarat Pollution Control Board. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with GPCB.
23. The air pollution control systems shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB/CPCB/MoEF&CC at vent / stack outlets.
24. Fugitive emissions of VOC's must be regularly monitored. Sensors for detecting VOC's shall be provided at strategic locations. Leak Detection and Repair (LDAR) programme shall be implemented to control VOC emissions.
25. All the vessels used in the manufacturing process shall be closed to reduce the fugitive emission

#### **HAZARDOUS WASTE**

The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous Waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

State Level Hazardous Waste Impact Assessment Authority  
(SEIAA, Gandhinagar)

Gujarat Pollution Control Board  
"Paryavaran Bhawan"  
Sector-10-A, Gandhinagar-382010

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E-mail :- [masseiaa@gmail.com](mailto:masseiaa@gmail.com), Website:- [www.seiaa.gujarat.gov.in](http://www.seiaa.gujarat.gov.in)



as may be amended from time to time. Authorization of the GPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes.

27. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal
28. ETP waste, Blower process Sludge, Spent Resin & Spent carbon from filters will be disposed off at the nearby common TSDF.
29. Discarded barrels / containers / bags / liners shall be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination.
30. Used oil shall be sold only to the registered recyclers.
31. The unit shall obtain necessary permission from the nearby TSDF site and CHWAF
32. Vehicles used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
33. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWAF.

#### **6.3 HAZARDOUS CHEMICALS**

34. The company shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended.
35. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules 1989, as amended in 2000 and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented
36. All the recommendations / commitments made in the revised EIA report of the project prepared by M/s. Anand Consultants, Ahmedabad and submitted vide letter no. NIL dated 29/06/2016 shall be implemented in letter and spirit.
37. All necessary precautionary measures as per the prevailing guidelines shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals, especially chlorine, hydrogen, HCl etc.
38. Storage of flammable chemicals shall be sufficiently away from the production area.
39. Sufficient no. of fire extinguishers shall be provided near the plant and storage area.
40. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.
41. All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities.
42. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report
43. Only flame proof electrical fittings shall be provided in the plant premises.
44. Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers.
45. All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
46. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs
47. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
48. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised
49. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity
50. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
51. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.
52. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
53. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.
54. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.

#### **6.4 NOISE**

55. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules

#### **6.5 ENERGY CONSERVATION**

56. The project proponent shall install energy efficient devices and appliances conforming to the Bureau of Energy Efficiency

**MEMBER SECRETARY**  
State Level Environment

Impact Assessment Authority

(SEIAA) Gujarat  
Gujarat Pollution Control Board,  
"Paryavaran Bhawan"  
Sector-10-A, Gandhinagar-10

Gujarat Pollution Control Board, "Paryavaran Bhawan" Sector-10 A, Gandhinagar-382010  
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57. The energy audit shall be conducted at regular intervals and the recommendations of the audit report shall be implemented.
58. The project proponent shall implement the application of solar energy which shall be utilized as solar lighting for illumination of common areas, lighting of internal roads and passages in addition to utilization of solar water heating systems.
59. The transformers and motors shall have minimum efficiency of 85 %.
60. Variable frequency drives shall be installed.
61. Energy conservation measures shall include use of electronic lighting system, use of CFL tubes to minimize energy use, use of programmable timers for pumping system and lighting, water level controllers for water pumps, centralized cooling etc.
62. Energy saving practices as follows shall be practiced-
  - > Constant monitoring of energy consumption and defining targets for energy conservation.
  - > Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort level.
  - > Use of solar cells for lighting.
  - > Use of solar water heater for canteen & washing area.
  - > Proper load factor shall be maintained by the unit.
  - > Provision of day light roof to utilize maximum natural light in the production plant instead of electrical lighting.
  - > Use of electronic ballast to save energy.
  - > Automatic switching system for lighting & water tank pumping shall be used.
  - > To the maximum extent possible and technically feasible, energy efficient equipment like motors, pumps, air conditioning systems shall be selected.
  - > Gravity flow shall be preferred wherever possible to save pumping energy.
  - > Promoting awareness on energy conservation.
  - > Training to the staff on methods of energy conservation and to be vigilant for this.

#### **C. CLEANER PRODUCTION AND WASTE MINIMIZATION**

63. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB.
64. The company shall undertake following waste minimization measures
  - a. Metering and control of quantities of active ingredients to minimize waste.
  - b. Reuse of by-products from the process as raw materials or raw materials substitutes in other process.
  - c. Use of automated and enclosed filling to minimize spillages.
  - d. Use of close feed system into batch reactors.
  - e. Dry cleaning / mopping of floor instead of floor washing.
  - f. Use of high pressure hoses for cleaning to reduce wastewater generation.
  - g. Regular preventive maintenance for avoiding leakage, spillage etc.

#### **D. GREEN BELT AND DRAINAGE SYSTEM**

65. The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in the GIDC estate, nearby schools, gram panchayat areas and any other open areas in consultation with the GIDC / local bodies / GPCB and submit an action plan of plantation for next three years to the GPCB.
66. Drip Irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development.

#### **E. OTHER CONDITIONS**

67. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
68. All the recommendations / commitments made in the EIA report of the project prepared by M/s. Anand Consultants, Ahmedabad and submitted vide letter no. NIL dated 29/06/2018 shall be implemented in letter and spirit.
69. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
70. During material transfer, spillages shall be avoided and gully drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
71. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
72. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.
73. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
74. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous and Waste Management and Transboundary Movement) Rules 2018 and the Public Liability Insurance Act, 1991.

**MEMBER SECRETARY**  
State Level Environmental  
Impact Assessment Authority

(Sector-10, Gandhinagar)  
Gujarat Pollution Control Board,  
"Paryavaran Bhawan"  
Sector-10-A, Gandhinagar-10

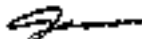
Gujarat Pollution Control Board, "Paryavaran Bhawan" Sector-10 A, Gandhinagar-382010  
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along with their amendments and rules.

75. The company shall undertake socio-economic developmental / community welfare activities as per the CSR Rules 2014.
76. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
77. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
78. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
79. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
80. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
81. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
82. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
83. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
84. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
85. This environmental clearance is valid for seven years from the date of issue.
86. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 15 of the National Green Tribunal Act, 2010.

With regards,

Yours sincerely,




(G. J. DAVE)  
Member Secretary

Issued to:

Mr. Ashu Pareek,  
M/s. Graalm Industries Limited,  
Skyline Building,  
3<sup>rd</sup> floor, Nr. Shital Guest House,  
Old MH-3, Bharuch-362002

Copy to:-

1. The Secretary, SEAC, C/O. G.P.C.B. Gandhinagar - 382010
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office-Complex, East Arjun Nagar, New Delhi-110032
3. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (WZ), E-5, Anera Colony, Link Road-3, Bhopal-462016, MP
4. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi-110003.
5. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10 A, Gandhinagar-382010
6. Select File

  
**MEMBER SECRETARY**  
State Level Environment  
Impact Assessment Authority  
(SEIAA/Gujarat)  
Gujarat Pollution Control Board,  
"Paryavaran Bhavan"  
Sector-10-A, Gandhinagar-40

  
(G. J. DAVE)  
Member Secretary



Government of Gujarat

No. SEIAA/GUJ/EC/1(d) 287/2019

Date: 4 FEB 2019

By R P A D

Time Limit

Sub: Environment Clearance to M/s. Grasim Industries Ltd., for expansion of Captive Power Plant within the existing premises located at Plot No. -1, GIDC Industrial Estate, P.O.-Vilayat, Ta : Vagra, Dist.: Bharuch. In Category 1(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIAGJ/TH/28933/2017.

Dear Sir,

This has reference to your application along with EIA report dated 05/10/2018 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and additional information / documents submitted vide letter dated 10/12/2018 to the SEAC.

The proposal is for Environmental Clearance to M/s. Grasim Industries Ltd., for expansion of Captive Power Plant within the existing premises located at Plot No. -1, GIDC Industrial Estate, P.O.-Vilayat, Ta.: Vagra, Dist.: Bharuch. It is an existing unit for manufacturing following, which falls in the category - 1(d) of the schedule of the EIA Notification-2006.

Sr. No.	Name of Product/Activity	Quantity, MT/Month			End-use of product
		Existing	Proposed	Total	
1.	Captive Power Plant (CPP)	95 MW	45 MW	141 MW	Power Generation for Captive use

The project activity is covered in 1(d) and is of 'B' Category. Public hearing was conducted on 21/08/2018.

The SEAC, Gujarat vide their letter dated 21/01/2019 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 27/12/2018. The proposal was considered by SEIAA Gujarat in its meeting held on 23/01/2019 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions

**A. CONDITIONS**

**A.1 SPECIFIC CONDITION**

1. Unit shall comply the emission standards mentioned in the Notification by MoEF&CC vide no. S.O. 3305 (E) dated 07/12/2015 and amended time to time
2. Unit shall comply all the conditions stipulated in Coal Handling Guidelines published by GPCB
3. The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority
4. The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 828 (E) dated 16<sup>th</sup> November, 2009 shall be complied with.
5. Complete Zero Liquid Discharge [ZLD] status shall be maintained all the time for CPP.
6. All measures shall be taken to prevent soil and ground water contamination.
7. There shall be no drainage connection to discharge waste water from the premises.

**A.2 WATER**

8. The fresh water requirement for the proposed expansion shall not exceed 14863 KL/day. Unit shall reuse 11689 KLD [5870 KLD steam condensate from boiler for Boiler make-up, 4518 KLD permeate from RO plant for cooling tower make-up, washing and DM plant, 1301 KLD reject from RO plant for dust suppression to coal handling area (828 KLD), Sprinkling on fly ash (428 KLD) & Road cleaning(45 KLD)] within premises. Hence, fresh water requirement shall not exceed 4495 KLD and it shall be met through GIDC water supply system. Permission from the Concern authority for additional water requirement shall be obtained.

Metering of water shall be done and its records shall be maintained. No ground water shall be tapped in any case for meeting the project requirements.

10. Unit shall reuse 5870 KLD of Boiler condensate for Boiler feed water.
11. The industrial effluent generation after proposed expansion in power plant shall not exceed 8505 KL/day.
12. Entire quantity of waste water shall be subjected to Primary ETP (Cap. 500 KLD X 2) followed by RO plant.
13. RO permeate (5204 KLD) shall be reused for cooling tower make-up (4000 KLD), washing (75 KLD), DM plant (443 KLD) and gardening plantation (686 KLD) within premises.

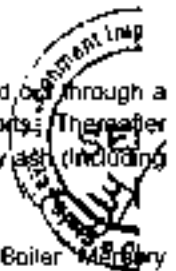
14. RO reject (1301 KLD) shall be reused for dust suppression to coal handling area (828 KLD), Sprinkling on fly ash (428 KLD) & Road cleaning (45 KLD) within premises.
15. Complete Zero Liquid Discharge (ZLD) shall be maintained and there shall be no discharge of industrial effluent in any case.
16. Domestic wastewater generation shall not exceed 6.4 KL/day for proposed project and it shall be treated in STP. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.
17. During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.
18. Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.
19. The unit shall provide metering facility at the inlets and outlets of the collection cum reuse system of waste water and maintain records of the same.
20. The unit shall provide adequate effluent treatment plant (ETP) with RO system for treatment of industrial effluent and it shall be operated regularly and efficiently so as to achieve Zero Liquid Discharge (ZLD) for CPP by reusing entire waste water within premises.
21. The unit shall provide metering facility at the inlet and outlet of the ETP & RO system and maintain records for the same.
22. Proper logbooks of ETP, chemical consumption, quantities and qualities of effluent reuse, power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.

### A 3 AIR

23. Unit shall not exceed fuel consumption for Steam Boiler and stand-by DG set as mentioned below:

Sr no.	Source of emission With Capacity	Stack Height (meter)	Name of the fuel	Quantity of Fuel MT/hr & MT/Day	Type of emissions i.e. Air Pollutants	Air Pollution Control Measures (APCM)
	<b>Existing</b>					
1	Boiler- 1 & 2 (2 x 175 TPH)	125	Coal	100 MT/hr	SPM, SO <sub>2</sub> , NO <sub>x</sub>	ESP and Low NO <sub>x</sub> burners.
2	Boiler 3 & 4 (2 x 175 TPH)	125			SPM, SO <sub>2</sub> , NO <sub>x</sub>	ESP and Low NO <sub>x</sub> burners.
	<b>Proposed</b>					
3	Boiler-5 (175 TPH)	125	Coal	29.16MT/hr	SPM, SO <sub>2</sub> , NO <sub>x</sub>	ESP and Low NO <sub>x</sub> burners.

24. Unit shall provide adequate APCM with flue gas generation sources as mentioned above.
25. There shall be no process gas emission from existing as well as from the proposed project.
26. Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.
27. A long term study of radio activity and heavy metals contents on coal/lignite to be used shall be carried out through a reputed institute and results thereof analyzed regularly and reported along with monitoring reports. The master mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal/lignite and fly ash (including bottom ash) shall be put in place.
28. Height of flue gas stacks attached to Boilers shall be minimum 125 meters.
29. A flue gas stack of 125 m height shall be provided with online monitoring system to existing Steam Boiler. Mercury emissions from stacks shall also be monitored on periodic basis.
30. High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standard prescribed in the Environment (Protection) Rules, 1986 as amended from time to time, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified standards or boiler shall shut down totally.
31. Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a reputed institute / organization.
32. Lime stone injection technology shall be adopted to control SO<sub>2</sub> and it shall be ensured that SO<sub>2</sub> levels in the ambient air do not exceed the prescribed standards.
33. The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company.
34. Online monitoring system shall be installed to monitor the SO<sub>x</sub>, NO<sub>x</sub> and SPM in the flue gas stack. An arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB on real time basis.
35. Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed.
36. Handling of the fly ash shall be through a closed pneumatic system.
37. Ash shall be handled only in dry state.
38. The unit shall strictly comply with the Fly Ash Notification under the EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.
39. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards.



prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.

- > All handling & transport of coal shall be exercised through covered coal conveyors only.
- > Enclosure shall be provided at Coal loading and unloading operations.
- > Water shall be sprinkled on Coal stock piles periodically to retain some moisture in top layer and also while compacting to reduce the fugitive emission.
- > All transfer points shall be fully enclosed.
- > Adequate dust suppression/extraction system at crusher house as well as for the Coal/Lignite stock yard and other vulnerable areas shall be provided to abate dust nuisance.
- > Accumulated coal dust / fly ash on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.
- > Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during vehicular movement.
- > Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
- > Coal/Lignite shall be transported through covered trucks only whereas fly ash shall be transported through closed trucks only.
- > A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.

40. Regular monitoring of ground level concentration of PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub> and Hg shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

#### **A. 4 SOLID / HAZARDOUS WASTE:**

41. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.

42. Hazardous waste sludge shall be packed and stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal.

ETP waste & spent resin shall be disposed off to authorized TSDF site.

43. Used oil shall be sold only to the registered recyclers / refiners.

44. Discarded containers / barrels / bags / liners shall be sold only to the authorized registered recycler.

45. For storage of fly ash, closed sites of adequate capacity shall be provided. No ash pond shall be constructed in the project.

Fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks, bricks, panels, etc. The unit shall strictly comply with the Fly Ash Notification under EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.

46. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/C-RIWIF.

47. Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.

#### **A. 5 SAFETY:**

50. The project management shall strictly comply with the provisions made in the Factories Act, 1948 as well as Manufacture, Storage and Impact of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.

51. Necessary precautions like continuous monitoring of hot spots (lighted lignite) using temperature detection systems, water sprinklers, avoiding stacking of lignite near steam pipeline etc. shall be made for storing lignite to prevent fire hazard.

52. All the risk mitigation measures, general & specific recommendations mentioned in Risk Assessment Report shall be implemented.

53. A well designed fire hydrant system shall be installed as per the prevailing standards.

54. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.

55. First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity at all the times.

56. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules.

57. Flameproof fittings shall be provided in the plant area.

58. Adequate fire fighting facilities shall be provided at the proposed power plant.

59. Proper ventilation shall be provided in the work area.

60. All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.

61. The project management shall prepare a detailed Disaster Management Plan (DMP) for the project as per the guidelines from Directorate of Industrial Safety and Health.

#### **A. 6 NOISE**

62. To minimize the noise pollution the following noise control measures shall be implemented:

- ✓ Selection of any new plant equipment shall be made with specification of low noise levels.
- ✓ Manufacturers / suppliers of major noise generating machines / equipments like air compressors, feeder pumps, turbine generators, etc. shall be instructed to make required design modifications wherever possible before supply and installation to mitigate the noise generation and to comply with the national / international regulatory norms with respect to noise generation for individual units.
- ✓ Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.
- ✓ Noise suppression measures such as enclosures, buffers and / or protective measures shall be provided.
- ✓ Employees shall be provided with ear protection measures like earplugs or earmuffs.
- ✓ Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.
- ✓ Construction equipment generating minimum noise and vibration shall be chosen.
- ✓ Ear plugs and muffs shall be made compulsory for the construction workers working near the noise generating activities / machines / equipment.
- ✓ Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.
- ✓ Construction equipment meeting the norms specified by EP Act, 1986 shall only be used.
- ✓ Noise control equipment and baffling shall be employed on generators especially when they are operated near the residential and sensitive areas.
- ✓ Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.

63. The overall noise level in and around the plant area shall be kept well within the prescribed standards by providing noise control measures including acoustic insulation, hoods, silencers, enclosures, vibration dampers etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act and Rules. Workplace noise levels for workers shall be as per the Factories Act and Rules.

#### **A. 7 GREEN BELT AND OTHER PLANTATION**

64. The unit shall develop green belt within premises as per the CPCB guidelines. However, if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.

65. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

#### **B. OTHER CONDITIONS**

66. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F No. 22-34/2018-IA,II dated 03/08/2018.

67. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.

68. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.

69. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Anand Environmental Consultants Pvt. Ltd., Ahmedabad and commitments made during presentation before SEAC, proposed in the EIA report shall be strictly adhered to in letter and spirit.

70. All the recommendations of CREP guidelines as may be applicable from time to time shall be followed rigorously.

71. A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

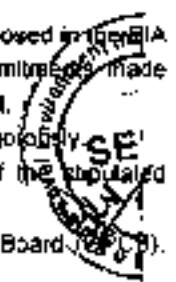
72. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.

73. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.

74. The above conditions will be enforced, inter-aka under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

75. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.

76. Unit shall comply provisions of MoEF&CC's O.M. No. 22-65/2017-IA,II dated 01/05/2018 regarding Corporate Environment Responsibility (CER). Fund allocation for Corporate Environment Responsibility (CER) shall be made as per the said OM dated 01/05/2018 for various activities therein.



77. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent
78. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose
79. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry
80. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
81. It shall be mandatory for the project management to submit half yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year
82. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdraw of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
83. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
84. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory
85. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary
86. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
87. This environmental clearance is valid for seven years from the date of issue
88. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010
89. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,

Yours sincerely,



(S. M. SAIYAD)

Member Secretary

Issued to:

261 ASP/16, Grasm Industries Ltd.,

Plot No. -1, GIDC Industrial Estate,

Vilayat, Ta.: Vagra, Dist.: Bharuch





S. J. PANDIT, IFS (Retd.)  
MEMBER SECRETARY  
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT  
IMPACT ASSESSMENT  
AUTHORITY  
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/1(d)&4(d)/764/2021

Date: 10 JUN 2021

By R.P.A.D  
Time Limit

Sub: Environment Clearance to M/s. Grasim Chemicals Ltd. for expansion of setting up of Chlor Alkali Plant and Captive Power Plant (CPP) at Plot No.-1, GIDC Industrial Estate, VM: Vithal, Tal: Vagra & Dist: Bharuch, Gujarat. In Category 1(d)&4(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SA/GJ/NDZ/12124/2018.

Dear Sir,

This has reference to your application along with EIA report dated 27/11/2020 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance to M/s. Grasim Chemicals Ltd. for expansion of setting up of Chlor Alkali Plant and Captive Power Plant (CPP) at Plot No.-1, GIDC Industrial Estate, VM: Vithal, Tal: Vagra & Dist: Bharuch, Gujarat. It is a proposed an existing unit for manufacturing following products, which falls in the category - 1(d) & 4(d) of the schedule of the EIA Notification-2006:

Sr. no.	Name of the Products	CAS no. / CI no.	Quantity (MT/Month)			End-use of the products
			Existing	Proposed	Total	
1.	Causic Soda Lye	1310-73-2	30418.87	12166.67	42583.33	Manufacture of pulp and paper, alumina, soap and detergents, petroleum products and chemical production. Other application include water treatment, food, textile, metal processing, mining, glass making and others.
2.	Hydrogen	1333-74-0	8516866.67 (Nm <sup>3</sup> )	3400006.67 (Nm <sup>3</sup> )	11923333.33 (Nm <sup>3</sup> )	Industrial application such as refining, treating metals and food processing. It is also used as alternate fuel in many industries.
3.	Liquid Chlorine / Sodium Hypochlorite / Hydrochloric Acid	7782-50-5	27375	20865.83	48240.83	It is a disinfectant. It is used to treat drinking water and swimming pool water. It is also used to make hundreds of consumer products from paper to paints, and from textiles to insecticides. About 20% of chlorine produced is used to make PVC. It can be used Vinyls, Chloromethanes, CPW, Organics Chemicals.

4.	Aluminium Chloride	7746-70-0	2083.33	416.67	2500	It finds application in the chemical industry as a catalyst for Friedel-Crafts reactions, both acylations and alkylations. It can be used in Agrochemicals, Pigments and Dyes, Pharma, Coating Industries
5.	Sodium Sulphate	7757-82-6	0	222.57	222.57	Sodium sulfate is used to dry organic liquids. As a filler in powdered home laundry detergents.
6.	Captive Power Plant	---	141 MW	35 MW	176 MW	Power Generation

The project activity is covered in 1(d)& 4(d) and is of 'B' Category. Since, the proposed project is located in notified industrial area, public consultation is not required as per paragraph 7(h) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated 03/06/2021 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 31/03/2021. The proposal was considered by SEIAA, Gujarat in its meeting held on 03/06/2021 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14<sup>th</sup> September, 2006 subject to the compliance of the following conditions.

#### **SECOND DAY**

#### **A. SPECIFIC CONDITIONS**

- All the issues raised in the earlier public hearing dated 21.08.2018 shall be comprehensively addressed / complied with in a time bound manner.
- Total Sulphur content of fuel use in CPP shall not exceed 0.8% at any point of time.
- Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.
- Unit shall comply Coal Handling Guidelines published by GPCB.
- Project Proponent (PP) shall maintain Complete Zero Liquid Discharge (ZLD) status all the time and there shall be no drainage connection from the premises and wastewater discharge outside premises by any means for CPP all the time.
- Unit shall install CEMS (Continuous Emission Monitoring System) in line to CPCB directions to all SPCB vide letter no. B-23015/04/CPCB-175401 dated 05/02/2014 for effluent discharge and air emission as per pollutants discharge/emission from respective project and an arrangement shall also be done for reflecting the online monitoring results on the company's server, which can be assessable by the GPCB/CPCB on real time basis. (For Small/Large/Medium (Red Category) & Whichever (Air emission & Effluent discharge) is applicable).
- PP shall pursue health check-ups of the workers on regular basis and shall provide adequate personal protective equipments.
- Unit shall comply the emission standards mentioned in the Notification by MoEF&CC vide no. S.O. 3305 (E) dated 07/12/2015 and amended time to time.
- Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.
- Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.
- A long term study of radio activity and heavy metals contents on coalignite to be used shall be carried out through a reputed institute and results thereof analyzed regularly and reported along with monitoring reports. Thereafter mechanism for an in-built continuous monitoring for radio activity and heavy metals in coalignite and fly ash (including bottom ash) shall be put in place.
- A flue gas stack of 125 m height shall be provided with online monitoring system to proposed Steam Boiler. Mercury emissions from stacks shall also be monitored on periodic basis.
- High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall be installed for control of flue gas emission from the proposed Boilers. The ESP shall be operated efficiently to ensure that particulate matter emission does not exceed the GPCB norms. The control system shall be designed and integrated in plant DCS in such a way that if emission from ESP exceeds the specified standard prescribed in the Environment (Protection) Rules, 1986 as amended from time to time, utilization of boiler capacity shall reduce so that flue gas emission from the stack meets with the specified

standards or boiler shall shut down totally

14. Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a reputed institute / organization.
15. Lime stone injection technology shall be adopted to control SO<sub>2</sub> and it shall be ensured that SO<sub>2</sub> levels in the ambient air do not exceed the prescribed standards.
16. The company shall prepare schedule and carry out regular preventive maintenance of mechanical and electrical parts of ESPs and assign responsibility of preventive maintenance to the senior officer of the company
17. The PP shall develop green belt within premises and nearby villages (154057.21 Sq. m i.e. 33 % of the total plot area) as committed before SEAC. Green belt shall be developed with native plant species that are significant and used for the pollution abatement as per the CPCB guidelines. It shall be implemented within 3 years of operation phase in consultation with GPCB.
18. **Safety & Health:**
  - a) PP shall provide Occupational Health Centre (OHC) as per the provisions under the Gujarat Factories Rule 68-U.
  - b) PP shall obtain fire safety certificate / Fire No-Objection certificate (NOC) from the concern authority as per the prevailing Rules / Gujarat Fire Prevention and Life Safety Measures Act, 2016
  - c) PP shall carry out mock drill within the premises as per the prevailing guidelines of safety and display proper evacuation plan in the manufacturing area in case of any emergency or accident.
  - d) PP shall install adequate fire hydrant system within premises and separate storage of water for the same shall be ensured by PP.
  - e) PP shall take all the necessary steps for human safety within premises to ensure that no any harm is caused to any worker/employee or labour within premises.
  - f) Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.

**AND WATER:**

19. Total water requirement for the project shall not exceed 24,768 KLD. Unit shall reuse 13,488 KLD of treated industrial effluent within premises. Hence, fresh water requirement shall not exceed 11,280 KLD and it shall be met through GIDC water supply only. Prior permission from the concerned authority shall be obtained for withdrawal of water.
20. The industrial effluent generation from the project shall not exceed 8,313 KLD
21. 8,313 KLD. total industrial effluent shall be treated in ETP consists of primary, secondary & tertiary treatment units. Out of 8313 KLD, treated effluent, 800 KLD shall be disposed into deep sea, 7713 KLD shall be treated in RO Plants.
22. 5566 KLD, RO permeate shall be reused within premises and 685 KLD, RO permeate shall be reused for gardening/plantation.
23. 1301 KLD, RO reject shall be used in coal yard, dust/ ash suppression and road cleaning and 140 KLD, RO reject shall be treated in MEE followed by ATFD. 112 KLD, MEE condensate shall be reused within premises.
24. Domestic wastewater generation shall not exceed 129.40 KL/day for proposed project and it shall be treated in STP. It shall not be disposed of into soak pit. Treated sewage shall be utilized for gardening and plantation purpose within premises after achieving on-land discharge norms prescribed by the GPCB.
25. During monsoon season when treated sewage may not be required for the plantation / Gardening / Green belt purpose, it shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.
26. Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.
27. The unit shall provide metering facility at the inlet of ETP, MEE, STP and RO and maintain records for the same.
28. Proper logbooks of ETP, MEE, STP and RO; chemical consumption in effluent treatment; quantity & quality of treated effluent, power consumption etc. shall be maintained and shall be furnished to the GPCB from time to time.

**AIR:**

29. Unit shall not exceed fuel consumption for boilers, Flaker Plant and D/G Sets as mentioned below:

Sr No.	Stack / Vent attached to	Type & Quantity of Fuel	Height of the Stack/ Vent (m)	Expected Emission	Air Pollution Control Measures
<b>EXISTING Flue Gas Emission</b>					
1.	Boiler 1 & 2	Coal [100 MT/hr]	125	PM SO <sub>2</sub> NO <sub>x</sub>	ESP and Low NO <sub>x</sub> Burners
2.	Boiler 3 & 4		125	PM SO <sub>2</sub> NO <sub>x</sub>	ESP and Low NO <sub>x</sub> Burners
3.	Boiler-5 (175 TPH)	Coal [29.18 MT/hr]	125	PM SO <sub>2</sub> NO <sub>x</sub>	ESP and Low NO <sub>x</sub> Burners

4.	D.G. Sets (1875 KVA x 2)	HSD (400 l/hr. each)	36	PM SO <sub>2</sub> NO <sub>2</sub>	NA
5.	D.G. Sets (750 KVA x 3)	HSD (200 l/hr. each)	11	PM SO <sub>2</sub> NO <sub>2</sub>	
6.	D.G. Sets (1875 KVA x 2)	HSD (400 l/hr. each)	36	PM SO <sub>2</sub> NO <sub>2</sub>	
PROPOSED Flue Gas Emission					
1.	Boiler -6 (250 TPH)	Coal (42 MT/hr)	125	PM SO <sub>2</sub> NO <sub>2</sub>	ESP and Low NO <sub>x</sub> Burners
2.	D.G. Sets (1875 KVA x 1)	HSD (400 l/hr each)	36	PM SO <sub>2</sub> NO <sub>2</sub>	NA
3.	Flaker Plant	Hydrogen (447.1 kg/hr.)	40	PM SO <sub>2</sub> NO <sub>2</sub>	NA

30. Unit shall provide adequate APCM with flue gas generation sources as mentioned above.

31. Unit shall provide adequate APCM with process gas generation sources as mentioned below:

EXISTING Process Gas Emission					
1.	Sodium Hypo Stack 1 (Caustic Plant)	--	35	Cl <sub>2</sub>	Alkali Scrubber
2.	HCl stack 1 (Caustic Plant)	--	35	HCl	Water scrubber having bubble cap tray absorption system.
3.	HCl stack 2 (Caustic Plant)	--	35		
4.	Poly Aluminum Chloride plant		35	HCl Cl <sub>2</sub>	
5.	Chlorinated Paraffin Plant	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system
6.	Aluminum Chloride	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system
7.	Stable Bleaching Powder	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system
8.	Sodium Hypo Stack 2 (Caustic Plant)	--	35	Cl <sub>2</sub>	Alkali Scrubber
9.	HCl stack 3 (Caustic Plant)	--	35	HCl	Water scrubber having bubble cap tray absorption system
10.	HCl stack 4 (Caustic Plant)	--	35		
11.	Poly Aluminum Chloride Liquid		35	HCl	Water scrubber system
12.	Poly Aluminum Chloride Powder	--	35	Cl <sub>2</sub>	3 stage Water scrubber system
13.	Chlorinated Paraffin Plant	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system
14.	Aluminum Chloride	--	35	HCl Cl <sub>2</sub>	
15.	Stable Bleaching Powder	--	35	HCl Cl <sub>2</sub>	Alkali scrubbing system
Proposed Not any					

32. The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission:

- > Internal roads shall be either concreted or asphalted or paved properly to reduce the fugitive emission during

vehicular movement.

- > Air borne dust shall be controlled with water sprinklers at suitable locations in the plant.
- > A green belt shall be developed all around the plant boundary and also along the roads to mitigate fugitive & transport dust emission.

33. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.

34. Regular monitoring of ground level concentration of PM10, PM2.5, SO2, NOx, HCl, Cl2 and VOCs shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

**A 4 SOLID HAZARDOUS WASTE:**

35. All the hazardous waste management shall be taken care as mentioned below

Sr. no.	Type/Name of Hazardous waste	Specific Source of generation (Name of the Activity, Product etc.)	Category and Schedule as per HW Rules.	Quantity (MT/Annum)			Management of HW
				Existing	Proposed	Total	
1	ETP Sludge	ETP	35.3	1524.50 MT	7557 MT	4081.5 MT	Will be collected, stored, transported & Disposed at authorized TSDF site
2	Spent Resin	From Chlor Alkali Plant	35.2	0.42 MT	0.33 MT	0.75 MT	Will be collected, stored, transported & Disposed at designated CHWIF site
3	Spent Carbon	From Chlor Alkali Plant	36.2	0.33 MT	0.07 MT	0.40 MT	Will be collected, stored, transported & Disposed at designated CHWIF site
4	Used Oil	From Lubrication or D. G. Set	5.1	128 KL	100 KL	228 KL	Will be collected, stored and sold to authorized recycler.
5	Discarded Containers	From Manufacturing	33.1	1680 Nos.	318 Nos.	1998 Nos.	Will be collected, decontamination, stored and reused/ sold to authorized recycler
6	Discarded Bags/ Liners	From Manufacturing	33.1	41.8 MT	54.2 MT	96 MT	
7	Dilute Sulphuric Acid (75%-88%)	From Chlor-Alkali Plant	B-15	0 MT	11,500 MT	11,500 MT	Collection, storage, transportation and will be sold to Authorized actual users having Rule-9 permission
Non-hazardous waste							



8	Brine/ process Sludge	-		6066 MT	2934 MT	9000 MT	Will be collected, stored, transported & disposed off to secured landfill site.
9	Fly Ash	-		111600 MT	27702 MT	138302 MT	Sold fly ash to M/s Anmol & Co., J.K. Lakshmi Cement, Ambuja Cement

36. Authorized end-users shall have permissions from the concerned authorities under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.
37. Unit shall explore the possibilities for environment friendly methods like co-processing of hazardous waste for disposal of incinerable & land fillable wastes before sending to CHWTF & TSDF sites respectively
38. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016 as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes
39. Hazardous waste sludge shall be packed and stored in separate designated hazardous waste storage facility with impervious bottom and leachate collection facility, before its disposal
40. Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed. Handling of the fly ash shall be through a closed pneumatic system. Ash shall be handled only in dry state.
41. The fly ash shall be supplied to the manufacturers of fly ash based products such as cement, concrete blocks bricks, panels, etc. The unit shall strictly comply with the Fly Ash Notification under EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit

#### **A. OTHER:**

42. The project proponent shall allocate the separate fund of Rs. 2.18 Crore as committed before SEAC. The entire activities proposed under CER shall be part of the Environment Management Plan (EMP) as per the MoEF&CC's OM no. F.No. 22/65/2017-IA, III dated 30.08.2020. This shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to the District Collector. The monitoring report shall be posted on the website of the project proponent.
43. All the recommendations, mitigation measures, environmental protection measures and safeguards proposed in the EIA report of the project prepared by Anand Environmental Consultants Pvt. Ltd., Ahmedabad and submitted by project proponent and commitments made during presentation before SEAC and proposed in the EIA report shall be strictly adhered to in letter and spirit.
44. The provisions of the Solid Waste Management Rules, 2016, e-Waste (Management) Rules, 2016, the Construction and Demolition Waste Management Rules, 2016 and the Plastics Waste Management Rules, 2016 shall be followed.
45. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
46. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB) State Government and any statutory authority.
47. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
48. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
49. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.

#### **B. GENERAL CONDITIONS**

##### **B.1 CONSTRUCTION PHASE:**

50. Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.
51. Project proponent shall ensure that surrounding environment shall not be affected due to construction activity. Construction materials shall be covered during transportation and regular water sprinkling shall be done in vulnerable areas for controlling fugitive emission.

52. All required sanitary and hygienic measures shall be provided before starting the construction activities and to be maintained throughout the construction phase.
53. First Aid Box shall be made readily available in adequate quantity at all the times
54. The project proponent shall strictly comply with the Building and other Construction Workers' (Regulation of Employment & Conditions of Service) Act 1996 and Gujarat rules made there under and their subsequent amendments. Local bye-laws of concern authority shall be complied in letter and spirit.
55. Ambient noise levels shall conform to residential standards both during day and night. Incremental pollution load on the ambient air and noise quality shall be closely monitored during construction phase.
56. Use of Diesel Generator (DG) sets during construction phase shall be strictly equipped with acoustic enclosure and shall conform to the EPA Rules for air and noise emission standards.
57. Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.
58. All topsoil excavated during construction activity shall be used in horticultural / landscape development within the project site
59. Excavated earth to be generated during the construction phase shall be utilized within the premises to the maximum extent possible and balance quantity of excavated earth shall be disposed off with the approval of the competent authority after taking the necessary precautions for general safety and health aspects. Disposal of the excavated earth during construction phase shall not create adverse effect on neighboring communities.
60. Project proponent shall ensure use of eco-friendly building materials including fly ash bricks, fly ash paver blocks, Ready Mix Concrete (RMC) and lead free paints in the project.
61. Fly ash shall be used in construction wherever applicable as per provisions of Fly Ash Notification under the E P Act, 1986 and its subsequent amendments from time to time.
62. Wind - breaker of appropriate height i.e. 1/3rd of the building height and maximum up to 10 meters shall be provided. Individual building within the project site shall also be provided with barricades.
63. "No uncovered vehicles carrying construction material and waste shall be permitted"
64. "No loose soil or sand or construction & demolition waste or any other construction material that cause dust shall be left uncovered. Uniform paving and proper storage of sand to avoid fugitive emissions shall be ensured."
65. Roads leading to or at construction site must be paved and blacktopped (i.e. - metallic roads).
66. No excavation of soil shall be carried out without adequate dust mitigation measures in place
67. Dust mitigation measure shall be displayed prominently at the construction site for easy public viewing
68. Grinding and cutting of building materials in open area shall be prohibited
69. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited
70. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site. (If applicable)

#### **E.2 OPERATION PHASE:**

##### **E.2.1 WATER:**

The water meter shall be installed and records of daily and monthly water consumption shall be maintained.

All efforts shall be made to optimize water consumption by exploring Best Available Technology (BAT). The unit shall continuously strive to reduce, recycle and reuse the treated effluent.

##### **E.2.2 AIR:**

73. In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
74. Acoustic enclosure shall be provided to the DG sets (if applicable) to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.
75. Stack/Vents (Whichever is applicable) of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.
76. Flue gas emission & Process gas emission (if any) shall conform to the standards prescribed by the GPCB/CPCB/MoEF&CC. At no time, emission level should go beyond the stipulated standards.
77. All the reactors / vessels used in the manufacturing process shall be closed to reduce the fugitive emission.

##### **E.2.3 HAZARDOUS/SOLID WASTE:**

78. The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous waste in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016, as may be amended from time to time. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.
79. Hazardous wastes shall be dried, packed and stored in separate designated hazardous waste storage facility with pucca

- bottom and leachate collection facility, before its disposal
80. The unit shall obtain necessary permission from the nearby TSD/ site and CHWAF. (Whichever is applicable)
  81. Trucks/Tankers used for transportation of hazardous waste shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.
  82. The design of the Trucks/Tankers shall be such that there is no spillage during transportation
  83. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSD/CHWAF
  84. Management of fly ash (if any) shall be as per the Fly ash Notification 2009 & its amendment time to time and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.

#### **8.2.5 SAFETY:**

85. The occupier/manager shall strictly comply the provisions under the Factories Act 1948 and the Gujarat Factories Rules 1963
86. The project authorities shall strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals Rules (MSHC) 1989, as amended time to time and the Public Liability Insurance Act for handling of hazardous chemicals etc. Necessary approvals from the Chief Controller of Explosives and concerned Govt. Authorities shall be obtained before commissioning of the project. Requisite On-site and Off-site Disaster Management Plans have to be prepared and implemented.
87. Main entry and exit shall be separate and clearly marked in the facility
88. Sufficient peripheral open passage shall be kept in the margin area for free movement of fire tender/ emergency vehicle around the premises.
89. Storage of flammable chemicals shall be sufficiently away from the production area.
90. Sufficient number of fire extinguishers shall be provided near the plant and storage area
91. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.
92. All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in this regard shall be obtained before commencing the expansion activities
93. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment report.
94. Only flame proof electrical fittings shall be provided in the plant premises.
95. Storage of hazardous chemicals shall be minimized and it shall be in multiple small capacity tanks / containers instead of one single large capacity tank / containers.
96. All the storage tanks shall be fitted with appropriate covers to avoid any leakages. Bund/dyke walls shall be provided for storage tanks for Hazardous Chemicals.
97. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
98. Tie up shall be done with nearby health care unit / doctor for seeking immediate medical attention in the case of emergency.
99. Personal Protective Equipments (PPEs) shall be provided to workers and its usage shall be ensured and supervised.
100. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity
101. Training shall be imparted to all the workers on safety and health aspects of chemicals handling
102. Occupational health surveillance of the workers shall be done and its records shall be maintained. Pre-employment and periodical medical examination for all the workers shall be undertaken as per the Factories Act & Rules
103. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
104. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report
105. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.

#### **8.2.6 NOISE:**

106. The overall noise level in and around the plant area shall be kept well within the standards by providing noise control measures including engineering controls like acoustic insulation hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to the standards prescribed under The Environment (Protection) Act, 1986 & Rules

#### **8.2.6 CLEANER PRODUCTION AND WASTE MINIMISATION**

107. The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP team in the company. The recommendations thereof along with the compliance shall be furnished to the GPCB
108. The company shall undertake various waste minimization measures such as
  - a. Metering and control of quantities of active ingredients to minimize waste
  - b. Reuse of byproducts from the process as raw materials or as raw materials substitutes
  - c. Use of automated and close fitting to minimize spillages.



- d. Use of close feed system into batch reactors.
- e. Venting equipment through vapour recovery system
- f. Use of high pressure hoses for cleaning to reduce wastewater generation.
- g. Recycling of washes to subsequent batches.
- h. Recycling of steam condensate.
- i. Sweeping / mopping of floor instead of floor washing to avoid effluent generation
- j. Regular preventive maintenance for avoiding leakage, spillage etc

**B.2.7 GREEN BELT AND OTHER PLANTATION:**

- 109. The unit shall develop green belt within premises as per the GPCB guidelines. However if the adequate land is not available within the premises, the unit shall take up adequate plantation on road sides and suitable open areas in GIDC estate or any other open areas in consultation with the GIDC / GPCB and submit an action plan of plantation for next three years to the GPCB.
- 110. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

**B.3 OTHER CONDITION:**

- 111. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA, III dated 09/08/2018 for Pharmaceutical and Chemical industries mentioned at (Sr. no. XX)
- 112. The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's Office Memorandum No. F.No.22-65/2017-IA III dated 01/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
- 113. Rain water harvesting of surface as well as rooftop runoff shall be undertaken and the same water shall be used for the various activities of the project to conserve fresh water as well as to recharge ground water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter.
- 114. The unit shall join and participate financially and technically for any common environmental facility / infrastructure as and when the same is taken up either by the Industrial Association or GIDC or GPCB or any such authority created for this purpose by the Govt / GIDC.
- 115. Application of solar energy shall be incorporated for illumination of common areas, lighting for gardens and street lighting in addition the provision for solar water heating system shall also be provided.
- 116. The area earmarked as green area shall be used only for plantation and shall not be altered for any other purpose.
- 117. All the commitments / undertakings given to the SEAC during the appraisal process for the purpose of environmental protection and management shall be strictly adhered to.
- 118. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose for the environmental protection and management.
- 119. In the event of failure of any pollution control system adopted by the unit, the unit shall be safely closed down and shall not be restarted until the desired efficiency of the control equipment has been achieved.
- 120. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
- 121. During material transfer there shall be no spillages and gulland drain shall be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
- 122. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
- 123. ~~Leakages from pipes, pumps shall be minimal and if occurs, shall be arrested promptly~~
- 124. No further expansion or modifications in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.
- 125. The above conditions will be enforced *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
- 126. The project proponent shall comply all the conditions mentioned in "The Companies (Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.
- 127. The project management shall ensure that unit complies with all the environmental protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
- 128. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.



129. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
130. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
131. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
132. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
133. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
134. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
135. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
136. This environmental clearance is valid for seven years from the date of issue.
137. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
138. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,  
Yours sincerely,



(S. J. PANDIT)  
Member Secretary

Assured to:  
Grasim Chemicals Ltd.  
Plot No.-1, GIDC Industrial Estate  
Vill: Vilayat,  
Tal: Vagra  
Dist: Bharuch,  
Gujarat





भारत सरकार/Government of India  
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो) /Petroleum & Explosives Safety Organisation (PESO)  
आंठवी मंजिल, यश कमल बिल्डिंग, सयाजी गंज  
वडोदरा- 390020  
8th Floor, Yash Kamal Building, Sayajigunj,  
Vadodara - 390020

ई-मेल:/E-mail :  
dyccebaroda@explosives.gov.in  
फोन / फ़ैक्स नंबर:/Phone/Fax No : 0265 -  
2225159

अनुज्ञप्ति सं./No : S/HO/GJ/03/1445(S52646)

दिनांक/Dated : 02/09/2022

सेवा में/To,

M/s. Grasim Industries Limited,  
Plot No.1, GIDC Vilayat Industrial Estae,,  
Vilayat Taluk Vagra,  
Vilayat,  
Bharuch,  
Taluka: Vagra,  
District: BHARUCH,  
State: Gujarat  
PIN: 392140

विषय :/Sub : Plot No, 1, GIDC Industrial Estate, Vilayat Taluk Vagra, Bharuch, Taluka: Bharuch, District: BHARUCH, State: Gujarat, PIN: 392140 स्थित CHLORINE, गैस के संपीडित पात्र / पात्रों में भंडारण के लिए स्थिर एवं गतिशील दाब पात्र (अज्वलित) नियम, 2016 के अधीन स्वीकृत अनुज्ञप्ति संख्या S/HO/GJ/03/1445 के नवीनीकरण संबंध में /Storage of NCHLORINE gas in pressure vessels at Plot No, 1, GIDC Industrial Estate, Vilayat Taluk Vagra, Bharuch, Taluka: Bharuch, District: BHARUCH, State: Gujarat, PIN: 392140 - Licence No : S/HO/GJ/03/1445 grant in form LS-1A of SMPV(U) Rules, 2016-Renewal of Licence Regarding

महोदय/Sir(s),

कृपया आपके दिनांक : 02/09/2022 के पत्र संख्या: **NIL** का संदर्भ ग्रहण करें ।/Please refer to your application No.**NIL** dated 02/09/2022 .

अनुज्ञप्ति संख्या : **S/HO/GJ/03/1445** का नवीकरण दिनांक 30th सितंबर 2027 तक कर इसके साथ अग्रेषित की जा रही हैं ।

Licence Number: **S/HO/GJ/03/1445** is renewed and is valid upto **30th September 2027** is forwarded herewith.

दिनांक 30/09/2027 . से आगे अनुज्ञप्ति नवीनीकरण हेतु उपरोक्त नियम के नियम 55 के प्रावधानों का पालन किया जाए । विलंब शुल्क से बचने हेतु शुल्क के साथ मूल अनुज्ञप्ति तथा अन्य दस्तावेज अधिकतम दिनांक : 30 सितंबर, 2027 तक **The Jt. Chief Controller of Explosives, Vadodara Circle, Vadodara** में जरूर पहुंच जाने चाहिए ।

The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2027. The renewal application along with fees, Original licence and other documents shall reach in the Office of **The Jt. Chief Controller of Explosives, Vadodara Circle, Vadodara**, latest by 30th September,2027 to avoid late fee.

कृपया अनुज्ञप्ति प्राप्ति की पावती दें ।/Please acknowledge the receipt of the licence.

भवदीय/Yours faithfully,

((गणेश आर.)  
(GANESH R.))  
उप विस्फोटक नियंत्रक  
Dy. Controller of Explosives  
कृते संयुक्त मुख्य विस्फोटक नियंत्रक  
For Jt. Chief Controller of Explosives  
वडोदरा/Vadodara

(For more information regarding status,fees and other details please visit our website <http://peso.gov.in>)

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भारत सरकार /Government of India  
 वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
 पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन /Petroleum & Explosives Safety Organisation (PESO)  
 आठवीं मंजिल, यश कमल बिल्डिंग, सयाजी गंज  
 वडोदरा- 390020  
 8th Floor, Yash Kamal Building, Sayajigunj, Vadodara - 390020

ईमेल/E-mail :  
 dyccebaroda@explosives.gov.in  
 दूरभाष/Phone/Fax No : 0265 - 2225159

सं/No : G/WC/GJ/06/1803(G34271)

दि/Dated : 27/07/2022

सेवा में/To,

M/s. Grasim Industries Limited,  
 5 & 6, 3RD FLOOR, SHREE MANGALAM COMPLEX,,  
 KASAK CIRCLE  
 City: BHARUCH,  
 District: BHARUCH  
 State: Gujarat  
 Pin : 392002

विषय/Sub Plot No: 1, GIDC INDL. ESTATE, Village/Town: VILAYAT, City: Bharuch, Taluka: Vagra, District:  
 : BHARUCH, State: Gujarat, Pin : 392140 - में सिलेंडरों में CHLORINE गैस का भंडारण- गैस सिलेंडर नियम, 2016  
 के अंतर्गत नवीकरण के बारे में/Storage of CHLORINE gas in cylinders at Plot No: 1, GIDC INDL. ESTATE,  
 Village/Town: VILAYAT, City: Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin :  
 392140 - under Gas Cylinders Rules, 2016 - Renewal regarding.

Sir(s),

कृपया आपके दि. 13/07/2022 के आवेदन सं. OIN1101712 का संदर्भ ग्रहण करें/Please refer to your application  
 No.OIN1101712 dated 13/07/2022 .

30<sup>th</sup> September 2032 तक विधिमाम्य अनुज्ञप्ति संख्या G/WC/GJ/06/1803 इसके साथ नवीकरण कर अग्रेषित की जा रही  
 है।/ Licence Number: G/WC/GJ/06/1803 is renewed and valid upto 30<sup>th</sup> September 2032 is forwarded  
 herewith.

कृपया नोट करें कि गैस सिलेंडर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञप्ति के पुनः नवीकरण हेतु आवेदन, इस  
 कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2032 को या इससे पूर्व) जमा कर दें । दिनांक  
 30 सितम्बर 2032 के पश्चात परंतु दिनांक 30 सितम्बर 2033 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलेंडर नियम, 2016 के  
 नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा । दिनांक 30 सितम्बर 2033 तक कोई नवीनीकरण आवेदन  
 प्राप्त नहीं होने की स्थिति में यह अनुज्ञप्ति स्वतः निरस्त हो जाएगी । /Please note that application for renewal of the  
 licence should be submitted so as to reach this office before the licence expires (i.e. on or before 30<sup>th</sup>  
 September, 2032) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of  
 licence received after 30<sup>th</sup> September, 2032 but not later than 30<sup>th</sup> September, 2033 shall be considered  
 only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no  
 application is received upto 30<sup>th</sup> September, 2033.

कृपया इस पत्र की प्राप्ति की पावती दें । /Please acknowledge the receipt of the same.

भवदीय/Yours faithfully,

(गणेश आर.)  
 (GANESH R.)  
 उप विस्फोटक नियंत्रक  
 Dy. Controller of Explosives  
 कृते संयुक्त मुख्य विस्फोटक नियंत्रक  
 For Jt. Chief Controller of Explosives  
 वडोदरा/Vadodara

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 वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
 पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो) Petroleum & Explosives Safety Organisation (PESO)  
 आठवीं मंजिल, यश कर्माज बिल्डिंग, बायजिगंज  
 वडोदरा- 380020  
 8th Floor, Yash Karmaj Building, Bayajinj,  
 Vadodara - 380020

ई-मेल: E-mail: dycc@baroda@explosives.gov.in

फोन / फ़ैक्स नंबर / Phone/Fax No: 0245 - 2225119

दिनांक/Dated: 26/02/2018

अनुमति सं./No.: SHO/GJ/03/1445(S62648)

सेवा/सेवा/To,

M/s. Grasim Industries Limited,  
 Plot No 1, GIDC Vilayat Industrial Estate,  
 Vilayat Taluk Vagra,  
 Vilayat,  
 Bharuch,  
 Taluka Vagra,  
 District: BHARUCH,  
 State: Gujarat,  
 PIN: 382140

28 FEB 2018

विषय/Subject: Plot No. 1, GIDC Industrial Estate, Vilayat Taluk Vagra, District: BHARUCH, State: Gujarat, Pin: 698999 निम्न  
 CHLORINE, गैस के संवर्धित पात्र / पत्रों में संग्रहण के लिए निम्न एक तनितम दाब पात्र (अपेक्षित) नियम, 2016 के अधीन स्वीकृत  
 अनुमति संख्या SHO/GJ/03/1445 के नवीनीकरण संबंध में /Storage of CHLORINE gas in pressure vessels at Plot No. 1,  
 GIDC Industrial Estate, Vilayat Taluk Vagra, District: BHARUCH, State: Gujarat, PIN: 999999 - Licence No -  
 SHO/GJ/03/1445 grant in form LS-1A of SMPV(U) Rules, 2016-Renewal of Licence Regarding

महोदय/Sir(s).

कृपया आपके दिनांक 08/02/2018 के पर संख्या DIN/61322 का संदर्भ ग्रहण करें। Please refer to your application No DIN/61822  
 dated 08/02/2018

अनुमति संख्या SHO/GJ/03/1445 का नवीकरण दिनांक 30/09/2022 तक कर इसके साथ अद्योपि की जा रही है।  
 Licence Number: SHO/GJ/03/1445 is renewed and is valid upto 30/09/2022 is forwarded herewith

दिनांक 30/09/2022 से आगे अनुमति नवीनीकरण हेतु उपरोक्त नियम के नियम 55 के प्रावधानों का पालन किया जाए। विवेक शुल्क  
 से बचने हेतु शुल्क के साथ मूल अनुमति तथा अन्य दस्तावेज अधिकतम दिनांक : 30 सितंबर, 2022 तक The Dy. Chief Controller  
 of Explosives, Vadodara में उक्त वृत्त जमा चाहिए।

The provisions of the Rule 55 of the above said rules shall be followed for further renewal of the licence beyond 30/9/2022. The  
 renewal application along with fees, Original licence and other documents shall reach in the Office of The Dy. Chief Controller  
 of Explosives, Vadodara, latest by 30th September, 2022 to avoid the fee

कृपया अनुमति प्राप्ति की पट्टी दें। Please acknowledge the receipt of the licence

भवदीय/Yours faithfully,

(राजेश पिपानी)  
 (Rajesh Pipani)  
 उप मुख्य विस्फोटक निगरान  
 Dy. Chief Controller of Explosives  
 वडोदरा/Vadodara



FORMS-1A/एनए - प्रस्ताव-1ए  
(See Rules 50, 51, 54 and 55) (नियम 50, 51, 54 और 55 देखें)  
Licence to Store Compressed gas in pressure vessel or vessels  
दबा वायु वा वाहनों में भंडारित गैस संचालन का लिए अनुमति



अनुमति No. : 580001001445(502648)

गैस संचालन दर: ₹2000/- per year/वर्ष

Licence is hereby granted to Graxia Industries Limited, Plot No. 1, GIDC Vlayat Industrial Estate, Vlayat Taluk Vagra, Vlayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat PIN: 382140 valid only for the storage of compressed gas in 5 Number(s) of pressure vessels as indicated below in the licensed premises described below and shown in the plan No.580001001445(502648) dated 28/02/2018 subject to the provisions of the Indian Explosives Act, 1884 (of 1884) and the rules made thereunder and to the further conditions of this licence.

श्री Graxia Industries Limited, Plot No.1, GIDC Vlayat Industrial Estate, Vlayat Taluk Vagra, Vlayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat PIN: 382140 को नये बरित अनुमति प्रदान की और रखरखाव मकान 580001001445(502648) dated 28/02/2018 में संचालित संचालन अधिनियम, 1884 (1884 का)

अधीन इसके अधीन द्वारा यह विवरण तथा इस अनुमति की शर्तें कहीं पर दस्तावाज़ वाचकों में प्रकीर्णित नहीं कर संचालन के लिए अनुमति प्रदान की जाती है।

यह अनुमति 30 सितंबर 2022 तक प्रवृत्त रहेगी।

The Licence shall remain in force till the 30th September 2022

Vessel No./विवरण नंबर	Name of Gas/गैस का नाम	State of Gas/गैस की स्थिति	Water Capacity in cubic meter/जल क्षमता (घ.मी.)	Max working Press./अधिकतम वर्किंग प्रेशर	Quantity Granted in kg/L/कीलॉग्राम में लीटर मात्रा (लिटर/कीलॉग्राम में लीटर)
1009 A	CHLORINE	Liquid	100.00	13.333	114000
1009 B	CHLORINE	Liquid	100.00	13.333	114000
1009 C	CHLORINE	Liquid	100.00	13.333	114000
1009 D	CHLORINE	Liquid	100.00	13.333	114000
1009 E	CHLORINE	Liquid	100.00	13.333	114000
1009 F	CHLORINE	Liquid	100.00	13.333	114000
Total Water capacity			600.00		

Sd/-

March 11, 2018

For Chief Controller of Explosives  
M.C. Nagur  
मुख्य संचालक नियंत्रक  
खण्ड

DESCRIPTION AND LOCATION OF THE LICENSED PREMISES/अनुमति प्राप्त स्थान का विवरण और अवस्थिति

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. 58-CVC/0311445 dated 28/02/2018 are situated at Vlayat Taluk Vagra and consists of 5 Number(s) vessel(s) out of 5 vessel(s). One vessel each for CHLORINE, CHLORINE, CHLORINE, CHLORINE, CHLORINE, CHLORINE of largest capacity will be kept empty for emergency for storage of (अनुमति प्राप्त, प्रदान, प्रदान, प्रदान, प्रदान, प्रदान) of largest capacity will be kept empty for emergency for storage of (अनुमति प्राप्त, प्रदान, प्रदान, प्रदान, प्रदान, प्रदान) in 580001001445 dated 28/02/2018 in Vlayat Taluk Vagra पर स्थित है और इसके 5 वेसल संचालित हैं।

5) Flammable/Compressed Gas/दहनशील / दबा गैस CHLORINE

and situated at Plot No. 1 Vlayat Taluk Vagra Police Station District: BHARUCH, State: Gujarat  
स्थित मकान Plot No. 1 वायव्य Taluk Vagra पुलिस स्टेशन जिला BHARUCH राज्य GUJARAT में स्थित है।

SPACE FOR ENDORSEMENT OF RENEWALS/नवीकरण के प्रमाण के लिए स्थान

	Date of Renewal/नवीकरण की तारीख	Date of Expiry/अनुमति की समाप्ति की तारीख	Signature and stamp of the Licensing authority/अनुमति प्रदाता के हस्ताक्षर और अंगुलीचिह्न की मुद्रा
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the provision of the Indian Explosives Act, 1884, or the Static and Mobile Pressure Vessels (Uniform) Rules, 2016, framed thereunder or of the conditions of the licence. अनुमति, 2016 का इस अनुमति की शर्तों का उल्लंघन न होने की दृष्टि से, फीस में कटौत किए बिना तीन वर्षों तक नवीकरित की जायेगी।	28/02/2018	30/09/2022	 Rajesh Piplan मुख्य संचालक नियंत्रक खण्ड

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of the licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both (अधीन, अधिनियम के अंतर्गत अनुमति प्राप्त, इस उपाय विवरण और शर्तों के अनुषंग नहीं कर जाता है और जिस विवरणों और शर्तों के अधीन यह अनुमति प्रदान की गई है। उनमें से किसी का उल्लंघन होता है तो उस दशा में यह अनुमति रद्द की जा सकती है और अनुमति का धारण करवाया न, किन्तु अधिनियम द्वारा तब तक नहीं जायेगी, या जुर्माना है, जो तीन हजार रुपये तक का हो सकता है, या दोनों से दण्डनीय भी होगा।





भारत सरकार / Government of India  
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन /Petroleum & Explosives Safety Organisation (PESO)  
आठवीं मंजिल, यश कमल बिल्डिंग, सायाजी गंज  
वडोदरा - 390020  
8th Floor, Yash Kamal Building, Sayajigunj, Vadodara - 390020

ईमेल /E-mail : dyccbaroda@explosives.gov.in

दूरभाष /Phone/Fax No : 0265 - 2225159

दि./Dated : 07/10/2019

सं/No : GIHO/GJ/05/733 & GIHO/GJ/06/724(G31658)

सेवा में /To,

M/s. Grasim Industries Limited,  
Plot NO 1 GIDC Vilayat Industrial Estate,,  
Taluka Vagra  
Vilayat,  
District: BHARUCH  
State: Gujarat  
Pin : 392140

07 OCT 2019

विषय/Sub : Plot No. 1 & 2 Survey No 357 Paiky, GIDC Industrial Estate Taluka Vagra, VILAYAT, Bheruch, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin : 999999 में क्लोरिन गैस का भरण-एवं अण्डारण गोडाउन- गैस सिलिण्डर्स नियम, 2016 के अंतर्गत काम 'इ एवं एच' में जारी अनुमति सं. GIHO/GJ/05/733 & GIHO/GJ/06/724(G31658) नवीकरण के बारे में / Filing of CHLORINE and Storage of CHLORINE at Plot No. 1 & 2 Survey No 357 Paiky, GIDC Industrial Estate Taluka Vagra, VILAYAT, Bheruch, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin : 999999 Licence No. GIHO/GJ/05/733 & GIHO/GJ/06/724(G31658) granted in Form E & F of Gas Cylinders Rules. 2016 - Renewal regarding

सहोदय/Sir

(8),

कृपया आपके दि. 03/09/2019 के पत्र सं. OIN343258 का संदर्भ रखें। Please refer to your application No OIN343258 dated 03/09/2019.

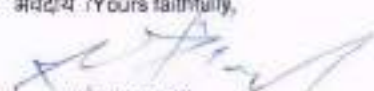
अनुमति संख्या GIHO/GJ/05/733 & GIHO/GJ/06/724 30<sup>th</sup> Septemebr, 2028 तक नवीनीकृत कर भेजी जा रही है। Licence Number: GIHO/GJ/05/733 & GIHO/GJ/06/724 is renewed and valid upto 30<sup>th</sup> Septemebr, 2028 is forwarded herewith.

कृपया नोट करें कि गैस सिलिण्डर नियम, 2016 के नियम 55(5) के अनुसार, अनुमति के पुनः नवीकरण हेतु आवेदन The Dy. Chief Controller of Explosives, Vadodara इस कार्यालय को इस अनुमति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2028 को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2028 के पश्चात परंतु दिनांक 30 सितम्बर 2029 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलिण्डर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा। दिनांक 30 सितम्बर 2029 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह अनुमति स्वतः निरस्त हो जाएगी। /Please note that application for renewal of the licence should be submitted so as to reach the The Dy. Chief Controller of Explosives, Vadodara before the licence expires (i.e. on or before 30<sup>th</sup> Septemebr, 2028) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30<sup>th</sup> Septemebr, 2028 but not later than 30<sup>th</sup> September, 2029 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> Septemebr, 2029.

कृपया इस पत्र की प्राप्ति की पावती दें। Please acknowledge the receipt of the same.

Note : Your Balance Amount with the Organisation is Rs.7000, which will be used for processing of the same Licence in future.

भवदीय /Yours faithfully,

  
(Sanjay Kumar)  
विस्फोटक नियंत्रक  
Controller of Explosives  
कृते उप मुख्य विस्फोटक नियंत्रक  
For Dy. Chief Controller of Explosives  
वडोदरा/Vadodara

[अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए कृपया हमारी वेबसाइट <http://peso.gov.in> देखें।]  
(For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)



फॉर्म ई / FORM E

नियम 50, 51 और 54 देखें (See Rules 50, 51 and 54)

सिलिंडरों में संपीड़ित गैस भरने के लिए अनुमति / Licence to fill compressed gas in cylinders



अनुमति संख्या/ Licence No. : G/HO/GJ/05/733(G31658)

M/s. Grasim Industries Limited, Plot NO 1 GIDC Vilayat Industrial Estate, Taluka Vagra, City: Vilayat, District: BHARUCH, State: Gujarat, Pin: 392140, को नीचे वर्णित और रेखांक संख्या G/HO/GJ/05/733(G31658) dated 13/03/2013 में दर्शित किए गए अनुमति पत्र में, भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों के उपबंधों तथा इस अनुमति की अन्य शर्तों के अधीन रहते हुए, केवल संपीड़ित गैस से भरे सिलिंडरों को रखने के लिए ही विचिन्तन्य अनुमति दी जाती है। / Licence is hereby granted to M/s. Grasim Industries Limited, Plot NO 1 GIDC Vilayat Industrial Estate, Taluka Vagra, City: Vilayat, District: BHARUCH, State: Gujarat, Pin: 392140 valid only for the filling of cylinders with compressed gas in the licensed premises described below and shown in the plan No. G/HO/GJ/05/733(G31658) dated 13/03/2013 subject to the provisions of the Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence.

यह अनुमति 30 सितम्बर 2028 तक प्रवृत्त रहेगी। / The Licence shall remain in force till the 30<sup>th</sup> September 2028.

For Chief Controller of Explosives

Nagpur

श्री मुख्य विस्फोटक नियंत्रक  
नागपुर

March 13, 2013

1) Amendment dated - 18/09/2018

अनुमति परिसर का विवरण और अवस्थिति / DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

निम्नलिखित विवरण के अनुसार सिलिंडरों में गैस भरने के लिए अनुमति परिसर, जिसकी अभिव्यास सीमाओं और अन्य विशिष्टियों को संलग्न अनुमोदित रेखांक सं. G/HO/GJ/05/733 dated March 13, 2013 में दिखाया गया है। VILAYAT में अवस्थित है और जिसमें अन्य सुविधाओं से जोड़े गए CHLORINE - 28 Nos. (2x9+10) फिलिंग पॉइंट्स हैं। / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. G/HO/GJ/05/733 dated March 13, 2013 are situated at VILAYAT and consists of CHLORINE - 28 Nos.(2x9+10) filling points with connected other facilities for filling of the gas(es) in cylinders as described here under:

	गैस का प्रकार Type of Gas	मात्रा /Quantity
a)	विषैले/ Toxic	CHLORINE
b)	नैर विषैले और नैर ज्वलनशील /Non-Toxic and Non Flammable	--NIL--
c)	नैर विषैले और ज्वलनशील /Non-Toxic and Flammable	--NIL--
d)	घुलित एसिटिलीन गैस /Dissolved Acetylene Gas	--NIL--
e)	एनपीजी के अलावा नैर विषैले और ज्वलनशील द्रवित गैस /Non-Toxic & Flammable liquefiable gas other than LPG	--NIL--
f)	एनपीजी/ Liquefied Petroleum Gas	--NIL--

और प्लॉट संख्या PlotNo :1& 2 Survey No 357 Paiky गली का नाम : GIDC Industrial Estate Taluka Vagra गांव : VILAYAT पुलिस थाना : Vagra जिला :BHARUCH राज्य: Gujarat. (and is situated at PlotNo :1& 2 Survey No 357 Paiky Name of Street :GIDC Industrial Estate Taluka Vagra Village/Town :VILAYAT Police Station : Vagra District : BHARUCH, State: Gujarat.

नवीकरण के पुनःकरण के लिए स्थान / SPACE FOR ENDORSEMENT OF RENEWALS

	नवीकरण की तारीख/Date of Renewal	समाप्ति की तारीख/Date of Expiry	अनुमति प्राधिकारी के हस्ताक्षर/Signature and stamp of the licensing authority
इस अनुमति को, विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए गैस सिलिंडर नियम, 2016 के उपबंधों या इस अनुमति की शर्तों का उल्लंघन न होने की दशा में, फीस में कोई छूट दिए बिना दस वर्ष तक नवीकृत किया जाएगा। /This licence shall be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884, or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence	07/10/2019	30/09/2028	 Sanjay Kumar CE For Dy. Chief Controller of Explosives Vadodara 

यदि अनुमति परिसर इससे उपाखण्ड विवरण और शर्तों के अनुमति नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुमति दी गई है, उनमें से किसी का उल्लंघन होता है तो यह अनुमति रद्द की जा सकती है और अनुमति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकती है, या जुर्माने से, जो तीन हजार रुपये तक का हो सकता है, या दोनों से, दण्डनीय भी होगा। / This licence is liable to be cancelled if the licenced premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupens or with both.

अनुमति की शर्त संख्या 8 में विहित कुछ भी होते हुए, सूर्यस्त और सूर्योदय के मीटर, विभिन्न शर्तों के अधीन, सिलिंडर भरण की अनुमति दी जाती है। / Notwithstanding anything contained in condition No. 8 of the Licence filling of cylinders within hours of sunset and sunrise is permitted subject to the following conditions.



फॉर्म नं. FORM F  
 नियम 50, 51 और 54 के अंतर्गत (Under Rules 50, 51 and 54)  
 Licences to store compressed gas in cylinders



शुल्क: शुल्क नं. Rs. 12000/- per year

अनुमति संख्या/License No. GHDGJ/06/724(G21658)

M/s. Grasim Industries Limited, Plot NO 1 GIDC Vilayat Industrial Estate, Taluka Vagra, City: Vilayat, District: BHARUCH, State: Gujarat, Pin: 392146 को नीचे वर्णित और रेखांकित स्थान GHDGJ/06/724(G21658) dated 13/03/2013 में वर्णित किए गए अनुमति परिसर में सहायक विस्फोटक अधिनियम, 1984 (1984 के अ) और अन्य संबंधित कानून और विधियों के अंतर्गत एक इस अनुमति की अन्य शर्तों के अधीन एक सेल अर्थात् सिमेंट में सेल विस्फोटक को रखने के लिए के विधानमय अनुमति दी जाती है।

A licence is hereby granted to M/s. Grasim Industries Limited, Plot NO 1 GIDC Vilayat Industrial Estate, Taluka Vagra, City: Vilayat, District: BHARUCH, State: Gujarat, Pin: 392146 valid only for the possession of cylinders filled with compressed gas in the licensed premises described below and shown in the plan No. GHDGJ/06/724(G21658) dated 13/03/2013 subject to the provisions of the Explosives Act, 1984 and the Rules made thereunder and to the further conditions of this licence.

यह अनुमति 30 सितंबर 2028 तक प्रवृत्त रहेगी। / The Licence shall remain in force till the 30<sup>th</sup> September 2028.

For Chief Controller of Explosives  
 Nagpur  
 कुल मुख्य विस्फोटक नियंत्रक  
 नागपुर

March 13, 2013

**अनुमति परिसर का विवरण और अवस्थिति / DESCRIPTION AND LOCATION OF THE LICENSED PREMISES**

निम्नलिखित विवरण के अनुसार विस्फोटक सेल में सेल रखने के लिए अनुमति परिसर, सिमेंट अडिब्लस कंपनी और अन्य विधियों को संलग्न अनुमति योजना नं. GHDGJ/06/724 dated March 13, 2013 में दिखाया गया है, जो अवस्थिति है और स्थान का पता दर्शाता है। / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. GHDGJ/06/724 dated March 13, 2013 are situated at VILAYAT and consists of a storage shed for possession of the gas contained in cylinders as described here under

गैस का प्रकार /Type of Gas	मात्रा /Quantity
a) विषैला/Toxic	CHLORINE - 119T Nos.
b) नॉन विषैला और नॉन ज्वलनशील /Non-Toxic and Non-Flammable	-NIL-
c) नॉन विषैला और ज्वलनशील /Non-Toxic and Flammable	-NIL-
d) घुलित असेटिलीन गैस /Dissolved Acetylene Gas	-NIL-
e) ज्वलनशील और विषैला नॉन ज्वलनशील अति गैस /Non-Toxic & Flammable liquefiable gas other than LPG	-NIL-
f) द्रवित पेट्रोलियम गैस /Liquefied Petroleum Gas	-NIL-

और स्थान का पता Plot No. 1 & 2 Survey No 357 Paky गाँव का नाम VILAYAT का नाम पुलिस स्टेशन Vagra जिला BHARUCH राज्य GUJARAT  
 / spot is situated at Plot No. 1 & 2 Survey No 357 Paky Village/Town VILAYAT Police Station Vagra District BHARUCH State Gujarat

**अनुमति के नवीकरण के लिए स्थान / SPACE FOR ENDORSEMENT OF RENEWALS**

नवीकरण की तारीख/Date of Renewal	अवधि की तारीख/Date of Expiry	अनुमति प्राधिकारी के हस्ताक्षर/Signature and stamp of the licensing authority
07/10/2018	30/09/2028	 Sarjay Kumar CE For Dy. Chief Controller of Explosives Vadodara <b>रघु मुख्य विस्फोटक नियंत्रक, वडोदरा</b> <b>Dy. Chief Controller of Explosives, Vadodara</b>

यदि अनुमति परिसर इससे इलाजक विधान और शर्तों के अनुसार नहीं पाया जाता है और फिर नियमों और शर्तों के अधीन यह अनुमति रद्द की जा सकती है और अनुमति का पता नकारा जा सकता है। इससे अतिरिक्त दो वर्षों तक की हो सकती है। यह अनुमति रद्द की जा सकती है। / This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.



Government of India  
Ministry of Commerce & Industry  
Petroleum & Explosives Safety Organisation (PESO)  
A1 & A2 wing, 5th Floor, C.S.O. complex, CBD Belapur, New Mumbai (M.S.)  
Mumbai - 400114

E-mail: [peso.mumbai@nic.gov.in](mailto:peso.mumbai@nic.gov.in)  
Phone/Fax No: 022-25478811, 25478821  
Coded: 18002800

No: ANO/PE/CGGC/11/657771

To: M/s. Green Industries Limited,  
Plot no.1, GIDC Village Industrial Estate,  
Bharuch,  
Taluka: Vagra,  
District: BHARUCH  
State: Gujarat  
Pin: 393140

Sub: Periodical Examination and testing of CHLORINE, Beamed cylinders at Plot No. plot no. 1, GIDC Industrial Estate, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin: 393140 Renewal under Gas Cylinders Rules, 2016 regarding

Re: (s)

Please refer to the inspection of your works by an office of the office of the on  
There is no objection to your carrying out periodic examination and testing of CHLORINE, Beamed cylinders in your above mentioned container testing station subject to the observance of the following conditions:

- 1.The degassing of the contents shall be done at the place approved by this office. The cylinders shall be fully degassed till they show zero reading for the absence of the flammable gas when tested with Explosives meter before subjecting the cylinders for testing
2. Not more than five cylinders shall be degassed at a time
3. The degassing and testing of cylinders shall be carried out only during daylight hours.
4. The examination and testing of cylinders shall be carried out only under continuous supervision of qualified and experienced personnel.
5. The Cylinders, which are approved for filling in writing by CCE office, shall only be undertaken for periodic examination/Testing.
6. All provisions of the relevant Indian standard code of practice for cylinders inclusive visual inspection shall be observed
7. CNG-ONB cylinders shall be subjected to Ultrasonic flaw detection test as per Annex D to IS:15490:2004.
8. The cylinders passed in the periodical examination and testing shall be marked with the code mark of the testing station and other relevant information as required under rule 6 of the Gas cylinders Rules, 2016. The due date for next test or the the date of expiry of service life of the cylinder, as the case may be, shall be clearly marked on the stainless steel ring inserted between the valve and the neck of the cylinders.
9. The quality management system of the testing station shall be covered under ISO:9001 certification from BIS or any other internationally reputed certifying agency with the accreditation with NABCB (Indian Accrediation Body) with in six months.
10. The requirements of Provisions of Rule 35 of the said rules shall be followed and records of test and examination of Cylinders shall be maintained for the service life of the Cylinders. The data record maintainance system shall be fully computerized.
11. The cylinders found unserviceable (Service life expired and failed in tests) shall be condemned as required under rule 35 of the said rules, and records there of shall be furnished to this office on the 1st of January, April, July and October every year.
12. No change in the organisational set up and machinery of testing station shall be effected without obtaining approval of this office.
13. The other relevant provisions of the said rules are complied with.

The approval may be reviewed, ammended or withdrawn at any time if considered necessary in the intrest of safety or if any of the conditions mentioned above is violated or not complied with

This permission is valid for the period upto 30/09/2023 date which may be extended further on submission of performance report, Renewal fee and ISO Certificate on or before the expiry of this approval.

The approval Accorded under rule 35 of the gas Cylinders Rule, 2016 does not absolve you from obtaining necessary permission/clearance under other statutas/local Regulations, if any applicable for setting up and operation of a cylinder testing Station, which please be noted.

SPACE FOR ENDORSEMENT OF RENEWALS

	Date of Renewal	Date of Expiry	Signature and stamp of the authority
This license shall be renewed without any concession in fee for ten years in the absence of suspension of the provision of the Explosives Act, 1984, or Gas Cylinders Rules, 2016 framed there under or of the conditions of the license.	13/09/2028	30/09/2023	Harish Singh Meena Dy. Controller of Explosives For Jt. Chief Controller of Explosives Mumbai

Your Identity

Harish Singh Meena  
Dy. Controller of Explosives  
For Jt. Chief Controller of Explosives  
Mumbai

Copy together with a copy of approved drawing is forwarded to Jt. Chief Controller of Explosives  
Number \_\_\_\_\_

For Jt. Chief Controller of Explosives  
Mumbai

प्ररूप XV  
प्रथम अनुसूची का अनुच्छेद 6 देखिए  
FORM XV  
(see Article 6 of the First Schedule)



अधिष्ठापनों में पेट्रोलियम के आयात और भंडारकरण के लिए अनुज्ञप्ति  
LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

फीस रूप (Fee Rs.) 23500/- per year

अनुज्ञप्ति सं. (Licence No.) : P/HQ/GJ/15/5344(P296022)

M/s. Grasim Industries Limited, Plot No. 1, G.I.D.C. Vilayat Industrial Estate, P.O. Vilayat, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392140 को केवल इसमें पथा विनिर्दिष्ट वर्ग और मात्राओं में पेट्रोलियम 420.00 KL आयात करने के लिए और उसका, नीचे वर्णित और अनुमोदित नक्शा संख्या P/HQ/GJ/15/5344 (P296022) तारीख 02/07/2014 जो कि इससे उपाबद्ध है, में दिखाए गए स्थान पर भण्डारकरण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुज्ञप्ति की अतिरिक्त शर्तों के अधीन रहते हुए, यह अनुज्ञप्ति अनुदत्त की जाती है।

Licence is hereby granted to M/s. Grasim Industries Limited, Plot No. 1, G.I.D.C. Vilayat Industrial Estate, P.O. Vilayat, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392140 valid only for the importation and storage of 420.00 KL Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved map No P/HQ/GJ/15/5344(P296022) dated 02/07/2014 attached hereto subject to the provisions of the Petroleum Act, 1934 and the rules made thereunder and to the further conditions of this Licence.


यह अनुज्ञप्ति 31st day of December 2023 तक प्रवृत्त रहेगी।  
The Licence shall remain in force till the 31st day of December 2023

पेट्रोलियम का विवरण /Description of Petroleum

अनुज्ञप्त मात्रा (किलोलीटरों में) /Quantity  
licenced in KL

वर्ग क प्रपुंज पेट्रोलियम /Petroleum Class A in bulk	NIL
वर्ग क प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	NIL
वर्ग ख प्रपुंज पेट्रोलियम /Petroleum Class B in bulk	420.00 KL
वर्ग ख प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	NIL
वर्ग ग प्रपुंज पेट्रोलियम /Petroleum Class C in bulk	NIL
वर्ग ग प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class C, otherwise than in bulk	NIL
कुल क्षमता /Total Capacity	420.00 KL

July 2, 2014

  
For Chief Controller of Explosives  
HQ, Nagpur

1). Amendment dated - 30/09/2019

अनुज्ञप्त परिसरों का विवरण और अवस्थान  
DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

अनुज्ञप्त परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टों संलग्न अनुमोदित नक्शों में दिखाई गई हैं Plot No: 1 , G.I.D.C. Vilayat Industrial Estate, Vilayat, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 394120 स्थान पर अवस्थित है तथा उसमें निम्नलिखित Three aboveground Petroleum Class B storage tanks together with connected facilities. सम्मिलित हैं।

The licensed premises, the layout, boundaries and other particulars of which are shown in the attached approved plan are situated at Plot No: 1 , G.I.D.C. Vilayat Industrial Estate, Vilayat, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 394120 and consists of Three aboveground Petroleum Class B storage tanks together with connected facilities, together with connected facilities.

नवीनीकरण के पञ्जाकन के लिए स्थान  
SPACE FOR ENDORSEMENT OF RENEWALS

पेट्रोलियम अधिनियम, 1934 के उपबन्धों या उनके अधीन बनाए गए नियमों या इस अनुज्ञप्ति की शर्तों का उल्लंघन न होने की दशा में यह अनुज्ञप्ति फिस में बिना किसी छूट के दस वर्ष तक नवीकृत की जा सकती है।  
This licence shall be renewable without any concession in fee for ten years in the absence of contravention of any provisions of the Petroleum Act, 1934 or of the rules framed thereunder or of any of the conditions of this licence.

नवीकरण की तारीख  
Date of  
Renewal

समाप्ति की तारीख  
Date of  
Expiry of license

अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प  
Signature and office stamp of the licencing  
authority.

1)

30/10/2018

31/12/2023

Sd/-  
Anil Kumar Yadav  
Controller of Explosives  
For Dy. Chief Controller of Explosives  
Vadodara

यदि अनुज्ञप्ति परिसर इसमें उपाबद्ध विवरण और शर्तों के अनुरूप नहीं पाए जाते हैं और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति मंजूर की गई है उनमें से किसी का उल्लंघन होने की दशा में यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्तिधारी प्रथम अपराध के लिए साधारण कारावास से, जो एक मास तक हो सकता है, या जुर्माने से, जो एक हजार रुपये तक हो सकता है, या दोनों से, और प्रत्येक पश्चातवर्ती अपराध के लिए साधारण कारावास से जो तीन मास तक हो सकता है, या जुर्माने से, जो पांच हजार रुपये तक हो सकता है, या दोनों से, दण्डनीय होगा।

This licence is liable to be cancelled if the licensed premises are not found conforming to the description given on the approved plan attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable for the first offence with simple imprisonment which may be extend to one month, or with fine which may extend to one thousand rupees, or with both and for every subsequent offence with simple imprisonment which may extend to three months, or with fine which may extend to five thousand rupees or with both.

अनुमोदित

APPROVED

P/Ho/GV/IS/5344 (P-296022)

कार्यालय क्र. 22  
 विद्यालय क्र. 23  
 दिनांक 30-09-2019  
 Date



NOTES:-

1. ALL DIMENSIONS ARE IN MM, ELEVATIONS AND CO-ORDINATES ARE IN METERS, UNLESS OTHERWISE STATED.
2. FFL+0.000M CORRESPONDS TO EL+11.5M ABOVE MEAN SEA LEVEL.
3. ALL VALVES SHALL BE TESTED AS PER STANDARD CODE REQUIREMENTS.
4. ALL ELECTRICAL EQUIPMENT SUCH AS MOTORS LOCAL STATIONS AND LIGHT FITTINGS SHALL BE OF INCREASED SAFETY TYPE.
5. TANK DESIGN IS AS PER API 650.
6. PUMP MOTOR IS EQUIPED WITH FLAME PROOF ENCLOSURE AS PER IS:2148
7. SMOKING IS PROHIBITED INSIDE TANK AREA.
8. ALL FLANGE JOINTS BONDING PROVIDED FOR PROTECT STATIC CHARGE.
9. HIGH LEVEL & LOW LEVEL ALARMS & INTERLOCKS PROVIDED TO ALL STORAGE TANKS.
10. USE ANTISTATIC HOSE PIPE FOR UNLOADING PETROLEUM CLASS 'B' FROM TRUCK.
11. ALL UNDERGROUND PIPELINE, ROAD CROSSING THROUGH HUME PIPE WITH 4MM(2x2) RAPPING COATING FOR PROTECTION OF CORROSION.

LEGEND:-

- FFL- FINISHED FLOOR LEVEL
- FGL- FINISHED GRADE LEVEL
- TOG - TOP OF GROUT
- ⊗ EMERGENCY SHOWER
- HAND RAILING
- BARBED WIRE FENCING



KEY PLAN

OWNER : GRASIM INDUSTRIES LIMITED

IAH	Document ID	Part	Group	Rev.
660161700	0161-LA-87-EA-00001	-	-	02

Store Location: Server/Share \\Contract File Server	Document-ID-BAR-Code
Store Location: Folder \\660161-ADM\Acad\Lead\Dry\Piping\Unit Plot Plan	-
Store Name 0161-LA-87-EA-00001	

Pro. Unit	Con. Unit	TOW	Type of Document	Order No.	Tot. Sheets
87	-	-	EA	-	1 OF 1



GRASIM INDUSTRIES LIMITED  
 VILAYAT GUJARAT

	Date	Name	Designation
ISSUED & ISSUED FOR PESO APPROVAL	02.04.12	ABC	LAYOUT PLAN FOR PETROLEUM CLASS 'B' (HSD, LNP & WAXOL) STORAGE TANK (FOR PESO APPROVAL)
REVISIONS FOR PESO APPROVAL	02.04.12	RPH	
CHECKED FOR PESO APPROVAL	04.04.12	KRK/MPK	
APPROVED FOR PESO APPROVAL	05.04.12	SRK/BBC	
Description	Scale	Conf. Code	
	1:150	-	-



भारत सरकार / Government of India  
 जलियत और उद्योग मंत्रालय/Ministry of Commerce & Industry  
 पेट्रोनिवम तथा विस्फोटक सुरक्षा संगठन /Petroleum & Explosives Safety Organisation (PESO)  
 आठवीं मंजिल, यश कमल बिल्डिंग, सवाजी मंज  
 वडोदरा - 390020  
 8th Floor, Yash Kamal Building, Sayajigunj, Vadodara - 390020

ईमेल /E-mail : dyccebaroda@explosives.gov.in

दूरभाष /Phone/Fax No : 0265 - 2225159

दि/ Dated : 07/10/2019

सं/No : G/HO/GJ/05/738 & G/HO/GJ/06/728(G31657)

सेवा में /To,

M/s. Grasim Industries Limited,  
 Plot No 1 GIDC Vilayat Industrial Estate,,  
 Taluka Vagra  
 Vilayat,  
 District: BHARUCH  
 State: Gujarat  
 Pin : 392140

09 OCT 2019

विषय/Sub : Plot No, 1, GIDC Industrial Estate Taluka Vagra, Vilayat, , District: BHARUCH, State: Gujarat, Pin : 999999में सिलिण्डरों में HYDROGEN गैस का अरक्षण-एवं भण्डारण गोड्डाउन- गैस सिलिण्डरों नियम, 2016 के अंतर्गत फार्म 'इ एच' एक में जारी अनुमति सं. G/HO/GJ/05/738 & G/HO/GJ/06/728(G31657) नवीकरण के बारे में / Filing of HYDROGEN and Storage of HYDROGEN at Plot No, 1, GIDC Industrial Estate Taluka Vagra, Vilayat, , District: BHARUCH, State: Gujarat, Pin : 999999 Licence No. G/HO/GJ/05/738 & G/HO/GJ/06/728 (G31657) granted in Form E & F of Gas Cylinders Rules, 2016 - Renewal regarding

महोदय/Sir (s).

कृपया आपके दि. 05/09/2019 के पत्र सं. nil का संदर्भ ग्रहण करें/ Please refer to your application No.nil dated 05/09/2019

अनुमति संख्या G/HO/GJ/05/738 & G/HO/GJ/06/728 30<sup>th</sup> Septemebr, 2029 तक नवीनीकृत कर भेजी जा रही है / Licence Number: G/HO/GJ/05/738 & G/HO/GJ/06/728 is renewed and valid upto 30<sup>th</sup> Septemebr, 2029 is forwarded herewith.

कृपया नोट करें कि गैस सिलिण्डर नियम, 2016 के नियम 55(5) के अनुसार, अनुमति के पुनः नवीकरण हेतु आवेदन The Dy. Chief Controller of Explosives, Vadodara इस कार्यालय को इस अनुमति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2029 को या इससे पूर्व) जमा कर दें। दिनांक 30 सितम्बर 2029 के पश्चात परंतु दिनांक 30 सितम्बर 2030 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलिण्डर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा। दिनांक 30 सितम्बर 2030 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह अनुमति स्वतः निरस्त हो जाएगी। Please note that application for renewal of the licence should be submitted so as to reach the The Dy. Chief Controller of Explosives, Vadodara before the licence expires (i.e. on or before 30<sup>th</sup> Septemebr, 2029) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30<sup>th</sup> Septemebr, 2029 but not later than 30<sup>th</sup> September, 2030 shall be considered only with late fee applicable vide Rule 55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> Septemebr, 2030

कृपया इस पत्र को प्राप्त की जायती ट/ Please acknowledge the receipt of the same.

भवदीय /Yours faithfully

(संजय कुमार)  
 (Sanjay Kumar)  
 विस्फोटक नियंत्रक  
 Controller of Explosives  
 कृते उप मुख्य विस्फोटक नियंत्रक  
 For Dy. Chief Controller of Explosives  
 वडोदरा/Vadodara

[अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए कृपया हमारी वेबसाइट <http://peso.gov.in> देखें।]  
 (For more information regarding status, fees and other details please visit our website <http://peso.gov.in>)





फॉर्म नं० / FORME

विधन 50, 51 और 54 देखें (See Rules 50, 51 and 54)

सिलेंडरों में संपीडित गैस भरने के लिए अनुमति / Licence to fill compressed gas in cylinders

अनुमति संख्या/Licence No. : GHO/GJ/05/738(G31657)



वार्षिक शुल्क / Fee Rs 5000/- per year

M/s. Grasim Industries Limited, Plot No 1 GIDC Vileyat Industrial Estate, Taluka Vagra, City: Vileyat, District: BHARUCH, State: Gujarat, Pin: 392140, में स्थित (अर्थात्) और विधान संख्या GHO/GJ/05/738(G31657) dated 14/05/2013 में दर्शाए गए अनुमति परिसर में, भारतीय विस्फोटक अधिनियम, 1884 (1884 का बंध) और इसके अधीन बनाए गए नियमों के अंतर्गत तथा इस अनुमति की अन्य शर्तों के अधीन स्वीकृत हुए, केवल संपीडित गैस में अनेक सिलेंडरों को रखने के लिए ही विधिवत अनुमति दी जाती है। Licence is hereby granted to M/s. Grasim Industries Limited, Plot No 1 GIDC Vileyat Industrial Estate, Taluka Vagra, City: Vileyat, District: BHARUCH, State: Gujarat, Pin: 392140 valid only for the filling of cylinders with compressed gas in the licensed premises described below and shown in the plan No. GHO/GJ/05/738(G31657) dated 14/05/2013 subject to the provisions of the Explosives Act, 1884(A of 1884) and the rules made thereunder and to the further conditions of this licence.

यह अनुमति 30 सितंबर 2029 तक प्रवृत्त रहेगी। / The Licence shall remain in force till the 30<sup>th</sup> September 2029.

For Chief Controller of Explosives  
Nagpur  
पूर्व मुख्य विस्फोटक नियंत्रक  
नगपुर

May 14, 2013

1)Amendment dated - 18/10/2018


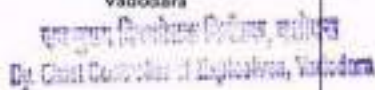
**अनुमति परिसर का विवरण और अवस्थिति / DESCRIPTION AND LOCATION OF THE LICENSED PREMISES**

विधिवत विवरण के अनुसार सिलेंडरों में गैस भरने के लिए अनुमति परिसर, जिसकी अभिविचार सीमाओं और अन्य विशिष्टियों को संलग्न अनुमति रेखांक सं. GHO/GJ/05/738 dated May 14, 2013 में दिखाया गया है। Vileyat में अवस्थित है और जिसमें अन्य सुविधाओं व जोड़े गए HYDROGEN - 8 Nos.(8x1) फिलिंग पॉइंट्स हैं। / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. GHO/GJ/05/738 dated May 14, 2013 are situated at Vileyat and consists of HYDROGEN - 8 Nos.(8x1) filling points with connected other facilities for filling of the gas(es) in cylinders as described here under:

गैस का प्रकार Type of Gas	मात्रा /Quantity
a) विषैला Toxic	-NIL-
b) गैर विषैले और गैर ज्वलनशील, Non-Toxic and Non Flammable	-NIL-
c) गैर विषैले और ज्वलनशील Non-Toxic and Flammable	HYDROGEN
d) विलीन असेटिलीन गैस /Dissolved Acetylene Gas	-NIL-
e) गैस (Non-Toxic & Flammable liquefiable gas other than LPG	-NIL-
f) द्रवित पेट्रोलियम Liquefied Petroleum Gas	-NIL-

और प्लॉट संख्या PlotNo :1 गली का नाम : GIDC Industrial Estate Taluka Vagra गांव : Vileyat पुलिस थाना : जिला :BHARUCH राज्य: Gujarat. (and is situated at PlotNo :1 Name of Street :GIDC Industrial Estate Taluka Vagra Village/Town :Vileyat Police Station : District :BHARUCH, State: Gujarat.

**नवीकरण के पुरांकार के लिए स्थान / SPACE FOR ENDORSEMENT OF RENEWALS**

नवीकरण की तारीख/Date of Renewal	समाप्ति की तारीख/Date of Expiry	अनुमति अधिकारी के हस्ताक्षर/Signature and stamp of the licensing authority
इस अनुमति को विस्फोटक अधिनियम, 1884 का अन्तर्गत अधीन बनाए गए गैस सिलेंडर नियम, 2016 के अंतर्गत यह इस अनुमति की शर्तों का उल्लंघन न होने की दशा में, गैस में कोई छूट दिए बिना दस वर्ष तक नवीकरित किया जाएगा। (This licence shall be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884, or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence)	07/10/2018	30/09/2029
		 <b>Sanjay Kumar</b> CE For Dy. Chief Controller of Explosives Vadodra 

यदि अनुमति परिसर इससे उल्लंघन विवरण और शर्तों के अनुसंधान नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुमति दी गई है, उनमें से किसी का उल्लंघन होता है तो यह अनुमति रद्द की जा सकती है और अनुमति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकती है, या जुर्माने से, जो तीन हजार रुपये तक का हो सकता है, या दोनों से, दण्डनीय भी होगा। / This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

अनुमति की शर्तों संख्या 8 में निर्दिष्ट कुछ भी होने हुए, सूर्यास्त और सूर्योदय के मध्य, निम्न शर्तों के अधीन, सिलेंडर भरण की अनुमति दी जाती है। / Notwithstanding anything contained in condition No. 8 of the Licence filling of cylinders within hours of sunset and sunrise is permitted subject to the following conditions.

- सभी ऑपरेशन एक सक्षम व्यक्ति के पर्यवेक्षण में किए जाने चाहिए। / All operation should be carried out under supervision of a competent person.
- पर्याप्त प्रकाश व्यवस्था प्रदान की जाएगी। / Adequate lighting are provided.
- सूर्यास्त और सूर्योदय के दौरान सिलेंडरों का प्रेषण नहीं किया जाएगा। / Cylinders are not dispatched during sunset and sunrise.



फॉर्म नं. / FORM F

नियम 50, 51 और 54 देखें / (See Rules 50, 51 and 54)

Licence to store compressed gas in cylinders



वार्षिक शुल्क रु./Fee Rs. 4000/- per year

अनुमति संख्या/ Licence No. - GHO/GJ/06/728(G31657)

M/s. Grasim Industries Limited, Plot No 1 GIDC Vilayat Industrial Estate, Taluka Vagra, City: Vilayat, District: BHARUCH, State: Gujarat, Pin: 392140 को लीने प्रमाण और विवरण संख्या GHO/GJ/06/728(G31657) dated 14/05/2013 में दर्शाए गए अनुमति पत्र में, भारतीय विस्फोटक अधिनियम, 1984 (1984 का 4) और उसके अधिनियमण नियमों के अंतर्गत तथा इस अनुमति की अन्य शर्तों के अधीन रहते हुए, केवल संश्लेषित गैस से भरे सिलिंडरों को रखने के लिए ही विधिवत अनुमति दी जाती है। /

Licence is hereby granted to M/s. Grasim Industries Limited, Plot No 1 GIDC Vilayat Industrial Estate, Taluka Vagra, City: Vilayat, District: BHARUCH, State: Gujarat, Pin: 392140 valid only for the possession of cylinders filled with compressed gas in the licensed premises described below and shown in the plan No GHO/GJ/06/728(G31657) dated 14/05/2013 subject to the provisions of the Explosives Act, 1984(4 of 1984) and the Rules made thereunder and to the further conditions of this licence.

यह अनुमति 30 सितंबर 2029 तक प्रवृत्त रहेगी। / The Licence shall remain in force till the 30<sup>th</sup> September 2029.

For Chief Controller of Explosives  
Nagpur  
शुभे शुभे विस्फोटक नियंत्रक  
नागपुर

May 14, 2013

अनुमति पत्र पर का विवरण और अवस्थिति / DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

निम्नलिखित विवरण के अनुसार सिलिंडरों में भरी गैस रखने के लिए अनुमति पत्र पर, जिसकी अभिव्याज योजनाओं और अन्य विवरणों को संलग्न अनुमति देयक नं GHO/GJ/06/728 dated May 14, 2013 में दिखाया गया है, में अवस्थित है और जिसमें एक मापदण्ड सं. है। / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. GHO/GJ/06/728 dated May 14, 2013 are situated at Vilayat and consists of a storage shed for possession of the gas contained in cylinders as described here under.

गैस का प्रकार / Type of Gas	मात्रा / Quantity
a) विषैले / Toxic	-NL-
b) गैर विषैले और गैर ज्वलनशील / Non-Toxic and Non-Flammable	-NL-
c) गैर विषैले और ज्वलनशील / Non-Toxic and Flammable	HYDROGEN - 360 Nos.
d) अक्षति एसिटिलीन गैस / Dissolved Acetylene Gas	-NL-
e) एसिटिलीन के अलावा गैस पिचले और ज्वलनशील द्रवित	-NL-
f) गैस / Non-Toxic & Flammable liquefiable gas other than LPG	-NL-
g) एसिटिलीन / Liquefied Petroleum Gas	-NL-

और पता संख्या PlotNo : 1 गाँव का नाम गाँव : Vilayat या जगम पुलिस थाना : जिला : BHARUCH, राज्या : Gujarat / and is situated at PlotNo : 1 Village/Town : Vilayat Police Station : District : BHARUCH, State: Gujarat.

नवीकरण के पृष्ठान्त के लिए स्थान / SPACE FOR ENDORSEMENT OF RENEWALS

नवीकरण की तारीख / Date of Renewal	समाप्ति की तारीख / Date of Expiry	अनुमति प्राधिकारी के हस्ताक्षर / Signature and stamp of the licensing authority
07/10/2019	30/09/2029	<p>इस अनुमति को विस्फोटक अधिनियम, 1984 का उसके अधीन चलाए गए गैस सिलिंडर नियम, 2016 के अंतर्गत या इस अनुमति की शर्तों का उल्लंघन होने की दशा में फीस में कोई छूट दिए बिना दस वर्ष तक नवीकरित किया जाएगा। / This licence shall be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1984 or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence.</p> <p>Sanjay Kumar CE For Dy. Chief Controller of Explosives Yadodara</p> <p>संयुक्त विस्फोटक नियंत्रक, यदोदरा Dy. Chief Controller of Explosives, Yadodara</p>

यदि अनुमति पत्र पर इससे उल्लंघन विवरण और शर्तों के अनुसार नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुमति दी गई है, उनमें से किसी का उल्लंघन होता है तो यह अनुमति रद्द की जा सकती है और अनुमति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकती है, या जुर्माने से, जो तीन हजार रुपये तक का हो सकता है, या दोनों से, दण्डनीय हो होगा। / This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.



GOVERNMENT OF INDIA  
DY. CHIEF CONTROLLER OF EXPLOSIVES  
PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION (PESO)  
(Formerly Department of Explosives)  
VADODARA SUB CIRCLE OFFICE

Tel : 2225159.  
Fax : (265)-  
Email : vyccebaroda@explosives.gov.in

8th Floor, Yash Kamal Building,  
Eaysijunj  
Vadodara -390020

No. GAWC/GJ/06/1803 (G34271)

Date: 30 Aug 2013

To,

M/S. GRASIM INDUSTRIES LTD,  
5 & 6, 3RD FLOOR, SHREE MANGALAM COMPLEX,  
KASAK CIRCLE,  
BHARUCH - 392002,  
District BHARUCH  
State Gujarat

Sub: Storage of 20 Nos - CHLORINE in cylinders at Plot No. : 1 GIDC INDL. ESTATE, Village : VILAYAT- District :  
BHARUCH State - Gujarat - Licence No. GAWC/GJ/06/1803 (G34271) granted in Form F of Gas Cylinder Rules  
2004 - Inspection & Encasement of licence regarding.

Sir,

Please refer to the Jt. Chief Controller of Explosives, Mumbai's Memo No. GAWC/GJ/06/1803 (G34271) dated  
04/20/13 and inspection of the above premises by the undersigned (an officer of this office on 17/8/2013).

The subject licence is returned herewith duly endorsed. The receipt of the licence may please be acknowledged.

Please note that your application for further renewal should reach this office on or before 30<sup>th</sup> September, 2022  
along with all the documents as required under Rule 55(5) of Gas Cylinder Rules, 2004. Application for renewal of licence  
received after 30<sup>th</sup> September, 2022 but not later than 30<sup>th</sup> September, 2023 be considered only with penalty fee vide rule  
55(7) (a)(b) of said Rules. The licence will automatically expire if no application is received upto 30<sup>th</sup> September, 2022.

premises should be maintained as per approved drawing.

Yours faithfully,

(Shivchandra D. Mishra)


Dy. Controller of Explosives  
for Dy. Chief Controller of Explosives  
Vadodara Sub Circle Office, Vadodara

Copy forwarded for information to:-

1) The Jt. Chief Controller of Explosives, West Circle, Mumbai with reference to his endorsement as above.

Dy. Chief Controller of Explosives, Vadodara

INSPECTED AND ENDORSED

  
 जिवचंदर जी. चिंभार  
 जप विस्फोटक नियंत्रक  
 कृते उप मुख्य विस्फोटक नियंत्रक  
 बडोदरा.



Form F

(See Rules 50, 51 and 54)



Licence to store compressed gas in cylinders

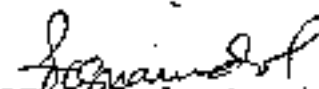
Licence No : GWC/GJ06/1803 (G34271)

fee Rs : 500/- per year

Licence is hereby granted to M/S. GRASIM INDUSTRIES LTD, 5 & 6, 3RD FLOOR, SHREE MANGALAM COMPLEX KASAK CIRCLE BHARUCH-392002 and only for the possession of cylinders filled with compressed gas in the licensed premises described below and shown in the plan No. GWC/GJ06/1803 dated 5 August, 2013 subject to the provisions of the Explosives Act, 1884(4 of 1884) and the Rules made thereunder and to the further conditions of this licence.

The licence shall remain in force up to 30<sup>th</sup> day of September, 2022.

The 5 August, 2013

  
 जिवचंदर जी. चिंभार,  
 Jt. Chief Controller of Explosives,  
 West Circle, Mumbai  
 West Circle, Mumbai

## DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. GWC/GJ06/1803 dated 5 August, 2013 are situated at VILAYAT and consists of a storage shed for possession of the gas contained in cylinders as described here under:

	Type of Gas	Quantity
a)	Toxic	20 Nos-CHLORINE,
b)	Non-Toxic and Non Flammable	
c)	Non-Toxic and Flammable	
d)	Dissolved Acetylene Gas	
e)	Non-Toxic & Flammable liquefiable gas other than LPG	
f)	Liquefied Petroleum Gas	

and is situated at Plot No : 1 Name of Street : GIDC INDL. ESTATE Village/Town : VILAYAT Police Station : VAGRA District : BHARUCH .

## SPACE FOR ENDORSEMENT OF RENEWALS

	Date of Renewal	Date of Expiry	Signature and stamp of the licensing authority
This licence shall be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884, or Gas Cylinders Rules, 2004, framed thereunder or of the conditions of the licence.			

This licence is liable to be cancelled if the licensed premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

## CONDITIONS

1. (a) The Hoarder, previous shall not be used for any purpose other than the keeping of compressed gas filled cylinders.
- (b) All cylinders shall be stored in L.P.G. Cylinders and those L.P.G. shall comply with provisions of OMS 200-144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.
2. Compressed gas cylinders shall be stored only in the storage shed, which shall be constructed of suitable non-combustible material provided that, when only non-flammable gas filled in cylinders is stored, the bricks, masonry, concrete, which are not stored may be of wood.
3. The storage shed shall be adequately ventilated near the ground level and near or to the roof. In case the storage shed is used for keeping L.P.G. gas cylinders, the ventilation shall be provided with iron meshwork of fine copper or other non-combustible metal wire mesh of mesh size less than 12 to the floor construction.
4. As far as possible, different types of gases should not be stored in the same shed. Where different types of gas cylinders are stored in the same shed, cylinders may be grouped together depending on the nature of the gas contained therein e.g. flammable gas cylinders shall be separated from cylinders containing oxidizing gases by an intervening space of not more or by a fire resisting partition wall in between these and cylinders containing toxic gases shall be segregated from the cylinders containing non-toxic gases by a suitable partition wall.
5. The following standards shall be kept clear of all sheds, between any building, public place, public road or any adjoining property which may be built upon and the storage shed used for the storage of specified poisonous gas cylinders:

Quantity of compressed gas in Cylinder	Minimum distance to be kept clear
0	1.01
101	2.00
201	3.00
301	4.00
401	5.00
501	6.00
601	7.00
701	8.00
801	9.00
901	10.00
1001	11.00
1200	12.00
over 2000	15

- Provided that the distance specified above may be reduced by the Chief Controller (i) where access ways are provided or other special precautions taken, or (ii) where there are special circumstances which in the opinion of the Chief Controller would justify such reduction.
5. Notwithstanding anything contained in condition 5 above, cylinders containing specified poisonous gas exceeding 100 Kg. but not exceeding 500 Kg. may be kept in a storage shed forming part of, or attached to a building, provided that it is separated therefrom by a substantial partition and the only means of access to it is from outside air, such a storage shed shall not be situated under any staircase or near other entrance to, or exits from, the roof of the building or other buildings.
  6. A shed used for storage of specified poisonous gas cylinders shall be surrounded by a suitable brick masonry compound wall of 1.5 meters high with a 1.2 meter wide gate to prevent unauthorised persons from having access to the shed and its safety zone.  
Note: Suitable space for parking of truck and unloading of cylinders shall be provided by the Hoarder.
  7. This wall cylinders shall not be stacked in a horizontal position, provided that in case of specified poisonous gas cylinders, the following method of stacking may be permitted:
    - (a) filled cylinders shall be stored vertically and not be stacked more than 2 high;
    - (b) empty cylinders if stored vertically, shall not be stacked more than 3 high and if stored horizontally, shall not be stacked more than 5 high.

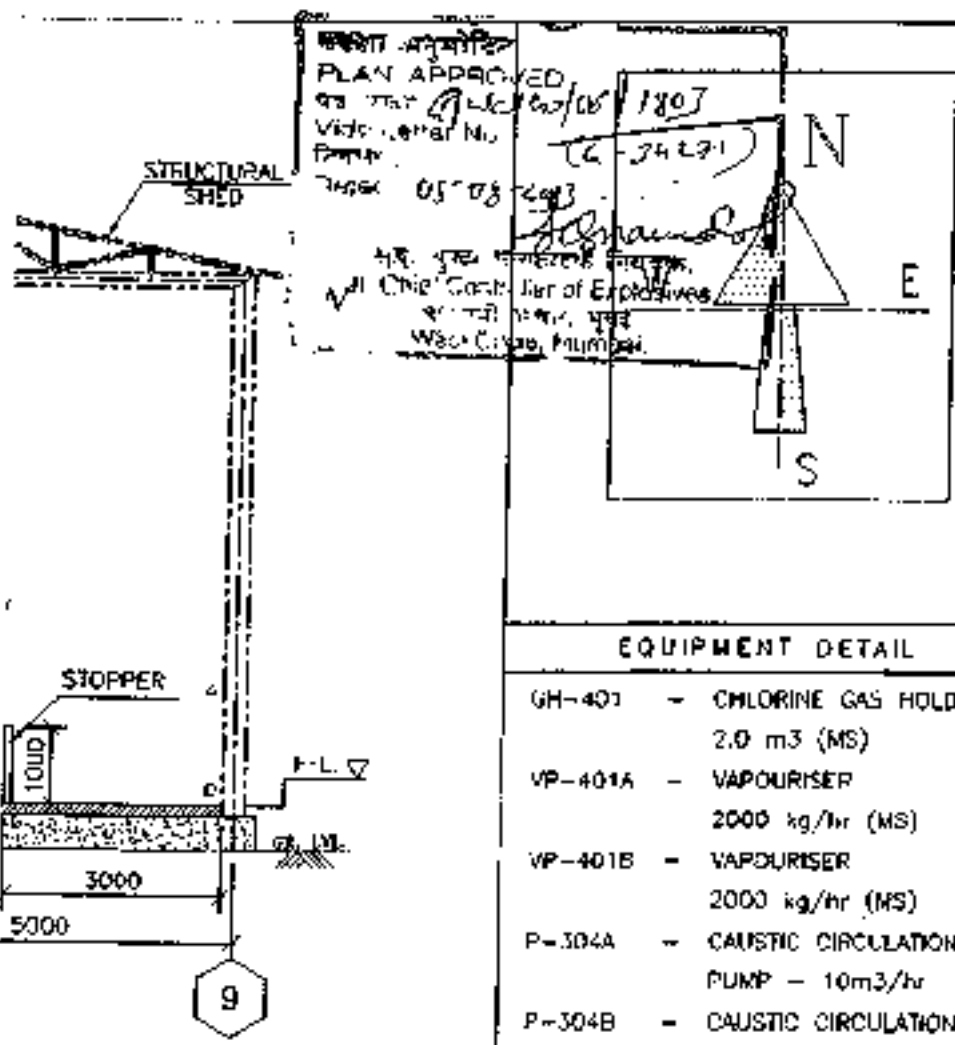
- (iii) the pile of the cylinders shall be kept stable by using blocks at the ends of the pile or across the cylinder with provision to permit moving and stacking of cylinders shall be kept separate from the pile of cylinders and shall be kept separate from the pile of cylinders.
9. This chemical storage of the gas shall be in a container.
  10. The storage shall be in the charge of a competent person.
  11. Any accident, fire, explosion or unusual incident connected with the licensed premises shall be immediately reported to the Chief Controller of the Fire Department, the Chief Officer of the Fire Department, the District Inspector and the District Charge of the Special Police Station and by whatever mode of communication.
  12. Any person storing gas cylinders, which shall be used by a notice in writing, to prevent any additions, alterations or repairs to the gas cylinders storage shed, which in the opinion of the licensing authority, are necessary for the safety of the premises, shall ensure the said additions, alterations or repairs which work period not being less than one month from the date of receipt of the notice, as may be specified in the notice.
  13. No shed used for storage of flammable gases shall be heated and no lighting of the gas cylinders shall be permitted between the hours of sunset and sunrise, except where approved electric lighting is exclusively used.
  14. The storage shed and the area surrounding it shall in all cases be kept clear and free from all flammable materials, waste vegetation and rubbish.
  15. (a) No fire, furnace or other source of heat or light other than fluorescent electric light and fittings shall be allowed in the storage shed and within the safety zone required to be maintained under condition 3.  
(b) No person shall smoke in the storage shed or anywhere near, fence, mobile phone or other appliances producing radiation in the premises. Conspicuous "No smoking signs in Hindi, English and the regional language shall be posted or hung up at prominent places outside the storage shed.
  16. The licensee shall provide at the licensed premises a minimum of two portable foam type/ordinary chemical type fire extinguishers of 17 kg. each BEE marked or approved which shall be kept ready at a convenient location for immediate use in the event of any fire in addition to other fire fighting or other mitigating facilities required for flammable or toxic gases.
  17. Free access to the licensed premises shall be given at all reasonable times to any of the officers listed in clause 71 and every facility shall be afforded to such officers for ascertaining that the rules and the conditions of this license are duly observed.

**Additional conditions for a licence in Form 'F' of the Gas Cylinder Rules, 2004 for storage of liquid chlorine in tonners and cylinders.**

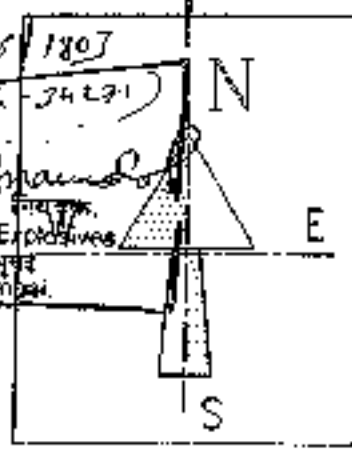
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1. A valve hood assembly preferably of tie rod type for controlling leakage of chlorine through valve of a Tonneur or cylinder should be made available in the premises and the supervisor / worksmen should be trained in handling of the same.
2. The arrangement for neutralization of at least 900 kg. of liquid chlorine should be readily available in the premises. A suitable tank to hold 1160 kg. of caustic soda and 3680 litres of water should be provided in the premises. A suitable pipeline with perforated distributor at one of the ends should be also made available for use during neutralization. The tonner / cylinder should never be immersed in the caustic soda solution.
3. At least one self contained breathing apparatus and two cannister type gas masks shall be kept in / or near the premises in a readily accessible location.
4. Ammonia torches for locating chlorine leaks shall be made available in / or near the premises.
5. A weather cock shall be provided in a suitable location for determining wind direction so that in case of leakage of chlorine, the workers can move against wind direction.
6. Emergency kit consisting of various appliances and tools including valve hood assembly for cylinders and tonners, clamp for cylinder valve leaks and chain and yoke assembly for tonner valve leak shall be available with the licensee.
7. In case of closure / lock - up of plant, no cylinders containing chlorine shall be retained in the premises.

  
J.L. Chief Controller of Explosives,  
West Circle, North Circular Road,  
Bombay.  
West Circle, North Circular Road,  
Bombay.



PLAN APPROVED  
 05 MAY 1983  
 V. S. ...  
 05-08-83  
 Mr. ...  
 Chief Const. ...  
 West ... Mumbai.



**EQUIPMENT DETAIL**

- GH-401 - CHLORINE GAS HOLDER  
2.0 m<sup>3</sup> (MS)
- VP-401A - VAPOURISER  
2000 kg/hr (MS)
- VP-401B - VAPOURISER  
2000 kg/hr (MS)
- P-304A - CAUSTIC CIRCULATION  
PUMP - 10m<sup>3</sup>/hr
- P-304B - CAUSTIC CIRCULATION

CORPORATED & RESUBMIT FOR PESC APPROVAL	SP	PL
USED AS MARKED	SP	PL
USED AS MARKED.	SP	PL
USED TO MAKE GR. LEVEL AT 0.000M & AS MARKED	SP	PL
USED AS MARKED.	SP	PL
USED AS MARKED.	SP	PL
USED AS MARKED.	SP	PL

DESCRIPTION	REV. BY	CHD. BY
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**REVISION**

**HYDROUS ALUMINIUM CHLORIDE PLANT.**

**INDUSTRIES LTD.**

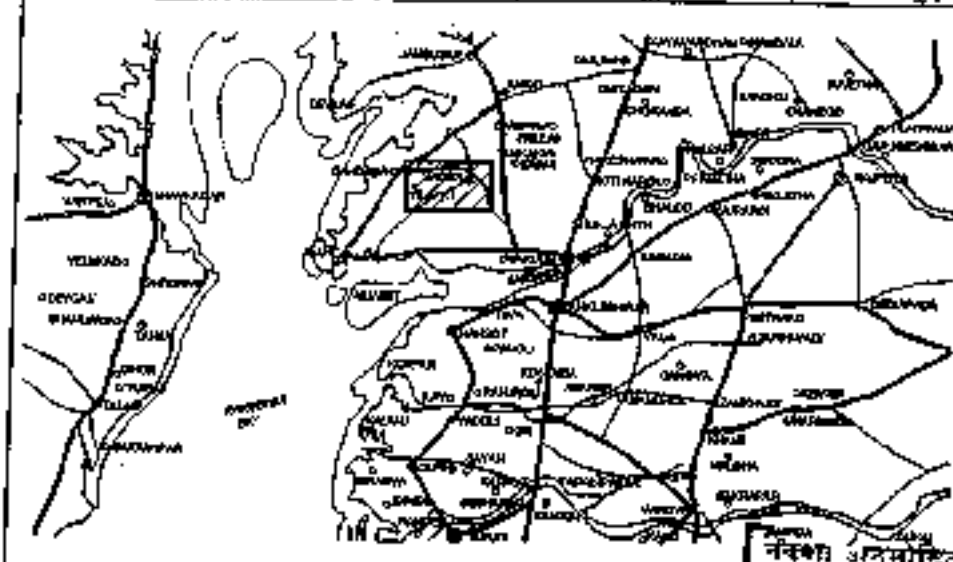
**LAYOUT FOR CHLORINE AREA.**

Cole & Associates.  
 CONSULTANTS & ENGINEERS.)  
 301, OM SAI NIKAS CO.OP.HSD, 500, SUBHASH ROAD,  
 2, MADFASI RAM MANDIR, VILE PARLE (E) MUMBAI-37.

For Grasim Industries Ltd.  
 Authorized Signatory

16.12	SCALE 1:100	DIVISION PROCESS	SHEET : 1 OF 1
16.12	JOB NO. 1107	DRAWING NO. 0161-LA-00-EA-00005	REV. 7





LOCATION MAP

NOTES:

- 1) ALL DIMENSIONS ARE IN METRE. ELEVATIONS, COORDINATES & UNIT BLOCK SIZES ARE IN METRES.
- 2) -
- 3) F.O.C. OF THE PLANT IS -0.0004 CORRESPONDING TO 11.500 M ABOVE MEAN SEA LEVEL.
- 4) -
- 5) -
- 6) REFERENCE POINT E=000.000, N=000.000 CORRESPONDS TO GLOBAL E=9329.126 AND N=8151.750
- 7) ELECTRICAL POWER SUPPLY OF 33KV SHALL BE MADE AVAILABLE AT THE SUBSTATION BY GRID
- 8) -
- 9) GRID TO PROVIDE SPACE FOR 200 TRUCKS PARKING (FOR SALT HANDLING) WITH REST ROOMS

PLAN APPROVED  
 27/06/2011  
 (E-2427)  
 Chief Engineer  
 Dept. of Explosives  
 West Circle  
 Mumbai

REF. DWG

- 1) PROPOSED CALSTIC SODA PLANT LAYOUT PRELIMINARY CRD NO. 0-VST-C-9875 DATE: 15/03/2011
- 2) GRASIM INDUSTRIES LIMITED CRD & CONTOUR SURVEY LAYOUT PLAN RECEIVED ON DATE: 19/04/2011

COPY FOR PESO APPROVAL

Client : **GRASIM INDUSTRIES LIMITED**  
 Plot No. 1, GIDC Ind. Estate  
 Vilayat, Bharuch (Gujrat)

LHM	Document #	Part	Group	Rev.
66-0161-700	0161-LA-00-LD-00002	-		06

Store Location: Server/Share  
 \\160161\160161-00A  
 Store Location: Folder  
 0161-LA-00-LD-00002  
 Store Name  
 0161-LA-00-LD-00002.dwg

**For Grasim Industries Ltd.**

**Authorized Signatory**

Pro. Unit	Con. Unit	TOH	Type of Document	Order No.	Tot. Sheets
-	-	-	LH	-	1

**GRASIM Industries Ltd.**

**Uhde India**

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PROJECT: 500 TPD CALSTIC SODA PLANT		
Date	Name	Designation:
Drawn	13/9/2011	MHSRKE Sd/-
Prepared	13/9/2011	MHSRKE Sd/-
Checked	13/9/2011	MHSRKE Sd/-
Approved	13/9/2011	MHSRKE Sd/-
Scale	1:1000	
Col. Code	Acc. Code	Status

OVERALL PLOT PLAN

Comments approved  
 Comments approved  
 Comments approved  
 Comments approved  
 Comments approved  
 Comments approved

E-2427



भारत सरकार  
Government of India  
व्यवसाय और उद्योग मंत्रालय  
Ministry of Commerce & Industry  
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पीएसओ)  
Petroleum & Explosives Safety Organisation (PESO)  
अटली बिल्डिंग, एच. कामल बिल्डिंग, रायसिगुर,  
वाडोदरा - 390020  
6th Floor, Yash Kamal Building, Raysigpur,  
Vadodara - 390020

Email: dycc@peso.gov.in

Phone/Fax No: 0265 - 225153

दिनांक / Date: 05/10/2021

पत्र सं. / No.: PWB/GJ/15/6900 (P451445)

प्रति / To:

M/s. Grosim Industries Limited,  
Plot No.1, GIDC Vlayat Industrial Estate,  
Vlayat Taluk Vagra,  
Vlayat,  
Bharuch,  
Taluka: Vagra,  
District: BHARUCH,  
State: Gujarat  
PIN: 392140

05 OCT 2021

विषय / Sub: Plot No. Plot No.1, Plot No.1, G.I.D.C Estate, Village Vlayat, Taluk Vagra, Dist. Bharuch 392012 (Gujarat), India, Vlayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392012 में पेट्रोलियम क्लास A का अस्थापना अनुमति प्राप्त करने के लिए।

Petroleum Class A Installation at Plot No. Plot No.1, Plot No.1, G.I.D.C Estate, Village Vlayat, Taluk Vagra, Dist. Bharuch 392012 (Gujarat), India, Vlayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392012 Grant of License regarding

संदर्भ / Ref:

आपका पत्र सं. सं. दिनांक 05/10/2021 का आभारपूर्वक है।  
Please refer to your letter No. nll dated 05/10/2021

विशेषाधिकार अधिनियम में श्रेणिकृत पेट्रोलियम पदार्थों के लंबे समय तक के संग्रह के लिए पेट्रोलियम नियम, 2002 के अर्धीन इका - XV में संशुद्ध, दिनांक 31/12/2025 तक वैध अनुमति संख्या PWB/GJ/15/6900 (P451445) दिनांक 05/10/2021 की जा रही है।

License No. PWB/GJ/15/6900 (P451445) dated 05/10/2021 granted in Form XV under the Petroleum Rules, 2002 and valid till 31/12/2025 for the storage of the following kinds and quantities of Petroleum at the subject installation is forwarded herewith.

पेट्रोलियम का विवरण / Description of Petroleum	रेकोर्ड में अनुमानित मात्रा / Quantity (entered in kg)
बर्तन में प्रयुक्त पेट्रोलियम / Petroleum Class A in bulk	1570.00 KL
बर्तन में प्रयुक्त पेट्रोलियम से अलग / Petroleum Class A, otherwise than in bulk	NIL
बर्तन में प्रयुक्त पेट्रोलियम / Petroleum Class B in bulk	NIL
बर्तन में प्रयुक्त पेट्रोलियम से अलग / Petroleum Class B, otherwise than in bulk	NIL
बर्तन में प्रयुक्त पेट्रोलियम / Petroleum Class C in bulk	NIL
बर्तन में प्रयुक्त पेट्रोलियम से अलग / Petroleum Class C, otherwise than in bulk	NIL
<b>कुल क्षमता / Total Capacity</b>	<b>1570.00 KL</b>

कृपया पेट्रोलियम नियम 2002 के अर्धीन इका 148 में दी गई प्रक्रिया का पालन करें और अनुमति के नवीकरण हेतु सम्पूर्ण दस्तावेजों को अनुमति की वैधता समाप्त की तारीख या उसके पूर्व Jt. Chief Controller of Explosives, Vadodara को भेजें।

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence to Jt. Chief Controller of Explosives, Vadodara, so as to reach his office on or before the date on which Licence expires.

यह अनुमति/अनुमति अन्य प्राधिकारियों से आवश्यक अनुमति/अनुमति प्राप्त करने से यह एक समूह अन्य विधियों से छूट नहीं देती है।

This approval/permission, however, does not absolve from obtaining necessary permission/clearance from other authorities or under other statutes as applicable.

आपका / Your last by

(संजय कुमार)  
(Sanjay Kumar)  
ब्रिटीश ग्रेड  
Controller of Explosives  
एच. कामल बिल्डिंग, रायसिगुर  
For Jt. Chief Controller of Explosives  
वाडोदरा/Vadodara

Copy forwarded to :-  
1. The District Magistrate & Collector, BHARUCH(Gujarat) with reference to his NDC No MAG/WOCWS/9073/9067/9631/2021 Dated 31/08/2021

प्ररूप XV  
(प्रथम अनुसूची का अनुच्छेद 6 देखिए)  
FORM XV  
(see Article 6 of the First Schedule)



अधिकारपत्रों में पेट्रोलियम के आयात और भंडारण के लिए अनुमति  
LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

फीस/वर्ष (Fee Rs.) 50000/- per year

अनुमति सं. (Licence No.): P/WB/GJ/15/5600(P451445)

M/s. Grasim Industries Limited, Plot No.1, GIDC Vilayat Industrial Estae., Vilayat Taluk Vagra, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392140 को केवल इसमें यथा विनिर्दिष्ट वर्ग और मात्रा में पेट्रोलियम 1570.00 KL आयात करने के लिए और उसका नीचे वर्णित और अनुमोदित नक्शा संख्या P/WB/GJ/15/5600(P451445) तारीख 05/10/2021 जो कि इससे उपाबद्ध है, में दिखाए गए स्थान पर भण्डारण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुमति की अतिरिक्त शर्तों के अधीन रहते हुए, यह अनुमति अनुद्भूत की जाती है।

Licence is hereby granted to M/s. Grasim Industries Limited, Plot No.1, GIDC Vilayat Industrial Estae., Vilayat Taluk Vagra, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392140 valid only for the importation and storage of 1570.00 KL Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No P/WB/GJ/15/5600(P451445) dated 05/10/2021 attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

यह अनुमति 31st day of December 2025 तक प्रवृत्त रहेगी।  
The Licence shall remain in force till the 31st day of December 2025

पेट्रोलियम का विवरण /Description of Petroleum

अनुमत्त मात्रा (किलोलीटर में) /Quantity  
licenced in KL

वर्ग क प्रपुंज पेट्रोलियम /Petroleum Class A in bulk	1570.00 KL
वर्ग क प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	NIL
वर्ग ख प्रपुंज पेट्रोलियम /Petroleum Class B in bulk	NIL
वर्ग ख प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	NIL
वर्ग ग प्रपुंज पेट्रोलियम /Petroleum Class C in bulk	NIL
वर्ग ग प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class C, otherwise than in bulk	NIL

कुल क्षमता /Total Capacity

1570.00 KL

October 5, 2021

For Jt. Chief Controller of Explosives  
WB, Vadodra

संयुक्त मुख्य विस्फोटक नियंत्रक, वडोदरा  
Joint Chief Controller of Explosives, Vadodra

अनुमत्त परिसरों का विवरण और अवस्थान

DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

अनुमत्त परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टताएं संलग्न अनुमोदित नक्शों में दिखाई गई हैं Plot No: Plot No.1, Plot No.1, G.I.D.C Estate, Village Vilayat, Tahsil Vagra, Dist. Bharuch 392012 (Gujarat), India, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392012 स्थान पर अवस्थित है तथा उसमें निम्नलिखित 2 Above Ground tank(s) for CLASS A of 785 KL each, सम्मिलित हैं।

The licensed premises, the layout, boundaries and other particulars of which are shown in the attached approved plan are situated at Plot No: Plot No.1, Plot No.1, G.I.D.C Estate, Village Vilayat, Tahsil Vagra, Dist. Bharuch 392012 (Gujarat), India, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392012 and consists of 2 Above Ground tank(s) for CLASS A of 785 KL each, together with connected facilities.

Note:-This is system generated document does

not require signature.

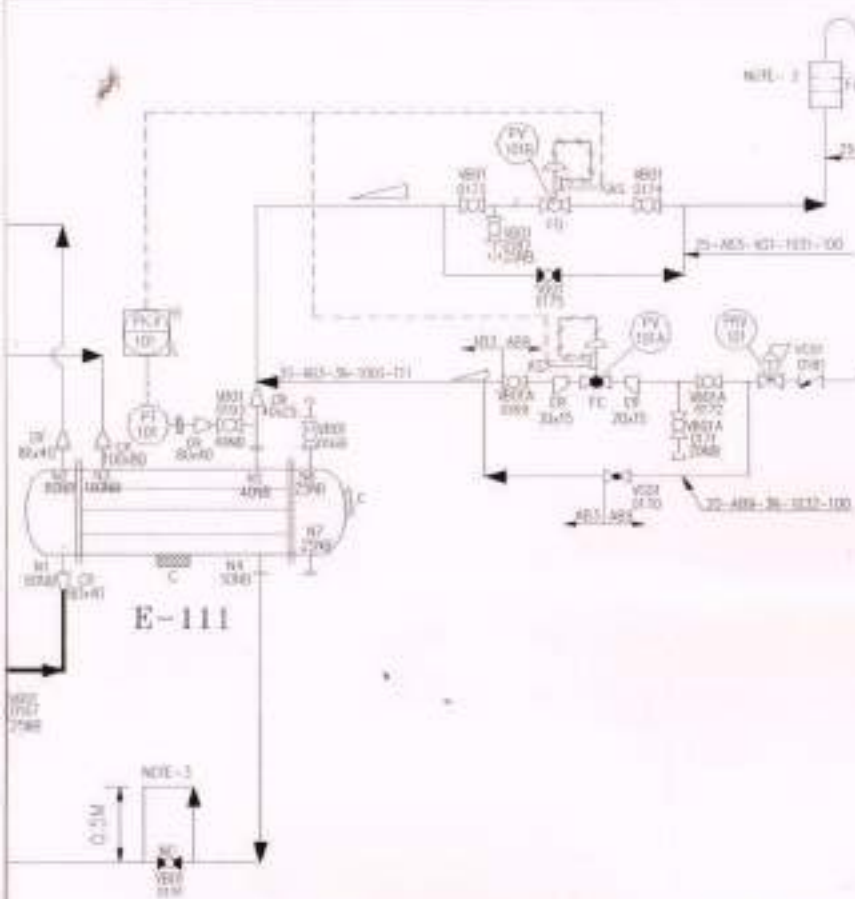
P 451445

अनुमोदित / Plan Approved  
 संख्या / No. P/WB/43/15/5600  
 दिनांक / Date 5/10/2021

संयुक्त मुख्य विस्फोटक नियंत्रक, वाडोदरा  
 Joint Chief Controller of Explosives, Vadodra

RET DWG-PC-34815-1

TP-30



For Grasim Industries Ltd.  
 (Chemical Division)

*W326*  
**VIVEK BHIDE**  
 President & Unit Head  
 Authorized Signatory



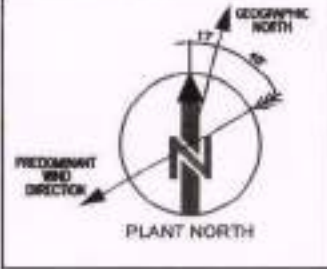
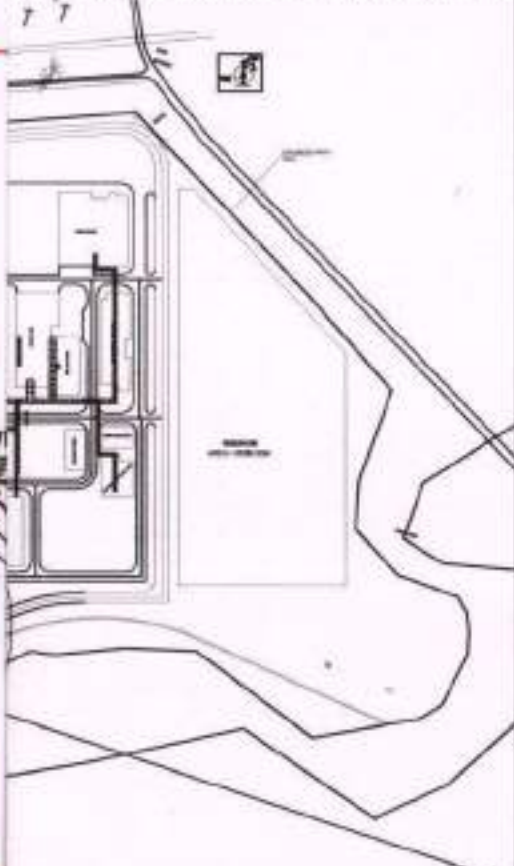
**Protech Consultants Pvt. Ltd.,**  
 OFFICE: 113, T.K. ROAD, AWARDIET, CHOPAN-800 018

VED FOR CONSTRUCTION

CLIENT:	GRASIM INDUSTRIES LIMITED, VRAVAT, BHARUCH (GUJARAT)	
PROJECT:	HYDROCHLORINATION	
TITLE:	<b>P&amp;ID FOR METHANOL STORAGE &amp; HANDLING</b>	
DATE:	DATE:	DATE:
DESIGNER:	DESIGNER:	DATE:
CHECKER:	DATE:	DATE:
APPROVED:	DATE:	DATE:
SCALE: NTL	REV. NO: 0/7	
DRAWING No:	REV. NO:	
PC-34815-1		2

D:\Drawing\GRASIM-HYDRO CHLORINATION\PROJECTS\PRO\PC-34815-1.RVT PRO FOR METHANOL STORAGE & HANDLING.dwg

2000.00  
 2005.00  
 2010.00  
 2100.00  
 2150.00  
 2200.00  
 2250.00  
 2300.00  
 2350.00  
 2400.00  
 2450.00  
 2500.00  
 2550.00



REFER DWG: PC-35158-1

PARTIAL PLOT PLAN FOR BLOWN UP VIEW

RASIM BOUNDARY WALL

0.000m = RL EL+12.500  
 1.000m = RL EL+11.500

REVISIONS PER PESO COMMENT	RP/PP	DM
	RP/PP	DM
E-MAIL DATED 26.09.19) INCORPORATED AND REVISION MARKED AS	MKK	SP
(VIDE Lr. APPROVAL No. NA (P451445) Dt.27.08.19) INCORPORATED.	MKK	SP
COMMENTS (VIDE E-MAIL DATED 10.06.19) INCORPORATED.	MKK	SP
DESCRIPTION	BY.	CHD.

**SIM INDUSTRIES LIMITED.**  
 PLANT DIVISION, VILAYAT, PLOT 1, GIDC VILAYAT INDUSTRIAL ESTATE,  
 VILAYAT, TALUK: VAGRA, BHARUCH-392130, GUJARAT-INDIA.

APPROVAL			NAME	DATE
DGN.			PCPL	04.05.2019
DRN.			MKK	04.05.2019
CHD.			SP	04.05.2019
APPD.			NRP	04.05.2019
SCALE : 1:150		JOB NO.: 517		
PROCESS	ELE.	INS.	DRAWING No.	REV.NO.
			PC-35157-1	5

P451445  
 आरेखण अनुमोदित / Plan Approved  
 संख्या / No. P/WB/45/15/5680  
 दिनांक / Date 5/10/2021  
 संयुक्त मुख्य विस्फोटक नियंत्रक, वडोदरा  
 Joint Chief Controller of Explosives, Vadodra

AT SIZE: 841mm x 594mm

GRASIM INDUSTRIES LTD.  
CHEMICAL DIVISION  
*W. S. J.*  
AUTHORISED SIGNATORY

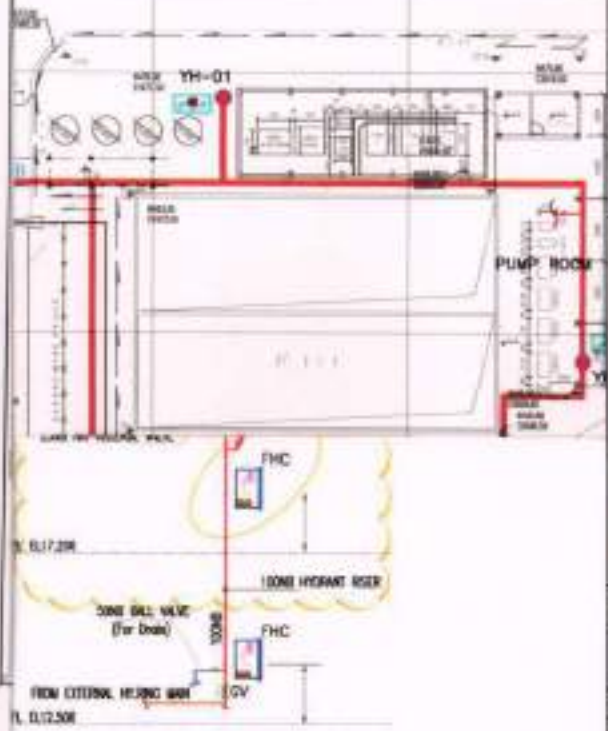
P 451445

आरेखण अनुमोदित / Plan Approved  
संख्या / No. P/W 13/43/15/5600  
दिनांक / Date 5-10-20 ~~RET PLAN~~

संयुक्त मुख्य विस्फोटक नियंत्रक, वडोदरा  
Joint Chief Controller of Explosives, Vadodra

NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS, UNLESS OTHERWISE SPECIFIED.
2. EXTERNAL HYDRANT SYSTEM WILL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH IS:13038.
3. PIPE SHALL BE MS PIPES COMPLYING TO IS:1239 PART-1, HEAVY (UPTO 150NB) CLASS AND IS:3580 FE410(FOR 250NB & ABOVE) AND ASME B16.11(FOR SIZE 40NB & BELOW)
4. PIPE JOINTS:  
A) PIPE SIZES 40NB AND BELOW ARE SOCKET WELDED JOINTS.  
B) PIPE SIZES 50NB AND ABOVE ARE BUTT WELDED JOINTS.
5. ALL FIRE PIPES SHALL BE HYDRO TESTED AT 1.5 TIMES OF WORKING PRESSURE FOR 2 HOURS.
6. ALL ROAD CROSSING SHALL BE PROTECTED WITH HUME PIPE.
7. EXTERNAL HYDRANT SHOULD BE LOCATED AT DISTANCE OF NOT LESS THAN 2M AND MAXIMUM 15M FROM THE FACE OF THE BUILDINGS.
8. HYDRANT VALVES WILL BE SS 63 MM SIZE SINGLE HEADED OBLIQUE TYPE WITH OUTLET ANGLE TOWARDS GROUND.
9. ALL EXTERNAL YARD HYDRANTS WILL BE PROVIDED WITH TWO (2) NOS. RRL HOSE WITH COUPLING (63MM SIZE X 15M LONG) AND ONE (1) NO. BRANCH PIPE WITH NOZZLE (20MM BORE) FOR SINGLE HEADED HYDRANTS, HOSES AND BRANCH PIPE SHALL BE KEPT INSIDE A HOSE BOX.
10. ALL EXPOSED SURFACES OF EQUIPMENT AND PIPING SHALL BE PAINTED WITH TWO COAT OF PRIMER AND TWO COATS OF SYNTHETIC ENAMEL.
11. FOR ABOVE GROUND PIPE, PIPE SUPPORT SHALL BE PROVIDED AT 4.0M INTERVALS.



KEY OF PIPE

SYMBOL	DESCRIPTION
DL	250NB HYDRANT PIPE (MS 'C' CLASS PIPE)
DL	150NB HYDRANT PIPE (MS 'C' CLASS PIPE)
DL	100NB HYDRANT PIPE (MS 'C' CLASS PIPE)



CRESCON PROJECTS & SERVICES PVT LTD  
Gulecha Towers, No.15B, 3rd Floor, Arcot Road  
Vadapalani  
Chennai - 26  
TEL : 044 - 23664945, Email : design@candeo.co.in

DRAWING TITLE >

EXTERNAL FIRE HYDRANT SYSTEM LAYOUT

DRAWN - <i>ADARSH</i>	CHECKED - <i>ADARSH</i>	APPROVED - <i>W. S. J.</i>
DESIGN NO. -	REV. -	NO. -
SCALE: 1:100		
WORKING NO. EPL-DRA-FHC-001	Rev. 01	
SHEET NO. 01	COUNT. ON 010	No. 01

COMPREHENSIVE BUILDING  
HYDRANT NO. 11&12

			DESIGN DATA		
150	NOZZ. PROJ.	R.F. PAD ODxDxTHK.	REMARKS	DESIGN CODE	API 620 ED. 2013
				TAG NO.	TK-101 A/B
		180x90x10THK.	WITH DIP PIPE	MEDIUM	METHYL ALCOHOL (METHANOL)
		217x117x10THK.	AS SHOWN	SP.GRAVITY	0.787
		---	AS SHOWN	PRESSURE (mmWC)	OP. 1500 अतिरिक्त अनुमोदित / Plan Approved
		180x90x10THK.			DES. (-)150 संख्या / No. P.W.B./43/15/5600
		180x90x10THK.			TEST FULL OF WATER / Date 5-10-2021
		180x90x10THK.	WITH DIP PIPE	TEMP. °C	OP. 30 / 50
		---			DES. 70
		217x117x10THK.		CORR. ALL.mm.	3.0 संयुक्त मुख्य विस्फोटक नियंत्रक, वादोदरा Joint Chief Controller of Explosives, Vadodara
		180x90x10THK.	WITH DIP PIPE	RADIOGRAPHY	SHELL : SPOT + ALL JOINTS
		180x90x10THK.			BOTTOM : FULL
		180x90x10THK.	WITH B/F	JT. EFFICIENCY	SHELL : 0.85   BOTTOM : 1.0
		---		STRESS RELIEVING	NIL
		---	AS SHOWN	VOLUME M <sup>3</sup>	ACTUAL : 825.6   NORMAL : 753
300	180x90x10THK.		WL EMPTY Kg.	~ 41015	
	913x613x10THK.	WITH COVER AND DAVIT	WL OF INT. Kg.	-	
	913x613x10THK.	DELETED	OP. WEIGHT Kg.	~ 689615	
			TEST WEIGHT Kg.	~ 865180	
			INSPECTION	BY CLIENT/AUTH. REP.	
			INSULATION	NIL	
			PAINTING	REFER NOTE NO:-15	
			QTY. (Nos.)	2 (TWO)	
			EXTERNAL LOAD DATA:	LOCATION : DAHEJ, GUJARAT, INDIA	
			WIND LOAD DATA:	SEISMIC DATA:	
		REFERENCE : IS:875 (PART3) : 1987	REFERENCE : IS:1893		
		BASIC WIND SPEED : 50 m/sec (10m ABOVE GROUND)	SEISMIC ZONE OF SITE : ZONE II SEISMIC COEFFICIENT : AS PER IS:1893		
<b>MATERIALS</b>					
	SHELL		IS:2062 Gr. E250 BR		
	CONE ROOF		IS:2062 Gr. E250 BR		
	BOTTOM PLATE		IS:2062 Gr. E250 BR		
	RAFTER		IS:2062 Gr. E250 A		
	NOZZLES	PIPE	SA 106 Gr. B		
		FLANGE	SA 105		
	MAN HOLE & COVER	PIPE	IS:2062 Gr. E250 BR		
		FLANGE	SA 105		
	PAD PLATE		SAME AS SHELL		
OFFICE: 173, T.T.K ROAD ALWARPET MADRAS-600 018					
MANUFACTURER :-					
<b>KAYPEE</b> KAYPEE MECHANICAL INDIA PVT. LTD. BHARUCH-392002					
DRAWN	HBS	TITLE:- GENERAL ASSEMBLY AND DETAILS FOR METHANOL STORAGE TANK ( (TK-101 A/B) )			
CHECKED	ABS				
APPROVED	ABS				
DATE	30.08.2019	TAG.NO. : (TK-101 A/B)	INSP.BY: BY CLIENT/TP1		
SCALE	NTS	PROJECT : HYDROCHLORINATION			
QTY.	2 Nos.	REF.PD NO: 7220000294	DT:02/08/2019		
REF. DATA SHEET. No.	KAYPEE JOB No.: 101				
PC-34898-1 REV.2	VENDOR DRAWING No. KAYPEE-DE-TK-101A-B-M-101		SHEET No. 1 OF 1	REV. No. 5	

p451445

अतिरिक्त अनुमोदित / Plan Approved  
संख्या / No. P.W.B./43/15/5600  
Date 5-10-2021संयुक्त मुख्य विस्फोटक नियंत्रक, वादोदरा  
Joint Chief Controller of Explosives, Vadodara

DRAWING NUMBER
PEE-DE-TK-101A/B-M-100
PEE-DE-TK-101A/B-M-101
PEE-DE-TK-101A/B-M-102
PEE-DE-TK-101A/B-M-103
PEE-DE-TK-101A/B-M-104
PEE-DE-TK-101A/B-M-105

**TEST REPORT  
 (STACK MONITORING)**

<b>ULR - TC775322000006550F</b>			
Test Report No.	URA/22/04/D/S-007	Report Issue Date:	03/05/2022
Service Request form No.	URA/SRF/04/007	Service Request Date	13/04/2022
Sample ID No.	URA/ID/S-22/04/007	Field Data Sheet No.:	URA/FDS/S-22/04/007
Name & Add. of Customer	M/s. Grasim Industries Limited Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	13/04/2022	Date of Testing	14/04/2022
Stack Sampling Attached to	<b>Power Plant 1</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

**Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	26/06/2021	Next Cali. Due On:	25/06/2022

**General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	39
4.	Flue Gas Temperature	°C	120
5.	Exit Gas Velocity	m/s	1.2
6.	Exit Gas Flow	m <sup>3</sup> /h	143278.4

**Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	28	<50	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	39	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	36	<50	IS: 11255 (Part 07)

Remarks:
Opinion & Interpretation (if required):

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



Nikunj D. Patel  
(Chemist)

Authorized By:



Jaivik S. Tandel  
(Manager - Operations)



**TEST REPORT  
(STACK MONITORING)**

<b>ULR - TC775322000006551F</b>			
Test Report No.	URA/22/04/D/S-008	Report Issue Date:	03/05/2022
Service Request form No.	URA/SRF/04/008	Service Request Date	13/04/2022
Sample ID No.	URA/ID/S-22/04/008	Field Data Sheet No.:	URA/FDS/S-22/04/008
Name & Add. of Customer	M/s. Grasim Industries Limited Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	13/04/2022	Date of Testing	14/04/2022
Stack Sampling Attached to	<b>Power Plant 2</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	26/06/2021	Next Cali. Due On:	25/06/2022

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	41
4.	Flue Gas Temperature	°C	121
5.	Exit Gas Velocity	m/s	1.3
6.	Exit Gas Flow	m <sup>3</sup> /h	155218.3

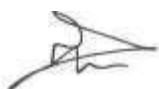
➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	22	<50	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	35	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	38	<50	IS: 11255 (Part 07)

Remarks:
Opinion & Interpretation (if required):

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

<b>ULR - TC775322000008242F</b>			
Test Report No.	URA/22/05/D/S-007	Report Issue Date:	08/06/2022
Service Request form No.	URA/SRF/05/007	Service Request Date	30/05/2022
Sample ID No.	URA/ID/S-22/05/007	Field Data Sheet No.:	URA/FDS/S-22/05/007
Name & Add. of Customer	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	30/05/2022	Date of Testing	31/05/2022
Stack Sampling Attached to	<b>Power Plant 1</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	26/06/2021	Next Cali. Due On:	25/06/2022

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	40
4.	Flue Gas Temperature	°C	124
5.	Exit Gas Velocity	m/s	1.6
6.	Exit Gas Flow	m <sup>3</sup> /h	191037.9

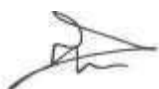
➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	26	<50	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	41	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	33	<50	IS: 11255 (Part 07)

<b>Remarks:</b>
<b>Opinion &amp; Interpretation (if required):</b>

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

<b>ULR - TC775322000008243F</b>			
Test Report No.	URA/22/05/D/S-008	Report Issue Date:	08/06/2022
Service Request form No.	URA/SRF/05/008	Service Request Date	30/05/2022
Sample ID No.	URA/ID/S-22/05/008	Field Data Sheet No.:	URA/FDS/S-22/05/008
Name & Add. of Customer	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	30/05/2022	Date of Testing	31/05/2022
Stack Sampling Attached to	<b>Power Plant 2</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	26/06/2021	Next Cali. Due On:	25/06/2022

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	39
4.	Flue Gas Temperature	°C	125
5.	Exit Gas Velocity	m/s	1.8
6.	Exit Gas Flow	m <sup>3</sup> /h	214917.6

➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	20	<50	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	37	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	36	<50	IS: 11255 (Part 07)

<b>Remarks:</b>
<b>Opinion &amp; Interpretation (if required):</b>

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

Test Report No.	URA/22/06/D/S-007	Report Issue Date:	05/07/2022
Service Request form No.	URA/SRF/06/007	Service Request Date	28/06/2022
Sample ID No.	URA/ID/S-22/06/007	Field Data Sheet No.:	URA/FDS/S-22/06/007
Name & Add. of Customer	M/s. Grasim Industries Limited Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	28/06/2022	Date of Testing	29/06/2022
Stack Sampling Attached to	<b>Power Plant 1</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	23/06/2022	Next Cali. Due On:	22/06/2023

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	40
4.	Flue Gas Temperature	°C	122
5.	Exit Gas Velocity	m/s	1.4
6.	Exit Gas Flow	m <sup>3</sup> /h	167158.2

➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	20	<50	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	33	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	35	<50	IS: 11255 (Part 07)

Remarks:

Opinion & Interpretation (if required):

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

Test Report No.	URA/22/06/D/S-008	Report Issue Date:	05/07/2022
Service Request form No.	URA/SRF/06/008	Service Request Date	28/06/2022
Sample ID No.	URA/ID/S-22/06/008	Field Data Sheet No.:	URA/FDS/S-22/06/008
Name & Add. of Customer	M/s. Grasim Industries Limited Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	28/06/2022	Date of Testing	29/06/2022
Stack Sampling Attached to	<b>Power Plant 2</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	23/06/2022	Next Cali. Due On:	22/06/2023

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	40
4.	Flue Gas Temperature	°C	120
5.	Exit Gas Velocity	m/s	1.1
6.	Exit Gas Flow	m <sup>3</sup> /h	131338.5


➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	24	<50	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	30	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	33	<50	IS: 11255 (Part 07)

Remarks:  
Opinion & Interpretation (if required):

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

Test Report No.	URA/22/07/D/S-007	Report Issue Date:	03/08/2022
Service Request form No.	URA/SRF/07/007	Service Request Date	07/07/2022
Sample ID No.	URA/ID/S-22/07/007	Field Data Sheet No.:	URA/FDS/S-22/07/007
Name & Add. of Customer	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	07/07/2022	Date of Testing	08/07/2022
Stack Sampling Attached to	<b>Power Plant 1</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	23/06/2022	Next Cali. Due On:	22/07/2023

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	34
4.	Flue Gas Temperature	°C	124
5.	Exit Gas Velocity	m/s	1.3
6.	Exit Gas Flow	m <sup>3</sup> /h	155218.3

➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	18	<150	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	36	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	31	<50	IS: 11255 (Part 07)

Remarks:  
Opinion & Interpretation (if required):

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

Test Report No.	URA/22/07/D/S-008	Report Issue Date:	03/08/2022
Service Request form No.	URA/SRF/07/008	Service Request Date	07/07/2022
Sample ID No.	URA/ID/S-22/07/008	Field Data Sheet No.:	URA/FDS/S-22/07/008
Name & Add. of Customer	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
Date of Sampling	07/07/2022	Date of Testing	08/07/2022
Stack Sampling Attached to	<b>Power Plant 2</b>		
Air Pollution Control Device	ESP (Electrostatic Precipitator)		
Fuel Used	Coal		

➤ **Details of Instrument Used for Monitoring**

Instrument Id No.	UERL-D/AIR/SMK/01		
Inst. Name:	Stack Monitoring Kit, VSS1	Serial Number:	467 DTJ 15
Cali. Date:	23/06/2022	Next Cali. Due On:	22/07/2023

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	35
4.	Flue Gas Temperature	°C	122
5.	Exit Gas Velocity	m/s	1.2
6.	Exit Gas Flow	m <sup>3</sup> /h	143278.4

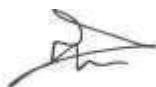
➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	27	<150	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	34	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	38	<50	IS: 11255 (Part 07)

Remarks:  
Opinion & Interpretation (if required):

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

<b>ULR - TC775322000010215F</b>			
<b>Test Report No.</b>	<b>URA/22/08/D/S-007</b>	<b>Report Issue Date:</b>	01/09/2022
<b>Service Request form No.</b>	URA/SRF/08/007	<b>Service Request Date</b>	06/08/2022
<b>Sample ID No.</b>	URA/ID/S-22/08/007	<b>Field Data Sheet No.:</b>	URA/FDS/S-22/08/007
<b>Name &amp; Add. of Customer</b>	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
<b>Date of Sampling</b>	06/08/2022	<b>Date of Testing</b>	08/08/2022
<b>Stack Sampling Attached to</b>	<b>Power Plant 1</b>		
<b>Air Pollution Control Device</b>	ESP (Electrostatic Precipitator)		
<b>Fuel Used</b>	Coal		

➤ **Details of Instrument Used for Monitoring**

<b>Instrument Id No.</b>	<b>UERL-D/AIR/SMK/01</b>		
<b>Inst. Name:</b>	<b>Stack Monitoring Kit, VSS1</b>	<b>Serial Number:</b>	<b>467 DTJ 15</b>
<b>Cali. Date:</b>	<b>23/06/2022</b>	<b>Next Cali. Due On:</b>	<b>22/08/2023</b>

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	34
4.	Flue Gas Temperature	°C	121
5.	Exit Gas Velocity	m/s	1.2
6.	Exit Gas Flow	m <sup>3</sup> /h	143278.4

➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	21	<150	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	30	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	34	<50	IS: 11255 (Part 07)

**Remarks:**

**Opinion & Interpretation (if required):**

\*\*\*\*\* End of Report \*\*\*\*\*

**Checked By:**



**Nikunj D. Patel**  
(Chemist)

**Authorized By:**



**Jaivik S. Tandel**  
(Manager - Operations)



**TEST REPORT  
(STACK MONITORING)**

<b>ULR - TC775322000010216F</b>			
<b>Test Report No.</b>	<b>URA/22/08/D/S-008</b>	<b>Report Issue Date:</b>	01/09/2022
<b>Service Request form No.</b>	URA/SRF/08/008	<b>Service Request Date</b>	06/08/2022
<b>Sample ID No.</b>	URA/ID/S-22/08/008	<b>Field Data Sheet No.:</b>	URA/FDS/S-22/08/008
<b>Name &amp; Add. of Customer</b>	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
<b>Date of Sampling</b>	06/08/2022	<b>Date of Testing</b>	08/08/2022
<b>Stack Sampling Attached to</b>	<b>Power Plant 2</b>		
<b>Air Pollution Control Device</b>	ESP (Electrostatic Precipitator)		
<b>Fuel Used</b>	Coal		

➤ **Details of Instrument Used for Monitoring**

<b>Instrument Id No.</b>	<b>UERL-D/AIR/SMK/01</b>		
<b>Inst. Name:</b>	<b>Stack Monitoring Kit, VSS1</b>	<b>Serial Number:</b>	<b>467 DTJ 15</b>
<b>Cali. Date:</b>	<b>23/06/2022</b>	<b>Next Cali. Due On:</b>	<b>22/08/2023</b>

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	34
4.	Flue Gas Temperature	°C	125
5.	Exit Gas Velocity	m/s	1.4
6.	Exit Gas Flow	m <sup>3</sup> /h	167158.2

➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	30	<150	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	36	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	34	<50	IS: 11255 (Part 07)

<b>Remarks:</b>
<b>Opinion &amp; Interpretation (if required):</b>

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

<b>ULR - TC775322000010917F</b>			
<b>Test Report No.</b>	<b>URA/22/09/D/S-007</b>	<b>Report Issue Date:</b>	03/10/2022
<b>Service Request form No.</b>	URA/SRF/09/007	<b>Service Request Date</b>	03/09/2022
<b>Sample ID No.</b>	URA/ID/S-22/09/007	<b>Field Data Sheet No.:</b>	URA/FDS/S-22/09/007
<b>Name &amp; Add. of Customer</b>	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
<b>Date of Sampling</b>	03/09/2022	<b>Date of Testing</b>	05/09/2022
<b>Stack Sampling Attached to</b>	<b>Power Plant 1</b>		
<b>Air Pollution Control Device</b>	ESP (Electrostatic Precipitator)		
<b>Fuel Used</b>	Coal		

➤ **Details of Instrument Used for Monitoring**

<b>Instrument Id No.</b>	<b>UERL-D/AIR/SMK/01</b>		
<b>Inst. Name:</b>	<b>Stack Monitoring Kit, VSS1</b>	<b>Serial Number:</b>	<b>467 DTJ 15</b>
<b>Cali. Date:</b>	<b>23/06/2022</b>	<b>Next Cali. Due On:</b>	<b>22/09/2023</b>

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	34
4.	Flue Gas Temperature	°C	124
5.	Exit Gas Velocity	m/s	1.4
6.	Exit Gas Flow	m <sup>3</sup> /h	167158.2

➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	16	<150	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	37	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	40	<50	IS: 11255 (Part 07)

<b>Remarks:</b>
<b>Opinion &amp; Interpretation (if required):</b>

\*\*\*\*\* End of Report \*\*\*\*\*

Checked By:



**Nikunj D. Patel**  
(Chemist)

Authorized By:



**Jaivik S. Tandel**  
(Manager - Operations)

**TEST REPORT  
(STACK MONITORING)**

<b>ULR - TC775322000010918F</b>			
<b>Test Report No.</b>	<b>URA/22/09/D/S-008</b>	<b>Report Issue Date:</b>	03/10/2022
<b>Service Request form No.</b>	URA/SRF/09/008	<b>Service Request Date</b>	03/09/2022
<b>Sample ID No.</b>	URA/ID/S-22/09/008	<b>Field Data Sheet No.:</b>	URA/FDS/S-22/09/008
<b>Name &amp; Add. of Customer</b>	<b>M/s. Grasim Industries Limited</b> Grasim Cellulosic Division, Plot No. 1, GIDC, Vilayat Industrial Estate, District – Bharuch, Gujarat, Pin Code – 392012 (India)		
<b>Date of Sampling</b>	03/09/2022	<b>Date of Testing</b>	05/09/2022
<b>Stack Sampling Attached to</b>	<b>Power Plant 2</b>		
<b>Air Pollution Control Device</b>	ESP (Electrostatic Precipitator)		
<b>Fuel Used</b>	Coal		

➤ **Details of Instrument Used for Monitoring**

<b>Instrument Id No.</b>	<b>UERL-D/AIR/SMK/01</b>		
<b>Inst. Name:</b>	<b>Stack Monitoring Kit, VSS1</b>	<b>Serial Number:</b>	<b>467 DTJ 15</b>
<b>Cali. Date:</b>	<b>23/06/2022</b>	<b>Next Cali. Due On:</b>	<b>22/09/2023</b>

➤ **General Stack Observation**

Sr. No.	Description	Unit	Observation
1.	Stack Height	m	125
2.	Stack Area	m <sup>2</sup>	33.1663
3.	Ambient Temperature	°C	34
4.	Flue Gas Temperature	°C	128
5.	Exit Gas Velocity	m/s	1.1
6.	Exit Gas Flow	m <sup>3</sup> /h	131338.5

➤ **Test Parameter Results**

DISCIPLINE – CHEMICAL TESTING			NAME OF GROUP – ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit of measurement	Result	Permissible Limit	Test Method
1.	Particulate Matter	mg/Nm <sup>3</sup>	18	<150	IS: 11255 ( Part 01)
2.	Sulphur Dioxide	ppm	32	<100	IS: 11255 (Part 02)
3.	Oxide of Nitrogen	ppm	38	<50	IS: 11255 (Part 07)

**Remarks:**

**Opinion & Interpretation (if required):**

\*\*\*\*\* End of Report \*\*\*\*\*

**Checked By:**



**Nikunj D. Patel**  
(Chemist)

**Authorized By:**



**Jaivik S. Tandel**  
(Manager - Operations)

**BEIL INFRASTRUCTURE LIMITED**

(Formerly Known As Bharuch Enviro Infrastructure Limited)

29 JANUARY, 2022

To,  
**GRASIM INDUSTRIES LTD. - CHEMICAL DIV. (PLOT NO.1 - 41279)**  
 Plot No.1, GIDC,  
 Vilayat, Taluka Vagra,  
 DIST. BHARUCH,

**Sub: Membership Certificate for Common Incineration Facility**

Dear Sir,

You are a member of our Common Incinerator Facility and your membership No. is **CI/SD/092**. We hereby certify that your booked quantity has increased from **10 MT/Year to 160 MT/Year**.

Thanking you,

Yours faithfully,

**For, BEIL Infrastructure Limited**  
**(Formerly Known as Bharuch Enviro Infrastructure Ltd)**

**AUTHORISED SIGNATORY**

**GRASIM INDUSTRIES LTD. - CHEMICAL DIV. (PLOT NO.1 - #1279)  
//INSIDE BHARUCH DISTRICT//LSI**

**INCINERATION MEMBERSHIP INCREASE QUANTITY AGREEMENT**

**CI/BD/092**

**CONTACT PERSON NAME: MS. SONALI CHAVAN**

**CONTACT PERSON MOB NO: +91- 6359003906**



**INDIA NON JUDICIAL**  
**Government of Gujarat**  
**Certificate of Stamp Duty**

Certificate No.	IN-GJ8005524611856U
Certificate Issue Date	16-Jun-2022 11:35 AM
Account Reference	IMPACT (ADM) 1130020112 BHARUCH GJ-BH
Article D. No. Reference	SUB 11-GJSA1300201105523212807076U
Purchaser(s)	VINESH PAVAR
Description of Document	Article 5.31 Agreement (part of service agreement - I & II)
Description	AGREEMENT
Conservation Price (Rs.)	0 (Zero)
First Party	GRASIM IND LTD CHEMICAL DIVISION
Second Party	BEIL INFRASTRUCTURE LTD
Stamp Duty Paid By	GRASIM IND LTD CHEMICAL DIVISION
Stamp Duty Amount (Rs.)	300 (Three Hundred only)



For Grasim Industries Ltd  
 (Chemical Division)



*[Signature]*  
 President & Unit Head  
 Authorized Signatory

0025600955

FOR: BEIL Infrastructure Ltd  
*[Signature]*  
 Authorized Signatory

THIS AGREEMENT is entered at Anklashwar on this 23<sup>rd</sup> day of the month of JANUARY-2022 (2020/2022).

Between

M/s BEIL INFRASTRUCTURE LIMITED (Formerly known as Bharuch Enviro Infrastructure Ltd) having its registered office at plot no 97B-1B GIDC, Anklashwar, Gujarat-393002, a company registered under the Companies Act, 1956 and currently represented by its Vice President Operations: Shri Manoj Patel Age about 48 years (reading of Anklashwar hereinafter referred to as 'BEIL', which expression shall where context so requires or admits or be deemed to include its successors or assignees) of one part

And

M/s GRASIM INDUSTRIES LTD. - CHEMICAL DIV. (PLOT NO.1 - 41279) Private Limited (Proprietor/Partner/Shareholder/Partnership Limited company registered under the ACT 1956, having its registered office/factory at Plot No.1, GIDC, Valayat, Taluka Vagra, Dist-Bharuch and currently represented by its Proprietor/Partner/Authorized Signatory/ Director Shri VIVEK VIJAY BHIDE Age about 57 year, residing At 201, ARNAV NARMADA NAGAR, NR WELSPUN COLONY, DAHEJ BYPASS ROAD, UMREJA, (hereinafter referred to as MEMBER which expression shall where the context so requires or admits or be deemed to include its successors or assignees) of the other part.

AND WHEREAS, the foremost and the sole objective of BEIL is to prevent Environmental Pollution Hazards and to observe the existing laws on environmental and Pollution Control.

AND WHEREAS the MEMBER desires to send its Hazardous Incineration Waste (hereinafter referred to as "INCINERATION WASTE") to the BEIL as per the norms of Gujarat Pollution Control Board (hereinafter referred to as "GPCB") and the BEIL having requisite facilities in this behalf, agrees to receive the Incineration Waste sent by the MEMBER on the terms and conditions stated hereunder which have been mutually agreed to by and between BEIL and the MEMBER.

AND WHEREAS the parties hereto have decided to execute a DEED OF AGREEMENT.

NOW THIS AGREEMENT WITNESSES and it is hereby mutually agreed by and between the parties hereto as follows.

#### 1. DEFINITIONS AND INTERPRETATIONS

- 1.1 'TIME' shall be stated in 'Hours' and shall mean Indian Standard Time.
- 1.2 'DAY' means a period of Twelve (12) consecutive hours beginning at 08:00 Hours and ending at 20:00 hours.
- 1.3 'WEEK' means a period of seven (7) consecutive days beginning from a day.
- 1.4 'WORKING' means a period beginning at 0800 hours on the first day of calendar month and ending at 0800 hours on the first day of succeeding calendar month.
- 1.5 'YEAR' means a period of three hundred and sixty-five (365) consecutive days or three hundred and sixty-six (366) consecutive days when such period includes a twenty ninth (29th) day of February beginning at 0800 hours from a day.
- 1.6 'FINANCIAL YEAR' means a period of three hundred and sixty-five (365) consecutive days or three hundred and sixty-six (366) consecutive days when such period includes a twenty ninth (29th) day of February, beginning at 0800 hours from a day.
- 1.7 The headings of or titles to the clauses in this AGREEMENT shall not be deemed to be part thereof or be taken into consideration in the interpretation or construction thereof or of the AGREEMENT.
- 1.8 Words importing the singular only also include the plural and vice versa, where the context so requires.
- 1.9 The present agreement is entered into by BEIL for collection and disposal of Hazardous waste of its MEMBERS.
- 1.10 BEIL means BEIL Infrastructure Limited

For Grasim Industries Ltd.  
(C) omicron

FOR BEIL Infrastructure Ltd.

Authorized Signatory

President & Unit Head  
Authorized Signatory

## 2. PERIOD OF AGREEMENT

- 2.1 This agreement shall come in force, effective from the date of signing of the agreement and shall remain effective till any amendment / change is made in this agreement.
- 2.2 The MFMRFR has paid amount of Rs.3,00,000/- (Rupees Three Lakh Only) + Total GST @ 18% (CGST @ 9% and SGST @ 9% (Rs.54,000/-) and previously he had paid Rs. 50,000/- (Total Rs 3,50,000/-) towards the Membership Fees which is non-refundable.
- 2.3 Both the parties hereto agree that the present Agreement shall automatically come to an end in any of the following eventualities
- On expiry of Authorization granted to the MEMBER and the same having not been renewed or the same having been not granted by GPCB
  - On expiry of the present Agreement, where no fresh agreement is signed and executed between parties hereto as mentioned above.
- 2.4 Both the parties hereto further agree that in case of the present Agreement coming to an end owing to any of the aforesaid eventualities, it will be the sole responsibility of the MFMRFR to handle and treat its Incineration Waste in accordance with the relevant provisions of law and that BEIL will not be responsible in any manner whatsoever in respect of the Incineration Waste of the MEMBERS.

## 3. OBLIGATION OF THE MEMBERS


- 3.1 While entering into the present Agreement with BEIL, MEMBER shall submit the categories of Incineration Waste and its desire to dispose off the same and that the said categories of Incineration Waste shall be as per those specified in the Schedule to Hazardous Waste (Management and Handling) Rules 2016 or as per any new amendment or rules under the above Act and permitted by GPCB. The MEMBER shall also give true and correct information related to the description, amount, nature and toxicity of the said Incineration Waste as and when called upon by BEIL or State or GPCB as any Committee notified and the provisions of Law.
- 3.2 The MEMBER shall get included in the Authorization from GPCB for permitting the MFMRFR to send its Incineration Waste to BEIL for disposal and that it shall be the responsibility of the MEMBER to get the same renewed from time to time failing which BEIL reserves its right to repudiate the present Agreement.
- 3.3 The MEMBER shall make all the proper and adequate arrangements for keeping accurate records of production and shall keep accurate records of production of each of its products and Incineration Waste generated thereof and send the compiled records to BEIL on the fifth (5) day of the succeeding MONTH, whereupon the BEIL shall send the same to GPCB.
- 3.4 MEMBER shall be required to maintain the record of Hazardous waste to be disposed off at BEIL site. The said records so maintained shall be open for inspection by BEIL or any officer of GPCB, Central Pollution Control Board (CPCB) or any authority of Central and/or State (Ministry of Environment and Forests) or any officer appointed by them.
- 3.5 The MEMBER shall make adequate and necessary arrangements as approved by and to the satisfaction of the BEIL, GPCB or other prescribed Authority under Law for collection and storage of its Incineration Waste at its premises and shall give access to the Dumpers/Trucks/Tractors of BEIL to its storage facility.
- 3.6 The MEMBER shall give an Undertaking to BEIL that during the movement of the Incineration Waste, there shall be no leakage or spillage and that the MEMBER shall take all steps to ensure that such Incineration Waste is properly packed and handled and is brought to the sites of BEIL without any adverse effects to environment and humans which may result from such Waste. In the event of such adverse effects having been caused during the transportation, it shall be the sole liability of the MEMBER. MEMBER has to follow the law/rules/guidelines published by authorities time to time, of transportation of Hazardous chemicals.
- 3.7 Before the Incineration Waste is delivered at BEIL site, the MEMBER shall ensure that the said Incineration Waste is packed and transported in a manner suitable for transportation and that the MEMBER should see that the said waste withstands physical and climatic conditions.

FOR: BEIL Infrastructure Ltd.

  
Authorized Signatory

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For Gubbin Industries Ltd.  
Gubbin Industries Ltd.

  
President & Unit head  
Authorized Signatory



- 3.8 If and when an accident occurs at the BEIL site or during the transportation of Incineration waste the MEMBER availing facility shall immediately report to BEIL and GPCE or Committee about the accident.
- 3.9 The MEMBER shall be bound to accept the rejected incineration waste and if it fails to do so his MEMBER ship will be terminated.
- 3.10 The MEMBER is obliged to maintain to send Vehicles and to dispatch a minimum full load of Incineration waste within two hours.
- 3.11 The MEMBER is obliged to pay in advance to BEIL in cheque (local account) or demand draft.
- 3.12 The MEMBER shall comply with the provisions of Environment (Protection) Act, 1986 and the Rules made there under as also with the conditions of present agreement and that any breach committed there under shall render the MEMBER not eligible for disposing of incineration waste in BEIL.
- 3.13 The MEMBER shall not become MEMBER of such other similar facility without prior written consent of BEIL. In case, the MEMBER is found to have availed MEMBER ship of such other facility BEIL has the right to terminate the MEMBER ship without offering any reason whatsoever.

#### 4. QUANTITY & QUALITY

- 4.1 The Incineration Waste to be sent by the MEMBER to the BEIL shall be as per the categories specified in the schedule to Hazardous Waste (Management and Handling) Rules, 2016 or as per any new amendment or rules under the above Act and permitted by GPCE. Various types of wastes permitted by Gujarat Pollution Control Board vide Authorization given to BEIL will be received for disposal at site.
- 4.2 The following listed wastes will not be accepted by BEIL:
- Waste which is reactive with air, water, lime and methylamine
  - Waste containing Radio Active materials
  - Waste containing Narcotic materials
  - Waste which causes eye irritation
  - Waste which has fumigation
  - Waste which has  $C_2$  oxide
  - Waste which contains volatile substances of significant toxicity
- 4.3 BEIL may return the Incineration Waste in total, if the MEMBERs above mentioned Incineration Waste is found not to be in accordance with the conditions mentioned in clause 4.1 of this AGREEMENT and the decision of BEIL in returning the Incineration Waste of the MEMBER for non-compliance of the provisions of the present clause of the Agreement will be final and it will not be called in question and the MEMBER shall have to pay the extra amount which shall be charged by BEIL for expenditure incurred in returning of the Incineration waste.
- 4.4 BEIL will have full authority to decide whether they will accept MEMBER's waste in Co-processing or not and whether Special Rate will be applicable or not applicable to them if provided.


#### 5. TRANSPORTATION

- 5.1 Transport of incineration waste shall be in accordance with the provisions of Rules issued by the Central Government under Motor Vehicle Act, 1988 and other guidelines issued from time to time and/or subject to the provisions of law for the time being in force.
- 5.2 The MEMBER has to make his own arrangement for transportation of Incineration waste from MEMBER's site to BEIL.

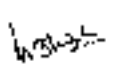
#### 6. BILLING AND PAYMENT OF DISPOSAL CHARGES

- 6.1 The sample of the Incineration Waste will be drawn from the supply and will be got analyzed from laboratory approved by MCA, BEIL and the charges/sample of the

FOR BEIL Infrastructure Ltd.

  
Authorized Signatory

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President of Infrastructure Ltd.  
Authorized Signatory

same will be sent to GPCE, Bharuch. The analysis charges for the same will be borne by the respective MEMBER only.

- 6.2 The MEMBER shall pay to BEIL the charges for disposing of its Inoneration Waste as may be notified by BEIL by cheque or Demand Draft in advance.
- 6.3 BEIL shall charge the MEMBER on the basis of weightment to be done at BEIL disposal site. If the Weigh bridge at disposal site is not working, it will be weighed at outside weigh Bridge approved by BEIL.
- 6.4 The MEMBER shall be bound by the analysis results/reports of BEIL for disposal charges and shall not call the same in question for any reason whatsoever.
- 6.5 The MEMBER shall make advance payment to BEIL for disposal of Inoneration Waste.

#### 7. DEFAULT

- 7.1 If the MEMBER fails and/or defaults in the discharge of any of his obligations under the present Agreement, the BEIL shall have discretion to (i) refuse to accept the Inoneration waste of the MEMBER for disposal without assigning any reason; (ii) notify to the SPCB the name of the MEMBER informing about such default and that its Inoneration waste would not be taken for disposal by DOL on account of such default, (iii) inform the MEMBER that its Inoneration Waste would be deemed to cause pollution and that the MEMBER be liable as polluter under the Pollution Laws, and/or (iv) notify to GPCE to take such action as may be deemed necessary in respect of such MEMBER, including closure of its industrial undertaking/unit.
- 7.2 BEIL reserves its right to accept or refuse MEMBERSHIP in event of MEMBER committing any breach/violation of the conditions of the present Agreement or any provisions of Law/Acts/Rules for the time being in force. BEIL reserves its right to suspend/cancel the MEMBERSHIP for such period as it deems fit without giving any reasons or prior notice.
- 7.3 Where an offense under the Environment Protection Act has been committed by the MEMBER or is attributable to any neglect on the part of the MEMBER which shall include its Director, Manager, Secretary, Officer, Partner, etc. and if such MEMBER is guilty of the offense or is liable to be prosecuted against and punished against and punished accordingly in such prosecution or legal proceedings shall be against BEIL for the offense committed by its MEMBER.
- 7.4 BEIL reserves its right to issue a show cause notice to the MEMBER if it is of the opinion that the MEMBER has contravened the provisions of law/conditions of the present Agreement requiring the MEMBER to remedy the contravention or as the cause may be, within a specific period of time. The said notice served shall specify the measures to be taken by the MEMBER in remedying the said contravention.
- 7.5 BEIL shall inform the Gujarat Pollution Control Board/GPCB of the suspension of any MEMBER.
- 7.6 The suspension/termination shall be revoked only at sole discretion of BEIL after it is satisfied that its conditions have been met.


#### 8. TRANSFER OF RIGHTS

- 8.1 BEIL may at any time transfer or assign its rights and obligations under the AGREEMENT to any other company or business concern by giving notice in writing to the MEMBER. Upon such transfer or assignment, only the transferee or assignee shall be liable for the obligations herein contained.

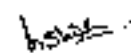
#### 9. INDEMNITIES

- 9.1 The MEMBER shall be deemed to be in exclusive possession and control of the said Inoneration Waste and shall be fully liable and responsible for its arrangements, appliances and properties of the time it receives BEIL. Accordingly the MEMBER hereby covenants and agrees to fully protect, indemnify and hold the BEIL, its employees, agents & successors and assignees harmless against any and all claims, demands, actions, suits, proceedings and judgments and any and all liabilities, costs, expenses, damages or losses arising out of or resulting from a incidental to or in connection therewith which may be made out against the BEIL or its employees.

FOR BEIL Infrastructure Ltd.

  
Authorized Signatory

FOR MEMBER

  
President & Authorized Signatory

MEMBER its employees, agents or successors and assignees or by third parties on account of damages or injury to property or loss of life resulting from or arising out of the installation, presence, maintenance or operation of the incinerator, waste gases, effluents and properties of the MEMBER.

5.2 It is also agreed by and between the BEIL and the MEMBER that the BEIL is not and shall not be liable in any manner whatsoever due to any negligence and for any reason or otherwise of the MEMBER in disposing its Incineration Waste at the factory site of the MEMBER or at any other place.

#### **10. FORCE MAJEURE**

10.1 In case of any force majeure, BEIL shall not be saddled with any liability (contingent or otherwise) but in that case, it shall be the sole liability of the MEMBER.

10.2 Both the parties hereto agree that due to change in any laws related to pollution or due to any directive of any Court or Authority, if BEIL is to incur any additional financial burden consequent upon any alteration and/or modification in the site or because of any other reason, then, in that case the MEMBER shall be liable to contribute for the same proportionate to its disposal of Incineration Waste quantity in BEIL site.

10.3 Both the parties hereto agree that in any event of there being order in form of any injunction, stay or otherwise from any Court, SPCB or any other Authority stopping the functioning of the Site or otherwise whereby BEIL becomes unable to accept the Incineration Waste of the MEMBER, BEIL shall not be responsible or made responsible and/or be liable in any manner in that regard and that in such an eventuality, it shall be the responsibility of the MEMBER to get the needful done in respect of disposal of its Incineration Waste.

#### **11. PREVIOUS CORRESPONDENCE**

11.1 All discussions and meetings held and correspondence exchanged between BEIL and the MEMBER in respect of the AGREEMENT and any decisions arrived at therein in the past and before the coming into force of the present AGREEMENT are hereby superseded by the present AGREEMENT and no reference of such discussions or meetings or such correspondence shall be entertained by either BEIL or the MEMBER for interpreting the present AGREEMENT or otherwise.

#### **12. LAWS GOVERNING THE AGREEMENT**

12.1 The present Agreement shall be subject to Indian Laws, rules and regulations and notifications etc. issued under such laws.

#### **13. AMENDMENTS**

13.1 BEIL may at any point of time make suitable changes in the present Agreement after serving a notice to the MEMBER.

#### **14. TERMINATION OF AGREEMENT**

14.1 BEIL has the unrestricted right to terminate the AGREEMENT and conduct its all pending claims from the deposit paid by the MEMBER.

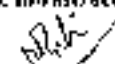
14.2 This AGREEMENT can be terminated by either party after giving a written notice of at least 90 days to the other party. If the cancellation is requested by the MEMBER, the provision relating to minimum charges shall be applicable, also during the notice period.

#### **15. PACKING**

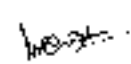
15.1 Incineration Waste should be sent in proper packing and below improper packing is not allowed.

- 1) MS DRUMS are found composite and dented
- 2) HDPE and MS Drums are found open OR Without proper capping.
- 3) HDPE and MS Drums are found broken
- 4) HDPE and MS Drums are found with bubbles on outer surface
- 5) Jumbo bags are over stacked in vehicle

FOR BEIL Infrastructure Ltd

  
Authorized Signatory

For Orissa Industries Ltd  
10/10/2018

  
President & General  
Authorized Signatory

- 6) Hazardous waste are leakage from the HDPE Drums or MS DRUMS.
- 7) Waste materials spillage in the vehicle.

**16. JURISDICTION**

16.1 The present Agreement M/s. BEIL and the MEMBER mutually agree that the Civil Court at Ankleshwar/Bharuch only shall have jurisdiction for all the disputes/differences arising out of this agreement.

16.2 The address of the parties hereto unless changed by written notification to be given at least 15 days in advance by registered letter prior to proposed date of change, shall be as follows:

**ADDRESSES OF PARTIES :**

**M/S. BEIL INFRASTRUCTURE LIMITED**  
 (Formerly Known as Bharuch Enviro Infrastructure Ltd):  
 PLOT NO 9701 to 9716,  
 GIDC, ANKLESHWAR  
 GUJARAT 393002.

**THE MEMBER:**

IN WITNESS WHEREOF the parties hereto acting through their properly constituted representatives have set their hands to cause this AGREEMENT signed and executed in their respective names and on their behalf.

For and on behalf of the  
**BEIL INFRASTRUCTURE LIMITED**  
 FOR, BEIL Infrastructure Ltd.

For & on behalf of the  
**MEMBER (Chemical Division)**  
**For Grasim Industries Ltd.**

Authorized Signatories

President & Unit Head

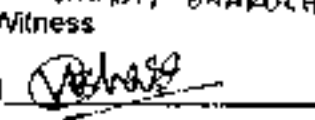
Name: Shri Manoj Patel  
 Designation: Vice President Operations  
 Address: Plot No 9701-9716,  
 Ankleshwar, Pin: 393 002

Name : VIVEK BHIDE  
 Designation : UNIT HEAD & PRESIDENT  
 Address : GRASIM INDUSTRIES LTD, CHEMICAL DIV., PLOT NO-1, GIDC, INDUSTRIAL ESTATE, VAGRA, BHARUCH

Witness

Witness

1. 

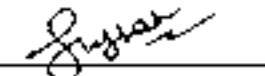
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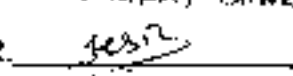
Name: Rajeev Mathur

Name: VIKAS VALAND

Address:  
 Plot No.9701-9716,  
 GIDC, Ankleshwar.

Address: GRASIM INDUSTRIES LTD, CHEMICAL DIVISION, PLOT NO. 1, GIDC IND. EST. VAGRA, BHARUCH

2. 

2. 

Name: Siddharth Shah

Name: HETA PURANI

Address:  
 Plot No.9701-9716,  
 GIDC, Ankleshwar.

Address: (GRASIM INDUSTRIES LTD) (CHEMICAL DIVISION), PLOT NO. 1 (GIDC INDUSTRIAL ESTATE, TA. VAGRA, BHARUCH.



REF: BEIL/ANK/2022

02<sup>ND</sup> MARCH, 2022

To,  
**GRASIM INDUSTRIES LTD. - CHEMICAL DIV. (PLOT NO.1 - 41279)**  
Plot No.1, GIDC,  
Vilayat, Taluka Vagra,  
Dist-Bharuch.

**Sub: Membership Certificate for Common Solid Waste Disposal Facility**

Dear Sir,

We hereby certify that you have become member of the common Solid/Hazardous Waste Disposal Facility developed by For, BEIL INFRASTRUCTURE LIMITED (Formerly Known as Bharuch Enviro Infrastructure Ltd),, at GIDC, DAHEJ. You have booked solid waste quantity **31000 MT/ Year** (Original Booked Quantity **24300 MT** + Increased Quantity **6700 MT**). Your Membership No. is **OTH/133**.

- 1) **Total TSDF Capacity of BEIL Dahej: 1900000 MT**
- 2) **Total Consented Capacity: 1900000 MT**
- 3) **Total Occupied Capacity: 0737129.63 MT**
- 4) **Spare Capacity: 1162870.37 MT**

Thanking you,

Yours faithfully,  
**For, BEIL Infrastructure Limited**  
**(Formerly Known as Bharuch Enviro Infrastructure Ltd)**

  
**AUTHORISED SIGNATORY**

Times of India

dt. 08.06.2011



**Grasim Cellulosic**

A Unit of Grasim Industries Ltd

Plot No. 1, GIDC Vilayat Dist: Bharuch, (Gujarat)

Environment Clearance by State Level Environment  
Impact Assessment Authority, Gujarat

Vide letter No SEIAA/GUJ/EC/1(d)/4(d)/25/1/96/2011, dated 30.05.2011, which was received on 07.06.2011, the State Level Environment Impact Assessment Authority Gujarat has accorded Environmental Clearances for the expansion of Chlor alkali plant with Caustic Soda plant 219000 TPA and Allied Products Liquid Chlorine Hydrochloric Acid 397100 TPA Hydrogen 61320000 Nm<sup>3</sup>/Year Chlorosulphonic Acid 73000 TPA Sulphonic Acid 36500 TPA, Carbon Disulphide 31025 TPA, Liquid Poly Aluminium Chloride 146000 TPA Staple Bleaching Powder 36500 TPA, Chlorinated ParaNin 36500 TPA Aluminium Chloride 14600 TPA with additional 60 MW power plant

Copies of the clearance letter are available with GPCB and may also be seen at website of SEIAA/SEAC/GPCB

**Grasim Industries Ltd**

Registered Office: PO: Biniagram,  
Nagda - 456 331, Dist. Ujjain (M.P.)

# Gujarati Lok Satta

DT. 07.06.2011

ADHYA BIRLA



Grasim Cellulosic

પોસ્ટ નં. ૧, ડી.આઈ.પી.સી., વિશાલ, કા.ભરૂચ (ગુજરાત)  
રાજ્ય સ્તરીય પર્યાવરણ પ્રબલ આલોકન પ્રવિહરક દ્વારા  
પર્યાવરણીય પરવાનગી, ગુજરાત

પા.નં. ૧૫૬૬ - SEIAA/GUJ/EC/3/d) વાજા & 5(0 96/2011) નામીય  
30.04.2011 ના મધ્યે નારીય - 2010-2011 ના રાજ્ય સ્તરીય પરવાનગી પ્રબલ  
આલોકન પ્રવિહરક-101 ગુજરાત સરકાર વિશાલ નગર ક્ષેત્ર ના સ્તરીય પ્રવાનગી પ્રવાનગી  
સેવા આનંદ ૧ ૨૦૦૦૦ ટન પ્રતિ વર્ષ તથા સેવા સેવા સેવા સેવા સેવા સેવા સેવા સેવા સેવા  
એસી ૧૨૦૦૦ ટન પ્રતિ વર્ષ, કાર્બોન ૨૫ ૨૦૦૦૦ ટન પ્રતિ વર્ષ, એસી  
ન્યુનિટ ૧૦૦૦૦ ટન પ્રતિ વર્ષ, એસી ૨૦૦૦૦ ટન પ્રતિ વર્ષ, એસી ૨૦૦૦૦ ટન પ્રતિ વર્ષ  
પ્રબલ પ્રબલ ૩૦૦૦૦ ટન પ્રતિ વર્ષ, તરક (બીકો): પેલી એલ્યુમિનમ  
કોરોઈડ ૧૦ ૨૦૦૦ ટન પ્રતિ વર્ષ, સેપ્સ બ્લોકીંગ પાઈડર ૩૦ ૫૦૦ ટન પ્રતિ વર્ષ,  
કોરોઈડ પેસીંગ ૩૦ ૫૦૦ ટન પ્રતિ વર્ષ, એલ્યુમિનમ કોરોઈડ ૧૦ ૨૦૦૦ ટન  
પ્રતિ વર્ષ તથા પાવર પ્લાન્ટ ૩૦ MW ના વિશાલ આનંદ છે.

પરવાનગી પામી નેવ GPCB નેલ આઈડર SEAA/SEAG/GPCB પર  
પ્રાપ્ત/મમરી.

સતીય ઈન્ડસ્ટ્રીઝ લિમિટેડ

રજી.ઓફિસ: પી.એ.વિરલાગામ,

વાગદા - ૪૫૬ ૩૩૧, કા.ઉજ્જૈન (મધ્યપ્રદેશ)

**PUBLIC NOTICE**  
**ENVIRONMENTAL CLEARANCE**

It is hereby informed that the State Level Environment Impact Assessment Authority, ParyavaranBhavan, Sector 10 - A, Gandhinagar - 382 010, Gujarat vide its letter Ref. No. SEIAA/GUJ/EC/5(f)/90/2014 dated 01/08/2014 has accorded Environment Clearance to M/s. Grasim Cellulosic (A unit of Grasim Industries Ltd.) for installation of Chloromethanes and Fatty Alcohol production unit at Plot No. 1, GIDC Industrial Estate, Vilayat, Dist: Bharuch, Gujarat as per applicable provisions of the S.O. 1533, EIA Notification, 2006. Copies of the clearance letters are available with Gujarat Pollution Control Board and may also be seen on the website of SEIAA/SEAC/GPCB.

Sd/-

**M/s. Grasim Industries Ltd.**

Plot No.1, GIDC Industrial Estate, Vilayat, Dist: Bharuch,  
Gujarat



## જાહેર નિવેદન

### પર્યાવરણ મંજૂરી

આ સાથે જણાવવામાં આવે છે કે 'સ્ટેટ લેવલ એન્વિરોમેન્ટ ઇમ્પ્રોવમેન્ટ ઓથોરિટી' પર્યાવરણ ભવન સેક્ટર ૧૦-અ ગાંધીનગર- ૩૮૨ ૦૧૦, ગુજરાત દ્વારા તેઓના પત્ર ક્રમાંક SEIAA/GUJ/EC/5(f)/૯૦/૨૦૧૪ તારીખ ૦૧/૦૮/૨૦૧૪ ના રોજ મેસર્સ ગ્રાસીમ સેલ્યુલોસિક (યુનિટ ઓફ ગ્રાસીમ ઇન્ડસ્ટ્રીઝ લિમિટેડ) ના પ્લોટ નં. ૧, જી.આઇ.ડી.સી., ઇન્ડસ્ટ્રીઅલ એસ્ટેટ, વિલાયત, જી.ભરુચ, ગુજરાતમાં ક્લોરોમીથેનસ અને ફેટી આલ્કોહોલના ઉત્પાદન માટેની યોજનાને S.O. ૧૫૩૩, EIA નોટિફિકેશન ૨૦૦૬, જાહેરનામા મુજબ એન્વિરોમેન્ટલ ક્લીઅરન્સ માટે અનુમતિ આપવામાં આવે છે. ઉપરોક્ત અનુમતિની નકલ ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડની કચેરીમાં ઉપલબ્ધ છે. અને સદર અનુમતિને SEIAA/SEAC/GPCB ની વેબસાઇટ પર પણ મુકવામાં આવેલ છે.

સહી/-

મેસર્સ ગ્રાસીમ ઇન્ડસ્ટ્રીઝ લિમિટેડ

પ્લોટ નં. ૧, જી.આઇ.ડી.સી., ઇન્ડસ્ટ્રીઅલ એસ્ટેટ, વિલાયત, જી.ભરુચ, ગુજરાત

**IN THE PIPELINE:** This will come into existence from April 1, 2017, when GST will be implemented. There are some 4.00 lakh commercial taxpayers in the state.

In the second phase, the remaining taxpayers will be migrated to GST. We are that to get all traders migrated to GST, the government has decided to carry out an awareness programme. He

said that without a GST number it will be difficult to carry out the trade in the state. He said a helpline and helpline numbers have been set up to assist trader with provisions in his budget.

The deputy chief minister said that without a GST number it will be difficult to carry out the trade in the state. He said a helpline and helpline numbers have been set up to assist trader with provisions in his budget.

## ENTERTAINMENT



# Brain dead man gives new life to four, vision to two

Three of four organs and eyes which he had donated to two more. A special team from Mumbai arrived in Bhanuagar via chartered plane and took the deceased organs to a Mumbai hospital.

Further transportation of the organs, after being packed in a special 'green corridor' for non-biochemists from the hospital to airport. Doctors up clean team distribution of organs to receiving and transplant centres in a vital for successful organ transplantation.

This was the first case in Maharashtra where a brain dead man donated organs to four people. Family readily agreed to donate his organs for the liver and two eyes. Dr Rajendra Kulkarni, MPT, member of the board, said he was severely injured when he was hit by a truck in Maharastra on November 11.



The heart was transplanted into the body of Babusha Choudhary, a farmer from Solapur in Maharashtra.



He had four organs which he donated to four people. Family readily agreed to donate his organs for the liver and two eyes. Dr Rajendra Kulkarni, MPT, member of the board, said he was severely injured when he was hit by a truck in Maharastra on November 11.

# Dalit man crushed by SUV

A 65-year-old Dalit man, Parvati Anand, was crushed under an SUV illegally by one of the two people involved in a road rage fight over some petty issue.

Typically, when on the road, a Dalit man is treated with respect. But on the road to a temple in Maharashtra, he was crushed under an SUV.

The driver of the SUV was arrested and charged with the offence of causing death by negligence. The case is being handled by the court in Mumbai.

# State govt plans ordinance to alter panchayat poll norms

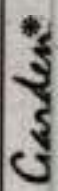
Gandhinagar, Gujarat government has decided to introduce a new ordinance amending the Panchayat Act to alter provisions regarding elections in five village panchayats. The draft ordinance has been prepared by the panchayat department and sent for the approval of Government of India.

After the ordinance is approved, the Gujarat cabinet will approve the draft and send it to the president. An officer close to the development said that the ordinance aimed at two key amendments related to

## PUBLIC NOTICE

This is to inform public at large that the State level Environment Impact Assessment Authority, Panchayati Raj, Sector 10 - A, Gandhinagar - 382 010, Gandhinagar, Gujarat, Gujarat, India, under the provision of the Environmental Protection Act, 1986, has approved the proposal for the establishment of a Synthetic Organic Chemicals and Causal Soda Plant (Phase I), GDC Industrial Estate, Valsad District, Gujarat. The details of the proposal are given in the notice dated 28/10/2016. Copies of the assessment report may be seen on the website of SEAA/GDCA/GDC.

SEAA  
M/s. GDC Industries Ltd., Valsad, Dist. - Bharuch, Gujarat.  
Plot No.-3, GDC Industrial Estate, Valsad, Dist. - Bharuch, Gujarat.



in the first phase. This will come into existence from April 1, 2017 when GST will be implemented. There are some 4-5 lakh commercial tax payers in the state.

In the second phase, the

remaining taxpayers will be migrated to GST. He said that to get all traders migrated to GST, the government has decided to carry out an awareness programme. He said that without a GST number, it will be difficult to carry out the trade in the state. He said a handbook and billboards have been set up to assist trader with provisions in the budget.

The deputy chief minister said society, GST, the state will be allowed to also compensation and if a state wants to give a subsidy it will have to make special provisions in the budget.

# Brain dead man gives new life to four, vision to two

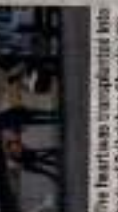
Tamil News Network

Boydell, 69, died of a heart attack in 2011. His family members were informed that he was brain dead. They were given the option to either bury him or donate his organs to help others.



Boydell, 69, died of a heart attack in 2011. His family members were informed that he was brain dead. They were given the option to either bury him or donate his organs to help others.

Four people received the heart from Boydell. Two of them were given a new vision. The heart was transplanted into the body of a 40-year-old man who had lost his vision.



The heart was transplanted into the body of a 40-year-old man who had lost his vision.

Boydell's organs were donated to four people. Two of them were given a new vision. The heart was transplanted into the body of a 40-year-old man who had lost his vision. The other two people received the heart and are now recovering in the hospital.

# Dalit man crushed by SUV

A 40-year-old Dalit man, Pravin Jadhav, was crushed under an SUV allegedly by one Abhishek Thapliya in a heated video game fight on Tuesday night after a fight over some party items.

"Thapliya, who is on the right, is a member of Godwin's village but their local. He had some items to sell but a fight broke out between them and Jadhav was crushed under the SUV.

The police are investigating the case. The incident occurred in a village near Mumbai. The SUV was driven by Thapliya and was carrying several items.

The police are investigating the case. The incident occurred in a village near Mumbai. The SUV was driven by Thapliya and was carrying several items.

### PUBLIC NOTICE

This is to inform public at large that the State level Environment Impact Assessment Authority, Prerangan, Bhuvan, Sector 10 - A, Gandhinagar - 382 010, Gujarat vide its letter No. SEAA/01/2016/04/02/2016 Dated 28/10/2016 has accorded Environment Clearance to M/s. Gajani Industries Ltd. (Commercial Division) for the proposed expansion of Synthetic Organic Chemical and Caustic Soda plant at Plot No.-1, CIDCO Industrial Estate, Vhayat Dist.- Bhavnagar. Gujarat per per applicable provisions of the S.O.1503 EM Notification 2006. Copies of the clearance letters are available with the Gujarat Pollution Control Board and may also be seen on the website of SEAA/01/2016/04/02/2016.

Sd/-  
M/s. Gajani Industries Ltd.,  
Plot No.-1, CIDCO Industrial Estate, Vhayat, Dist.- Bhavnagar, Gujarat.

### State govt plans ordinance to alter panchayat poll norms

Gandhinagar: Gujarat government has decided to introduce new ordinance amending the Panchayat Act to alter provisions regarding elections in the village panchayats. The draft ordinance has been prepared by the department of panchayats and sent for the approval of Governor O.P. Kohli. Sources said that the ordinance will be approved by the state cabinet.

After the ordinance's approval, the Gujarat cabinet will approve the draft and send it to the President. An official close to the development said that the ordinance is aimed at two key amendments related to

## ENTERTAINMENT



### MASTHEAD: STUNNING UP

IN TO THE GREAT ESCAPE MOVIE... STRANGE

FOR STRANGE... IN TO THE GREAT ESCAPE MOVIE... STRANGE

FOR STRANGE... IN TO THE GREAT ESCAPE MOVIE... STRANGE

FOR STRANGE... IN TO THE GREAT ESCAPE MOVIE... STRANGE



© Garden

સાચું જીવન જીવવાની જો એટીએમમાં

નક્કા જમા કરી આશુ કરે તો બેંકોમાં  
ભીડ ઓછી થવાની શક્યતા છે પરંતુ  
કેમ નક્કા એટીએમમાં જમા કરાવ્યા  
નાથી એ શાખા-મંડળોને સમજવામાં  
આવતું નથી

પર્યાપ્ત કરકાશ પડી  
બેંકોમાં મજા સુધી  
કેવો જાઓ નહીં  
તેની સીધી સ્વર  
નવા એટીએમ  
શરૂઆત  
ની એટીએમમાં  
ની જ્યાં આવી  
સ્વભાવી ધરૂ થઈ  
કિત કરાઈ હતી.  
કા 40 ટકા જે  
કે તેમાં પણ કેમ  
શક્યતામાં ખાલી  
ટીએમમાં કેમ  
શક્યતામાં ખાલી  
નો એટીએમમાં  
પોઝિટ કાર્ડરત  
કેકે એ પોતાના  
કાર્ડ જોડ્યો હતો  
1મ જમા કરાવી  
કરી રૂ. 49000  
કિટ કરી રાહો.  
મળ્યાદેનાં ખર્ચ  
માં કરાવવા જાય  
નો માલે સજીવ  
થી તેઓ પરત  
નીકળ્યાં હતાં.

સેટ તેમને રક્તમાં જ ગોજરો  
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સામોદાઈ...

**લેસણું**



સ્વ. ઘણામાં ઘણામાં પટેલ

સ્વ.દા. ૦૯-૧૧-૨૦૧૬

સનેત જણાવવાનું કે આમણ પૂજ્ય વિનાયક ઘણામાં પટેલ  
તા.૦૯-૧૧-૨૦૧૬ને સુવાસના રોજ દેવલોક પ્રયાણ છે.  
અમુક ગણતરી થઈ.

સદગુણી લેસણું : તા.૧૭-૧૧-૧૬ને સુરવારના રોજ  
સવારે ૧૨.૦૦ કલાક થી ૧.૦૦ કલાક દરમિયાન ગાંધીજી છે.  
સંકલ્પ : ૨૨, શુભાખ પાર્ક સોસાયટી, વિરાર નગર પાલે,  
અંકલેશ્વર.

**વિદ્યુત ઘનુભાઈ પટેલ**  
**વિદેશ ઘનુભાઈ પટેલ - પ્રદીપ ઘનુભાઈ પટેલ**  
**નિલેખ વિનુભાઈ પટેલ**

**ખાટર નિવૃત્તિ**

આ સાથે ખાટર ખાલાને મિટી કરવામાં આવે છે કે જે રેટર લેવલ  
સેન્ટ્રાલિઝેશન પ્રોપેટર સંબંધિતી” ખાલારત ભવન, સેક્ટર ૧૦૬,  
સાંઈબનર-૩૮૨ ૧૧૦ ખાલા દેવોભા પવસાઈ સ્લોડઃ/૦૫૫/૯૮/૦૫૫/ ૦૨૫  
સાથે સહીયા: ૨૨/૧૦/૨૦૧૬ ના રોજ ભેરાર્ક સાતિમ કમ્પ્યુટીઝ રિપોર્ટિંગ  
(સાંઈબનર કમ્પ્યુટીઝ) ના પોર્ટ નં.૧, ડા.આઈ.ટી.સી. પંચરતીયા સેક્ટર,  
વિરારત, અ.ભવન, સુવાસના પ્રસન્નવિત સિ.સી.સી. સોફ્ટવેર કેમ્પસમાં  
આને સેન્ટ્રીયલ મોડર ઘાટ ઉપવાસના વિનુવિકાસ તરફની સંજ્ઞાને ૧૦.૧૧.૧૬  
દા. નોટીફિકેશન રૂ.૦૦૬ મહેસાણા મુજબ સેન્ટ્રાલિઝેશન કમ્પ્યુટીઝ તરફ  
અનુમતિ આપવામાં આવેલ છે. ઉપરોક્ત અનુમતિની નકલ સુરતના પ્રમુખ  
વિનુવત સોફ્ટવેર કમ્પ્યુટીઝ ઉપવાસ છે અને સેટ અનુમતિનું સંક્રમણ  
ઉપર નોંધાયેલ પર પાટ મુકાઈ આવેલ છે.

સહી/-

**ભેરાર્ક સાતિમ કમ્પ્યુટીઝ રિપોર્ટિંગ**

સેક્ટર ૧૦૬-૧, ડા.આઈ.ટી.સી. પંચરતીયા સેક્ટર, વિરારત, અ.ભવન, સુવાસના













GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION  
(A GOVT. OF GUJARAT UNDERTAKING)  
Office of the Dy. Executive Engineer (DRG)  
1st FLOOR, NARMADA COMM. COMPLEX,  
STATION ROAD, PANCHBATTI,  
BHARUCH -392001 PH:242432/244184 FAX:(02642)241902  
Mail ID: gidcbharuch@rediffmail.com

NO: GIDC/BRH/DEE (DRG)/ 654

Date: 04/08/2018

To,  
M/s Grasim Industries Limited,  
Plot No. 1, GIDC,  
Vilayat, Ta.-Vagra,  
Dist- Bharuch-392140

**Sub : Assurance letter to discharge of 23.00 MLD industrial effluent by M/s Grasim Industries Limited Plot no. 1, Vilayat.**

Ref- 1. Your Letter Dated. 29/11/2017  
2. Approved Note by SE (CG) dated 25/07/2018

Dear Sir,

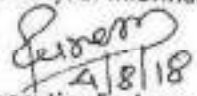
Vide letter under referenced letter no 1, you have demanded an assurance letter to discharge of 23.00 MLD industrial effluent.

You have paid Drainage contribution charges for 19.40 MLD effluent Quantity in Vilayat drainage Pumping Station and your Drainage connection is released for 12.48 MLD.

In this regard, this office assures that 23.00 MLD industrial effluent can discharge by M/s Grasim Industries Limited Plot no. 1 Vilayat, subject to the following conditions:

1. Current Available Discharge Quantity in Vilayat Drainage Pumping Station.
2. Availability of spare quantity in design capacity of sewer line.
3. The allottee pays the contribution and other applicable charge for the said quantity industrial effluent.
4. The allottee has to make their own provision to discharge industrial effluent in to GIDC's sewer line or in to collection well if the Pipe line Size is more than Existing Network Pipeline.
5. Existing effluent discharge Quantity would be assured after taken the approvals from the competent authority.
6. The effluent discharge connection shall only be released after the submission of GPCB consent as per the approved the quantity.

This is for your information Please.

  
Dy. Executive Engineer (DRG),  
GIDC Bharuch.



GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION  
(A Govt. of Gujarat Undertaking)  
Udhyog Bhavan, Block No.3, 4 & 5, Sector-11,  
Gandhinagar-382 017, Tele: 079-23250571

---

No. GIDC/ENG/CE/34

Date: 09-10-2017

To,  
Shri Ashish Garg,  
Unit Head, Grasim Industries Ltd,  
Vilayat Industrial Estate,

Sub: Up-gradation of GIDC Infrastructure to support Proposed Expansion of Viscous Staples Fibre at Vilayat  
Ref: Your letter dtd 03-10-2017 and subsequent meeting with the Hon'ble VC & MD, GIDC on 4<sup>th</sup> Oct. 2017.

Dear Sir,


We are glad to know that M/s Grasim is planning to invest Rs. 4000 crore in VSF and Caustic Chlorine capacity expansion at the existing Vilayat Plant. We welcome your decision and GIDC shall support M/s Grasim in expansion of the plant by upgrading the water supply as well as effluent discharge infrastructures.

GIDC has already the necessary permission from the government to draw water to from Narmada River as well as Narmada Main Canal, to meet the demand. GIDC has already completed the 25 MGD Narmada river based Water Supply Scheme while the 50 MGD Water Supply Scheme based on the Narmada Main Canal is on the verge of completion which is expected to be completed by December 2017. Once 50 MGD Water Supply Scheme is completed the issue of Saline Water Ingress in the Narmada River shall be mitigated as the major water shall be conveyed through the gravity pipe line laid from the Narmada Main Canal to Dahej and GIDC shall be able to supply 55-66 MLD of Water to M/s Grasim.

While for conveyance of the treated effluent, GIDC is planning to lay a new effluent disposal line of adequate capacity and shall make necessary arrangements to take care of the effluent from the Grasim by December 2019.

Thanking You,

Yours faithfully,

  
(B.C. Warli)  
Chief Engineer,  
GIDC, Gandhinagar.

# GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION



(A Govt. of Gujarat Undertaking)  
Office of the Superintending Engineer (CG)  
1<sup>st</sup> Floor, Narmada Commercial Complex,  
M.G. Road, Ramnagar, Bhavnagar-372001  
Phone: (02642)242432/244383  
FAX: (02642)241902

Ref:- NO. No GIDC/SE/CG/BRH/1236

Dated:- 29/12/2018

To,  
M/s Gram Industries Limited  
Plot No. 1, Valsad Industrial Estate

Sub:- 1) Increase in quantity of effluent discharge from 12.48 MLD to 19.40 MLD  
2) Increase in quantity of water supply from 15.90 MLD to 25 MLD

Dear Sir,

In this regard it is to inform you that GIDC has already released 12.48 MLD effluent discharge quantity as per prevailing policy of the Corporation. Now as approved by GPCB, you have paid the drainage contribution charges to GIDC for additional quantity i.e. 19.40 MLD (-) 12.48 MLD i.e. for 6.92 MLD. In view of this, you are requested to apply online for new drainage connection for ultimate quantity of 19.40 MLD.

Similarly for water supply GIDC has already released 15.90 MLD water supply as per prevailing policy of the Corporation. Now as approved by GPCB, increase in quantity of water supply from 15.90 MLD to 25.00 MLD is approved in principle. In view of this, you are requested to apply online for water supply connection for ultimate quantity of 25.00 MLD.

Thanking you  
Yours faithfully,

  
Superintending Engineer (CG)  
GIDC, Bhavnagar

Copy submitted w.r. to-  
The Chief Engineer, GIDC, Gandhinagar for kind information please.

Copy to:-  
The Executive Engineer, GIDC, Bhavnagar  
The Dy. Executive Engineer (Org - Ws), GIDC, Bhavnagar



No. GIDC/PROJ/MKT/GRASIM/575

December 6, 2006

M/s. Grasim Industries Limited  
B-4, Aditya Birla Centre,  
S.K. Ahire Marg,  
Worli,  
Mumbai 400 030. (Fax No.022-66525832)

**Kind attention Shri S.K. Saboo, Group Executive President**

Dear Sir,

**Sub.: Offer-cum-Allotment of Plot in Vilayat Ind. Estate**  
**Ref: Our letter no. GIDC/RM/ANK/ALT/210 dt.9.11.2006**


Please refer to your letters dt.28.11.2006, 4.12.2006 and 6.12.2006 as also the personal discussions Grasim team had with you on 2.12.2006 and 4.12.2006.

We are pleased to send herewith a statement capturing the gist of decisions taken on various request made by you.

You have informed us that you received our letter dt.9.11.2006 on 13.11.2006. Accordingly, you are required to make payment of the offer amount and comply with other terms & conditions of the offer before 12.12.2006. Kindly note that the bulk area discount scheme has been discontinued with effect from 1.10.2006. We shall have to withdraw the bulk area discount given to you in case the payment is not received within the stipulated time.

Thanking you,

Yours faithfully,

  
(P.K. Pujari)  
Vice Chairman & Managing Director

Encl.: As above

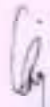


Vilayat Estate allottee - M/s. Grasim Industries Limited

Sr. No.	Issue	GIDC's reponse																												
1.	<p><b>Land Cost -</b></p> <ul style="list-style-type: none"> <li>- Initial understanding 30% discount</li> <li>- Actual working out 28.4%</li> </ul> <p>Request - To consider giving 30% discount</p>	<p>Bulk Area Discount scheme since discontinued from 1.10.2006.</p> <p>GIDC cannot consider the request for flat rate of discount.</p>																												
2.	<p><b>Water -</b></p> <p><b>Quantity -</b></p> <ul style="list-style-type: none"> <li>- Allotted 12.21 MLD against 30 MLD.</li> <li>- First Phase minimum requirement 15.60 MLD (on an increasing spread of 5 years)</li> </ul> <p>Request - To revise quantity to 15.60 MLD within same allotment price.</p> <p><b>Minimum Charges -</b> Minimum Charges for 70% of the demand quantity payable after 3 years from the date of allotment.</p> <p>Request - To revise 3 years to 5 years.</p> <p><b>Variable Charges -</b></p> <p>Request - Should be charged on actual consumption basis.</p>	<p>Quantity of water allotted 15.60 MLD.</p> <p>Grasim's water requirement staggered as follows :-</p> <table border="0"> <tr> <td>1st Year</td> <td>-</td> <td>4</td> <td>MLD</td> </tr> <tr> <td>2nd year</td> <td>-</td> <td>4</td> <td>MLD</td> </tr> <tr> <td>3rd Year</td> <td>-</td> <td>4</td> <td>MLD</td> </tr> <tr> <td>4th year</td> <td>-</td> <td>4</td> <td>MLD</td> </tr> <tr> <td>5th year</td> <td>-</td> <td>6</td> <td>MLD</td> </tr> <tr> <td>6th Year</td> <td>-</td> <td>12</td> <td>MLD</td> </tr> <tr> <td>From 7th Year</td> <td>-</td> <td>15.6</td> <td>MLD</td> </tr> </table> <p>Commitment charges will be levied on the basis of above demand after the period of utilization as per GIDC's policy. GIDC's commitment for supply of water would be only for quantities as indicated above. Water will be provided on completion of 25 mgd. w/s scheme for Dahej by June, 2007.</p>	1st Year	-	4	MLD	2nd year	-	4	MLD	3rd Year	-	4	MLD	4th year	-	4	MLD	5th year	-	6	MLD	6th Year	-	12	MLD	From 7th Year	-	15.6	MLD
1st Year	-	4	MLD																											
2nd year	-	4	MLD																											
3rd Year	-	4	MLD																											
4th year	-	4	MLD																											
5th year	-	6	MLD																											
6th Year	-	12	MLD																											
From 7th Year	-	15.6	MLD																											

3.	<p><b>Effluent -</b></p> <p><b>Quantity -</b></p> <ul style="list-style-type: none"> <li>- Allotted quantity 9.76 MLD.</li> <li>- For first phase minimum requirement is 12.48 MLD.</li> </ul> <p><b>Request -</b> To revise quantity to 12.48 MLD within the same allotment price.</p> <p><b>Charges -</b> <b>Request -</b> To be charged based on actual disposal quantity on similar lines of water.</p>	EDP utilization staggered. 80% of the water requirement indicated at Column-2 above.
4.	<p><b>Power Line-</b></p> <p><b>Request-</b> Power Lin passing through the plot to be shifted at no extra cost to us.</p>	GIDC is shifting the power line as per the revised planning of the Estate.
5.	<p><b>Commencement of Production -</b></p> <p><b>Request -</b> To extend the time period for approval of building plan to the date on which last of the approval for construction of the project is obtained and consequently extend the time for "Commencement of Production" to five years from the date of such approval.</p>	Not acceptable.
6.	<p><b>The Project -</b></p> <p><b>Request -</b> To allow any other project from Aditya Birla Group.</p>	GIDC will consider such requests as per rules for sub-letting & sub-dividing.

7.	<p><b><u>Staff and Workers Colony -</u></b></p> <p><b>Request -</b>          Since it is a continuous process plant and Power Plant, hence to meet emergency requirement we have to have colony for workers and staff. To give approval.</p>	<p>Regular residential colony within the plot cannot be permitted. However, transit/emergency housing may be considered on merits.</p>
8.	<p><b><u>Date of Allotment -</u></b></p> <p><b>Request -</b>          Date of allotment to be considered from the date of handing over vacated plot from the farmers or removal of Power Line, whichever is later.</p>	<p>Considering the large area allotted to you, the period for utilization of the plot i.e. coming into production is four years from the date of allotment as per GIDC's policy.</p> <p>GIDC will hand over possession of land after removal of encroachments and power line would be shifted at the earliest possible.</p>
9.	<p><b><u>Future Water &amp; Effluent Requirement -</u></b></p> <p><b>Request -</b>          Assurance for making available additional water &amp; effluent for second phase.</p>	<p>Any additional capacity beyond the quantity mentioned above will be at a cost and subject to availability.</p>

  
 Date: \_\_\_\_\_  
 \_\_\_\_\_



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT

ANNEXURE 7



### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: APR22/109/35 (ULR- TC70992200008134F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22EF01	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sample Collected By: Mr. Shubham Verma
6.	Analysis commenced on: 20.04.2022	7.	Analysis Completed on: 25.04.2022
8.	Reporting Date: 28.04.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed v/	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Inlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 20.04.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	88	N.A.	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	16	N.A.	IS 3025 PP-44
3.	Residual Chlorine	mg/L	<0.1	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 Cl B

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT – EFFLUENT**

REPORT NO.: APR22/109/36 (ULR- TC709922000008135F)


**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22EF02	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sample Collected By: Mr. Shubham Verma
6.	Analysis commenced on: 20.04.2022	7.	Analysis Completed on: 25.04.2022
8.	Reporting Date: 28.04.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Outlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 20.04.2022

**TEST RESULTS**

S.No.	Parameters	Unit (SI)	Results	Specification /SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	27	30	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	11	20	IS 3025 PP-44
3.	Residual Chlorine	mg/L	1.24	0.5 (minimum)	APHA: 23 <sup>rd</sup> Edition 4500 Cl <sup>-</sup> B

Remark :

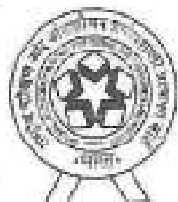
Authorised By : 

Name : **Bhavisha Pandya** Designation : **Sr.Chemist**

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  - 2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



TC-1088

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: MAY22/120/35 (ULR- TC709922000010541F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.	
2.	Sample ID: 2147888246 – 120MY22EFD1	3. Client Representative: Mr.Vikas Valand
4.	Sample Date: 19.05.2022	5. Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 25.05.2022	7. Analysis Completed on: 31.05.2022
8.	Reporting Date: 02.06.2022	9. Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11. Group: Pollution and Environment
12.	Sampling Location: STP Inlet	13. Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15. Sample Received Date: 25.05.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	83	N.A.	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	51	N.A.	IS 3025 PP-44
3.	Residual Chlorine	mg/L	<0.1	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 Cl B

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
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  - 2) No analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-PMT-030	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO. : MAY22/120/36 (ULR- TC709922000010542F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Gram Industries Ltd., Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 120MYZZEFDZ	3.	Client Representative: Mr. Vikas Vland
4.	Sample Date: 19.05.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 25.05.2022	7.	Analysis Completed on: 31.05.2022
8.	Reporting Date: 02.06.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Outlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 25.05.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	25	30	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	14	20	IS: 3025 PP-44
3.	Residual Chlorine	mg/L	1.77	0.5 (minimum)	APHA: 23 <sup>rd</sup> Edition 4500-Cl B

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-PMIT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT – EFFLUENT**

REPORT NO.: MAY22/120/37 (ULR- TC709022000010543F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra-Gujarat. Pin code-392140.	3. Client Representative: Mr. Vikas Veland
2. Sample ID: 2147888246 – 120MY22EF03	5. Sample Collected By: Mr. Vimal Chauhan
4. Sample Date: 19.05.2022	7. Analysis Completed on: 31.05.2022
6. Analysis commenced on: 25.05.2022	9. Discipline: Chemical
8. Reporting Date: 02.06.2022	11. Group: Pollution and Environment
10. Packing Condition & Quantity: Sealed ✓	13. Product: Waste Water
12. Sampling Location: ETP Inlet	15. Sample Received Date: 25.05.2022
14. Sampling Method: IS:3025 (Part 1)-1987	

**TEST RESULTS**

S.No.	Parameter	Unit (SI)	Results	Specification/SPCB Norms/IS Standards	Method Used
1.	pH		7.49	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	28	N.A.	APHA 23 <sup>rd</sup> Edition 2550- B
3.	Colour	Pt-CO	50	N.A.	APHA 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	5652	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids	mg/L	28	N.A.	APHA 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	526	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	150	N.A.	IS 3025 (Part 44) : 1993
8.	Oil & Grease	mg/L	<1	N.A.	APHA 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 5530 D
10.	Amn. Nitrogen	mg/L	<0.05	N.A.	IS 3025 (PP 34)- 1988
11.	Sulphide	mg/L	<1	N.A.	IS 3025 (Part – 29): 1986
12.	Hexa Chromium	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr – B
13.	Total Chromium	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr – B
14.	Zinc	mg/L	<0.03	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
15.	Fluoride	mg/L	0.78	N.A.	APHA 23 <sup>rd</sup> Edition 4500 F–D
16.	Arsenic	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 As – B
17.	Copper	mg/L	<0.03	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
18.	Lead	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
19.	Mercury	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3112-B
20.	Nickel	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
21.	Nitrate Nitrogen	mg/L	0.49	N.A.	IS 3025 (Part-34): 1988
22.	Calcium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
23.	Manganese	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
24.	Iron	mg/L	<0.05	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
25.	Selenium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Se – C

Remark :

Authorised By -

Designation : Sr.Chemist

Name : Bhaishya Pandya

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-RMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT – EFFLUENT**

REPORT NO.: MAY22/120/38 (ULR- TC709922000010544F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC, Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-302140.	3.	Client Representative: Mr. Vikas Votand
2.	Sample ID: 2147888246 – 120MY22EF04	4.	Sample Collected By: Mr. Vimal Chauhan
4.	Sample Date: 19.05.2022	6.	Analysis Completed on: 31.05.2022
5.	Analysis commenced on: 25.05.2022	7.	Discipline: Chemical
8.	Reporting Date: 02.06.2022	9.	Group: Pollution and Environment
10.	Packing Condition & Quantity: Sealed ✓	11.	Product: Waste Water
12.	Sampling Location: ETP Outlet	13.	Sample Received Date: 25.05.2022
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	

**TEST RESULTS**

S.No	Parameters	Unit (SI)	Results	Specification/SPCD Norms/ BIS Standards	Method used
1.	pH		7.29	6.5-8.5	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	28	N.A.	APHA 23 <sup>rd</sup> Edition 2550- B
3.	Colour	Pt-CO	30	N.A.	APHA 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	6240	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids	mg/L	19	100	APHA 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	186	250	APHA 23 <sup>rd</sup> Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	60	100	IS 3025 (Part 4) : 1993
8.	Oil & Grease	mg/L	<1	10	APHA 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 5530 D
10.	Amyl Nitrogen	mg/L	<0.05	50	IS 3025 (PP 34): 1988
11.	Sulphide	mg/L	<1	5	IS 3025 (Part - 29): 1986
12.	Hexa Chromium	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
13.	Total Chromium	mg/L	<0.02	1	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
14.	Zinc	mg/L	<0.03	15	APHA 23 <sup>rd</sup> Edition 3111 B
15.	Fluoride	mg/L	0.83	15	APHA 23 <sup>rd</sup> Edition 4500 F-D
16.	Arsenic	mg/L	<0.01	0.2	APHA 23 <sup>rd</sup> Edition 3500 As - B
17.	Copper	mg/L	<0.03	3	APHA 23 <sup>rd</sup> Edition 3111 B
18.	Lead	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3111 B
19.	Mercury	mg/L	<0.01	0.01	APHA 23 <sup>rd</sup> Edition 3112-B
20.	Nickel	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
21.	Nitrate Nitrogen	mg/L	1.40	10	IS 3025 (Part-34): 1988
22.	Calcium	mg/L	<0.01	2	APHA 23 <sup>rd</sup> Edition 3111 B
23.	Manganese	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
24.	Iron	mg/L	<0.05	N.A.	APHA 23 <sup>rd</sup> Edition 3500 SC - C
25.	Selenium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 SC - C
26.	Bio-Assay Test	%	100% survival after 96 hours at 100% dilution	N.A.	IS 6582 (Part-2): 2001

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - EFFLUENT**

DOC. NO.: LAB-PMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
 Phone : (O) 0265 - 6131000, 6131001

**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT – EFFLUENT**

REPORT NO.: MAY22/120/39

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.	3.	Client Representative: Mr. Vikas Valsand
2.	Sample ID: 2147888246 – 120MY22EF03	5.	Sample Collected By: Mr. Vimal Chauhan
4.	Sample Date: 19.05.2022	7.	Analysis Completed on: 21.05.2022
6.	Analysis commenced on: 25.05.2022	9.	Discipline: Chemical
8.	Reporting Date: 01.06.2022	11.	Group: Pollution and Environment
10.	Packing Condition & Quantity: Sealed ✓	13.	Product: Waste Water
12.	Sampling Location: ETP Inlet	15.	Sample Received Date: 25.05.2022
14.	Sampling Method: IS:3025 (Part 1)-1987		

**TEST RESULTS**

S.No.	Parameters	Unit (SI)	Results	Specification/IS/ISIRI Norms/BIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CV E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	0.48	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Rarfoya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) The analysis of sample will be done, if received within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2013	Revision Date: 01.01.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

**REPORT NO. : MAY22/120/40**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code: 392140.	3.	Client Representative: Mr. Vikas Vaid
2.	Sample ID: 2147888246 – 120MY22EF04	5.	Sample Collected By: Mr. Vimal Chauhan
4.	Sample Date: 19.05.2022	7.	Analysis Completed on: 31.05.2022
6.	Analysis commenced on: 25.05.2022	9.	Discipline: Chemical
8.	Reporting Date: 02.06.2022	11.	Group: Pollution and Environment
10.	Packing Condition & Quantity: Sealed ✓	13.	Product: Waste Water
12.	Sampling Location: ETP Outlet	15.	Sample Received Date: 25.05.2022
14.	Sampling Method: IS:2025 (Part 1)-1987		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ISPCN Norms/BIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	1.38	100	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

NOTE:

- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
- 2) Re-analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
- 3) The results reported above relate to the sample identified under Sample Detail.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.01.2021



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(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: JUN22/113/35 (ULR- TC708922000012571F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113N22EF01	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 29.06.2022	7.	Analysis Completed on: 02.07.2022
8.	Reporting Date: 02.07.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Inlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 24.06.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	87	N.A.	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	150	N.A.	IS 3025 PP-44
3.	Residual Chlorine	mg/L	<0.1	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 Cl: B

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reprinted, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





# KADAM ENVIRONMENTAL CONSULTANTS

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: JUN22/113/36 (ULR- TC709922000012572F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 1131N22EF02	3.	Client Representative: Mr.Vikas Vaikand
4.	Sample Date: 17.06.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 24.06.2022	7.	Analysis Completed on: 02.07.2022
8.	Reporting Date: 02.07.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Outlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 24.06.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification /SPCE Norms/ BIS Standards	Method Used
1.	Suspended Solids	mg/L	21	30	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	8	20	IS 3025 FP-44
3.	Residual Chlorine	mg/L	1.77	0.5 (minimum)	APHA: 23 <sup>rd</sup> Edition 4500 Cl <sup>-</sup> B

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021







## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: JUN22/113/30

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO Vilayat, Taluka-Vagra, Gujarat. Pin code-392140.	3.	Client Representative: Mr. Vikas Valand
2.	Sample ID: 2252908246 – 113JN22EF03	4.	Sample Collected By: Mr. Vimal Chauhan
4.	Sample Date: 17.06.2022	6.	Analysis commenced on: 24.06.2022
6.	Analysis commenced on: 24.06.2022	8.	Analysis Completed on: 02.07.2022
8.	Reporting Date: 02.07.2022	10.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	12.	Group: Pollution and Environment
12.	Sampling Location: ETP Inlet	14.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	16.	Sample Received Date: 24.06.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Classification/SPCC Norms/IS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500-CY E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark:

Authorised By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: JUN22/113/M0

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat, Taluka-Vagra Gujarat. Pin code-392140.	3.	Client Representative: Mr. Vikas Valand
2.	Sample ID: 2252908246 – 113JN22EF04	4.	Sample Collected By: Mr. Vimal Chauhan
4.	Sample Date: 17.06.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 24.05.2022	7.	Analysis Completed on: 02.07.2022
8.	Reporting Date: 02.07.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>ETP Outlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 24.06.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCR Norms/BIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	<0.05	100	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

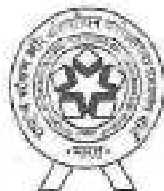
Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 30 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported should relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



TC-7018

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Phone : (O) 0265 - 6131000, 6131001**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT – EFFLUENT**

REPORT NO. - JUL 22/146/36 (ULR- TC709922000014814F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22EF01	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 26.07.2022	7.	Analysis Completed on: 01.08.2022
8.	Reporting Date: 05.08.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Inlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 26.07.2022

**TEST RESULTS**

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	41	N.A.	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	23	N.A.	IS 3025 PP-44
3.	Residual Chlorine	mg/L	<0.1	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 Cl B

Remark :

Authorised By -

Name : Bhavisha Paridya

Designation : Sr.Chemist

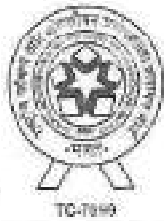
- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 13 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - EFFLUENT**

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

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# KADAM ENVIRONMENTAL CONSULTANTS

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: JUL22/146/37 (ULR- TC709022000014815F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22EFD2	3.	Client Representative: Mr. Vikas Vohnd
4.	Sample Date: 25.07.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 26.07.2022	7.	Analysis Completed on: 01.08.2022
8.	Reporting Date: 05.08.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: STP Outlet	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 26.07.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCR Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	24	30	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	9	20	IS 3025 PP-11
3.	Residual Chlorine	mg/L	1.33	0.5 (minimum)	APHA: 23 <sup>rd</sup> Edition 4500 Cl-B

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under sample details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021







**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT – EFFLUENT**

REPORT NO. : JUL22/146/30 (ULR- TC709922000014817F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Cruxtic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra Gujarat. Pin code- 392140.		
2.	Sample ID: 2252908245 – 146JU22EF04	3.	Client Representative: Mr. Vikas Vahani
4.	Sample Date: 25.07.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 26.07.2022	7.	Analysis Completed on: 01.08.2022
8.	Reporting Date: 05.08.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: ETP Outlet	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 26.07.2022

**TEST RESULTS**

S.No.	Parameters	Unit (SI)	Results	Specification (SPCB Norms/BIS Standards)	Method Used
1.	pH		8.44	6.5-8.5	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	26	N.A.	APHA 23 <sup>rd</sup> Edition 2550- B
3.	Colour	Pt-CO	10	N.A.	APHA 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	6776	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids	mg/L	16	100	APHA 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	152	250	APHA 23 <sup>rd</sup> Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	44	100	IS 3025 (Part 11) - 1993
8.	Oil & Grease	mg/L	<1	10	APHA 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 5530 D
10.	Ammon. Nitrogen	mg/L	<0.05	50	IS 3025 (Part 34) - 1988
11.	Sulphide	mg/L	<1	5	IS 3025 (Part - 29) - 1986
12.	Hexa Chromium	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3500 C - B
13.	Total Chromium	mg/L	<0.02	1	APHA 23 <sup>rd</sup> Edition 3500 C - B
14.	Zinc	mg/L	<0.03	15	APHA 23 <sup>rd</sup> Edition 3111 B
15.	Fluoride	mg/L	0.70	15	APHA 23 <sup>rd</sup> Edition 4500 F-D
16.	Arsenic	mg/L	<0.01	0.2	APHA 23 <sup>rd</sup> Edition 3500 Ag - B
17.	Copper	mg/L	<0.03	3	APHA 23 <sup>rd</sup> Edition 3111 B
18.	Lead	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3111 B
19.	Mercury	mg/L	<0.01	0.01	APHA 23 <sup>rd</sup> Edition 3112-B
20.	Nickel	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
21.	Nitrate Nitrogen	mg/L	<0.05	10	IS 3025 (Part 34) - 1988
22.	Cadmium	mg/L	<0.01	2	APHA 23 <sup>rd</sup> Edition 3111 B
23.	Manganese	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
24.	Iron	mg/L	<0.05	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
25.	Selenium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 SC - C
26.	Bio-Assay Test	%	Not carried out after 15 days of collection	N.A.	IS 6582 (Part-2): 2001

Remark :

Authorised By

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be re-analysed, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date.: 01.03.2021	Issue Date: 01-03-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: JUL22/146/40

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra Gujarat. Pin code- 392140.	3.	Client Representative: Mr. Vikas Vaidan
2.	Sample ID: 2252908245 – 146JU22EF03	4.	Sample Collected By: Mr. Vimal Chauhan
4.	Sample Date: 25.07.2022	5.	Analysis Completed on: 01.08.2022
5.	Analysis commenced on: 26.07.2022	6.	Discipline: Chemical
8.	Reporting Date: 05.08.2022	7.	Group: Pollution and Environment
10.	Packing Condition & Quantity: Sealed ✓	8.	Product: Waste Water
12.	Sampling Location: ETP Inlet	9.	Sample Received Date: 26.07.2022
14.	Sampling Method: IS:3025 (Part 1)-1987		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ISIRI Norms/IS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Parthiya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details

-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10,  
Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: JUL22/146141

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.	3.	Client Representative: Mr. Vikas Valand
2.	Sample ID: 2252908246 - 146JU22EF04	5.	Sample Collected By: Mr. Vimal Chauhan
4.	Sample Date: 25.07.2022	7.	Analysis Completed on: 01.08.2022
6.	Analysis commenced on: 26.07.2022	9.	Discipline: Chemical
8.	Reporting Date: 05.08.2022	11.	Group: Pollution and Environment
10.	Packing Condition & Quantity: Sealed ✓	13.	Product: Waste Water
12.	Sampling Location: ETP Outlet	15.	Sample Received Date: 26.07.2022
14.	Sampling Method: IS-3025 (Part 1)-1987		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ISIRI Norms/ISIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	<0.05	100	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
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-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

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(MoEF Approved)

B71/B/3, Near Himalaya Machinery, GIDC Makerpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: AUG22H62/35 (ULR- TC709922000016735F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22EF01	3.	Client Representative: Mr.Vikas Veland
4.	Sample Date: 26.08.2022	5.	Sample Collected By: Mr. Kishan Bhatt
6.	Analysis commenced on: 02.09.2022	7.	Analysis Completed on: 07.09.2022
8.	Reporting Date: 07.09.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: STP Inlet	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 02.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	28	N.A.	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	47	N.A.	IS 3025 PP-44
3.	Residual Chlorine	mg/L	<0.1	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 Cl B

Remark :

Authorised By -

Name : **Sharisha Pandya**

Designation : **Sr.Chemist**

- NOTE:
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-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: AUG22/162/26 (ULR- TC709922000016736F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22EF02	3.	Client Representative: Mr. Vikas Yaland
4.	Sample Date: 26.08.2022	5.	Sample Collected By: Mr. Kishan Bhatt
6.	Analysis commenced on: 02.09.2022	7.	Analysis Completed on: 07.09.2022
8.	Reporting Date: 07.09.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: STP Outlet	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 02.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	20	30	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	14	20	IS 3025 PP-44
3.	Residual Chlorine	mg/L	3.55	0.5 (minimum)	APHA: 23 <sup>rd</sup> Edition 4500 Cl-B

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT – EFFLUENT**

REPORT NO.: AUG22/162/37 (ULR- TC709922000016737F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22EF03	3.	Client Representative: Mr. Vikas Vahad
4.	Sample Date: 26.08.2022	5.	Sample Collected By: Mr. Kishan Bhatt
6.	Analysis commenced on: 02.09.2022	7.	Analysis Completed on: 07.09.2022
8.	Reporting Date: 07.09.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>ETP Inlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 02.09.2022

**TEST RESULTS**

S.No.	Parameters	Unit (SI)	Results	Specification /SPCB Norms/ BIS Standards	Method Used
1.	pH		7.32	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	28.6	N.A.	APHA 23 <sup>rd</sup> Edition 2530- B
3.	Colour	Pt-CO	5	N.A.	APHA 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	4648	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids.	mg/L	46	N.A.	APHA 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	902	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	260	N.A.	IS 3025 (Part 44) : 1993
8.	Oil & Grease	mg/l	<1	N.A.	APHA 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/l	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 5530 D
10.	Amm. Nitrogen	mg/L	<0.05	N.A.	IS 3025 (FP 34): 1988
11.	Sulphide	mg/L	<1	N.A.	IS 3025 (Part – 29): 1986
12.	Hexa Chromium	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
13.	Total Chromium	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
14.	Zinc	mg/L	<0.03	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
15.	Fluoride	mg/L	0.76	N.A.	APHA 23 <sup>rd</sup> Edition 4500 F-D
16.	Arsenic	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 As - B
17.	Copper	mg/L	<0.03	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
18.	Lead	mg/l	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
19.	Mercury	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3112-B
20.	Nickel	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
21.	Nitrate Nitrogen	mg/L	<0.05	N.A.	IS 3025 (Part-34): 1988
22.	Cadmium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
23.	Manganese	mg/l	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
24.	Iron	mg/L	<0.05	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
25.	Selenium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Se - C

Remark :

Authorised By -

Name : Bhavisha Ramesh

Designation : Sr.Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - EFFLUENT**

DOC. NO.: LAB-FHT-050	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 8131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: AUG22/162/38 (ULR- TC709922000016738F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat, Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22EF04	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sample Collected By: Mr. Kishan Bhatt
6.	Analysis commenced on: 02.09.2022	7.	Analysis Completed on: 07.09.2022
8.	Reporting Date: 07.09.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: ETP Outlet	13.	Product: Waste Water
14.	Sampling Method: IS-3025 (Part 1)-1987	15.	Sample Received Date: 02.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCC Norms/IS Standards	Method Used
1.	pH		7.06	6.5-8.5	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	28.4	N.A.	APHA 23 <sup>rd</sup> Edition 2550 B
3.	Colour	Pl-CO	5	N.A.	APHA 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	418.6	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids	mg/L	12	100	APHA 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	152	250	APHA 23 <sup>rd</sup> Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	44	100	IS 3025 (Part-44): 1993
8.	Oil & Grease	mg/L	<1	10	APHA 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 5530 D
10.	Amin. Nitrogen	mg/L	<0.05	50	IS 3025 (PP-34): 1988
11.	Sulphide	mg/L	<1	5	IS 3025 (Part – 29): 1986
12.	Hexa Chromium	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
13.	Total Chromium	mg/L	<0.02	1	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
14.	Zinc	mg/L	<0.03	15	APHA 23 <sup>rd</sup> Edition 3111 B
15.	Fluoride	mg/L	0.82	15	APHA 23 <sup>rd</sup> Edition 4500 F – D
16.	Arsenic	mg/L	<0.01	0.2	APHA 23 <sup>rd</sup> Edition 3500 As – B
17.	Copper	mg/L	<0.03	3	APHA 23 <sup>rd</sup> Edition 3111 B
18.	Lead	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3111 B
19.	Mercury	mg/L	<0.01	0.01	APHA 23 <sup>rd</sup> Edition 3112-B
20.	Nickel	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
21.	Nitrate Nitrogen	mg/L	<0.05	10	IS 3025 (Part-34): 1988
22.	Cadmium	mg/L	<0.01	2	APHA 23 <sup>rd</sup> Edition 3111 B
23.	Manganese	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
24.	Iron	mg/L	<0.05	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
25.	Selenium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Se - C
26.	Bio-Assay Test	%	30 % survival of fish after 96 hours in 100% effluent	N.A.	IS 6582 (Part-2): 2001

Remark :

Authorised By :

Name : Bhavisha Poojya

Designation : Sr.Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 05
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: AUG22/162/39

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat, Taluka-Vagra, Gujarat. Pin code-392140.	3.	Client Representative: Mr. Vikas Valand
2.	Sample ID: 2252908246 – 152AU22EF03	5.	Sample Collected By: Mr. Kishan Bhatt
4.	Sample Date: 26.06.2022	7.	Analysis Completed on: 07.09.2022
6.	Analysis commenced on: 02.09.2022	9.	Discipline: Chemical
8.	Reporting Date: 07.09.2022	11.	Group: Pollution and Environment
10.	Packing Condition & Quantity: Sealed ✓	13.	Product: Waste Water
12.	Sampling Location: ETP Inlet	15.	Sample Received Date: 02.09.2022
14.	Sampling Method: IS:3025 (Part 1)-1987		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification /SPCB Norms/ BIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Adressable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKM	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Raju

Designation : Sr.Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO. : AUG22/18240

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. 'Caustic Plant-Vilayat' Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.	3.	Client Representative: Mr. Vikas Valand
2.	Sample ID: 2152908246 – 162AU22EF04	4.	Sample Collected By: Mr. Kishan Bhatt
4.	Sample Date: 26.08.2022	5.	Analysis Completed on: 07.09.2022
6.	Analysis commenced on: 02.09.2022	7.	Discipline: Chemical
8.	Reporting Date: 07.09.2022	9.	Group: Pollution and Environment
10.	Packing Condition & Quantity: Sealed ✓	11.	Product: Waste Water
12.	Sampling Location: <b>ETP Outlet</b>	13.	Sample Received Date: 02.09.2022
14.	Sampling Method: IS:3025 (Part 1)-1987		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification / SPC8 Norms/ BIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	<0.05	100	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

NOTE:

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- 2) Re-analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.
- 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO. : LAB-FMT-050	Issue No. : 02	Revision No. : 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: SEP22/139/37 (ULR- TC709922000016735F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 1395E22EF01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sample Collected By: Mr. Vimal
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 04.10.2022
8.	Reporting Date: 04.10.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Inlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 30.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	35	N.A.	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	43	N.A.	IS 3025 PP-44
3.	Residual Chlorine	mg/L	<0.1	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 Cl B

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO. : SEP22/139/38 (ULR- TC709922000016736F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 1395E22EF02	3.	Client Representative: Mr. Vikas Valard
4.	Sample Date: 20.09.2022	5.	Sample Collected By: Mr. Vimal
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 04.10.2022
8.	Reporting Date: 04.10.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>STP Outlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 30.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Suspended Solids	mg/L	10	30	APHA: 23 <sup>rd</sup> Edition 2540 D
2.	BOD	mg/L	11	20	IS 3025 PP-44
3.	Residual Chlorine	mg/L	4.43	0.5 (minimum)	APHA: 23 <sup>rd</sup> Edition 4500 Cl B

Remark : *[Signature]*

Authorised By - *[Signature]*

Name : Bhavisha Pandya Designation : Sr.Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.
- END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: SEP22/139/39 (ULR- TC709922000016737F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code- 392140.	3.	Client Representative: Mr. Vikas Vahland
2.	Sample ID: 2252908246 – 139SE22EF03	4.	Sample Collected By: Mr. Vinal
4.	Sample Date: 20.09.2022	5.	Sample Collected By: Mr. Vinal
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 04.10.2022
8.	Reporting Date: 04.10.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: ETP Inlet	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 30.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	pH		7.52	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	25	N.A.	APHA 23 <sup>rd</sup> Edition 2550- B
3.	Colour	Pt-CO	<1	N.A.	APHA 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	4376	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids	mg/L	52	N.A.	APHA 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	975	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
7.	BOD [3 days at 27 °C]	mg/L	293	N.A.	IS 3025 (Part-44) : 1993
8.	Oil & Grease	mg/L	<1	N.A.	APHA 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 5530 D
10.	Amn. Nitrogen	mg/l	<0.05	N.A.	IS 3025 (PP 34): 1988
11.	Sulphide	mg/L	<1	N.A.	IS 3025 (Part - 29): 1986
12.	Hexa Chromium	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
13.	Total Chromium	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
14.	Zinc	mg/L	<0.03	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
15.	Fluoride	mg/L	1.01	N.A.	APHA 23 <sup>rd</sup> Edition 4500 F—D
16.	Arsenic	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 As - B
17.	Copper	mg/L	<0.03	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
18.	Lead	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
19.	Mercury	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3112-B
20.	Nickel	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
21.	Nitrate Nitrogen	mg/L	<0.05	N.A.	IS 3025 (Part-34): 1988
22.	Cadmium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
23.	Manganese	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
24.	Iron	mg/L	<0.05	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
25.	Selenium	mg/L	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 SC - C

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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TC-7099

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: SEP22/139/40 (ULR- TC709922000016738F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252906246 – 139SE22EF04	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sample Collected By: Mr. Vimal
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 04.10.2022
8.	Reporting Date: 04.10.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment.
12.	Sampling Location: ETP Outlet	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 30.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	pH		7.15	6.5-8.5	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	27	N.A.	APHA 23 <sup>rd</sup> Edition 2550- B
3.	Colour	Pt-CO	<1	N.A.	APHA 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	4208	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids	mg/L	17	100	APHA 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	139	250	APHA 23 <sup>rd</sup> Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	42	100	IS 3025 (Part 44) : 1993
8.	Oil & Grease	mg/L	<1	10	APHA 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/L	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 5530 D
10.	Amms. Nitrogen	mg/L	<0.05	50	IS 3025 (PP 34): 1988
11.	Sulphide	mg/l	<1	5	IS 3025 (Part – 29): 1986
12.	Hexa Chromium	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
13.	Total Chromium	mg/L	<0.02	1	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
14.	Zinc	mg/l	<0.03	15	APHA 23 <sup>rd</sup> Edition 3111 B
15.	Fluoride	mg/L	0.59	15	APHA 23 <sup>rd</sup> Edition 4500 F—D
16.	Arsenic	mg/L	<0.01	0.2	APHA 23 <sup>rd</sup> Edition 3500 As – B
17.	Copper	mg/l	<0.03	3	APHA 23 <sup>rd</sup> Edition 3111 B
18.	Lead	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3111 B
19.	Mercury	mg/L	<0.01	0.01	APHA 23 <sup>rd</sup> Edition 3112-B
20.	Nickel	mg/l	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
21.	Nitrite Nitrogen	mg/L	<0.05	10	IS 3025 (Part-34): 1988
22.	Cadmium	mg/L	<0.01	2	APHA 23 <sup>rd</sup> Edition 3111 B
23.	Manganese	mg/l	<0.02	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
24.	Iron	mg/l	<0.05	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
25.	Selenium	mg/l	<0.01	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Se - C
26.	Bio-Assay Test	%	92% survival of fish after 96 hrs in 100% effluent	N.A.	IS 6582 (Part-2): 2001

Remark :

Authorised By -

Name : Bhavisha Paridya

Designation : Sr.Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: SEP22/139/41

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22EF03	3.	Client Representative: Mr. Vikas Veland
4.	Sample Date: 20.09.2022	5.	Sample Collected By: Mr. Vimal
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 09.10.2022
8.	Reporting Date: 04.10.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: ETP Inlet	13.	Product: Waste Water
14.	Sampling Method: IS-3025 (Part 1)-1987	15.	Sample Received Date: 30.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Pendya

Designation : Sr.Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



### LABORATORY TEST REPORT – EFFLUENT

REPORT NO.: SEP22/139/42

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat, Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22EF04	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sample Collected By: Mr. Vimal
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 04.10.2022
8.	Reporting Date: 04.10.2022	9.	Discipline: Chemical
10.	Packing Condition & Quantity: Sealed ✓	11.	Group: Pollution and Environment
12.	Sampling Location: <b>ETP Outlet</b>	13.	Product: Waste Water
14.	Sampling Method: IS:3025 (Part 1)-1987	15.	Sample Received Date: 30.09.2022

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCIB Norms/BIS Standards	Method Used
1.	Cyanide	mg/L	<0.05	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
2.	Odour	-	Agreeable	N.A.	APHA: 23 <sup>rd</sup> Edition 2150 B
3.	TKN	mg/L	<0.05	100	APHA: 23 <sup>rd</sup> Edition 4500 N

Remark :

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - EFFLUENT

DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 04
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

ANNEXURE 8



### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: APR22/109/27 (ULR- TC709922000008130F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-			
2. Sample ID: 2147888246 – 109AP22AQ01	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 15.04.2022	5. Sampling Location: Nr. Aluminum Plant		
6. Sampling time: 14:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 18.04.2022	9. Analysis Completed on : 18.04.2022		
10. Reporting Date: 28.04.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Shubham Verma	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 18.04.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	: 54	100	IS 5182 (Part 23 ) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	: 10	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	: 8.77	80	IS 5182 (Part 2 ) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	: 13.18	80	IS 5182 (Part 6 ) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	: 1.7	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	: 2.45	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





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## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: APR22/109/28 (ULR- TC709922000008131F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat.Pin code-				
2.	Sample ID: 2147888246 – 109AP22AQ02	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 15.04.2022	5.	Sampling Location: Nr.PAC Plant		
6.	Sampling time: 14:30 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022		
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Shubham Verma	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 18.04.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	: 62	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	: 08	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	: 7.31	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	: 14.76	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	: 2.21	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	: 3.06	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: APR22/109/29 (ULR- TC70992200008132F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat.Pin code-			
2. Sample ID: 2147888246 – 109AP22AQ03	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 15.04.2022	5. Sampling Location: Nr.Main Gate		
6. Sampling time: 13:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 18.04.2022	9. Analysis Completed on : 18.04.2022		
10. Reporting Date: 28.04.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Shubham Verma	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from:-
18. Sample Received Date: 18.04.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	: 55	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	: 14	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	: 9.86	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	: 17.13	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	: 1.33	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	: 2.98	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	: N.D.	500	IS 5162 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: IAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO. : APR22/109/30 (ULR- TC709922000008133F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-				
2.	Sample ID: 2147888246 - 109AP22AQ04	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 15.04.2022	5.	Sampling Location: Nr. Marketing Yard		
6.	Sampling time: 15:30 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022		
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Shubham Verma	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 18.04.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	PM <sub>10</sub>	µg / m <sup>3</sup>	: 63	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg / m <sup>3</sup>	: 19	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg / m <sup>3</sup>	: 10.59	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg / m <sup>3</sup>	: 21.44	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg / m <sup>3</sup>	: 2.21	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg / m <sup>3</sup>	: 2.49	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg / m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: APR22/109/31

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat.Pin code-			
2. Sample ID: 2147888246 – 109AP22AQ01	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 15.04.2022	5. Sampling Location: Nr. Aluminum Plant		
6. Sampling time: 14:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 18.04.2022	9. Analysis Completed on : 18.04.2022		
10. Reporting Date: 28.04.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Shubham Verma	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method.	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Cloud cover: Clear sky
		Wind blowing from: -	Station category: Industrial
18. Sample Received Date: 18.04.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 755	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: 4.50	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: 1.24	50	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982
Remark: N.D. - Not Detected.					
Authorized By -					
Name : Bhavisha Paridya			Designation : Sr. Chemist		

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: APR22/109/32

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-				
2.	Sample ID: 2147888246 - 109AP22AQ02	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 15.04.2022	5.	Sampling Location: Nr. PAC Plant		
6.	Sampling time: 14:30 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022		
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Shubham Verma	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 18.04.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 901	5000	IS 5182(Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: 3.64	200	APHA 23 <sup>rd</sup> Edition 4500 O-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	$\mu\text{g}/\text{m}^3$	: 0.64	50	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LA6-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

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**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: APR22/109/33

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s, Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat.Pin code-				
2.	Sample ID: 2147888246 – 109AP22AQ03	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 15.04.2022	5.	Sampling Location: Nr.Main Gate		
6.	Sampling time: 13:00 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022		
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Shubham Verma	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air:		
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 18.04.2022				

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 801	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: 4.71	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: 0.83	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - AMBIENT**

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

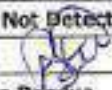
### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: APR22/109/34

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.				
2.	Sample ID: 2147888246 - 109AP22AQ04	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 15.04.2022	5.	Sampling Location: Nr. Marketing Yard		
6.	Sampling time: 15:30 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022		
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Shubham Verma	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Cross wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 18.04.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 714	5000	IS 5182(Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: 4.07	200	APHA 23 <sup>rd</sup> Edition 4500 C-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	$\mu\text{g}/\text{m}^3$	: 0.75	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982
Remark: N.D. - Not Detected.					
Authorized By - 					
Name : Bhavisha Pandya			Designation : Sr. Chemist		

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

**REPORT NO.: APR22/109/37**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat". Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pincode-392140.		
2.	Sample ID: 2147888246 – 109AP22HW01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling location: Brine Sludge
6.	Analysis commenced on: 20.04.2022	7.	Analysis Completed on: 28.04.2022
8.	Reporting Date: 28.04.2022	9.	Sample Collected By: Mr. Shubham Verma
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Light Gray	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags.✓		
17.	Sample Received Date: 20.04.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH	:	6.98	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H* B
2.	% Moisture Contents	%	32.90	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	4.07	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN* E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	10.16	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	3.2	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	0.036	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P - C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

NOTE:

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- 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
- 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

REPORT NO.: APR22/109/38

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pincode-392140.		
2.	Sample ID: 2147688246 – 109AP22HW02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling location: Phosphoric Acid
6.	Analysis commenced on: 20.04.2022	7.	Analysis Completed on: 28.04.2022
8.	Reporting Date: 28.04.2022	9.	Sample Collected By: Mr. Shubham Verma
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Gray	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags.√		
17.	Sample Received Date: 20.04.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH	:	6.89	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	37.70	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	4.70	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN- E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	18.8	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	1.5	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	0.058	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P – C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - NOISE

REPORT NO.: APR22/109/39 (ULR- TC709922000008136F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat, Pincode-392140.	3.	Client Representative: Mr.Vikas Valand
2.	Sample ID: 2147888246 – 109AP22NO01	5.	Sample Collected By: Mr. Shubham Verma
4.	Sampling Date: 16.04.2022	7.	Analysis Completed on: 16.04.2022
6.	Analysis commenced on: 16.04.2022	9.	Sampling Location: --
8.	Reporting Date: 28.04.2022	13.	Sample Received Date : 16.04.2022
10.	Discipline: Chemical		
11.	Group: Atmospheric Pollution		
12.	Product: Ambient Noise Levels		

#### TEST RESULTS

S. No.	Location	Day		Night		Method
		Time	Reading dB(A)	Time	Reading dB(A)	
1.	Nr. Main Gate	11:00 hr	61.5	22:00 hr	60.3	IS 9989: 1981
2.	Nr. ALCP Plant	12:00 hr	64.5	22:10 hr	61.2	IS 9989: 1981
3.	Nr.PAC Plant	12:30 hr	66.5	22:20 hr	59.3	IS 9989: 1981
4.	Nr.CL2 Area	13:00 hr	62.5	22:36 hr	48.9	IS 9989: 1981
5.	Nr.ETP	11:30 hr	65.0	22:35 hr	49.2	IS 9989: 1981
6.	Near Coal Tippler	12:10 hr	62.0	22:30 hr	50.1	IS 9989: 1981
7.	Fiber Main Gate	12:20 hr	62.5	22:46 hr	51.9	IS 9989: 1981
8.	Fiber Material Gate	12:50 hr	66.4	22:30 hr	59.3	IS 9989: 1981

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE :
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - NOISE

DOC. NO.: LAB-FMT-087	Issue No.: 01	Revision No.: 02
Effective Date: 01.07.2020	Issue Date: 01-05-2015	Revision Date: 01.07.2020



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## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/01 (ULR- TC70992200008116F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22SE01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 10:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Calcium Chloride Plant		
2.	Height	m	: -		
3.	Diameter	mm	: -		
4.	Temperature	°c	: 74		
5.	Velocity	m/s	: 5.4		
6.	Type of fuel used		: N.A.		
7.	Quantity of fuel used		: N.A.		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 14	150	IS 11255 (Part 1) : 1985

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/07 (ULR- TC709922000008122F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP225E07	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed Bladder: Clamped		
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	Chlorinated Paraffin Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	39	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Ch <sub>2</sub>	mg/Nm <sup>3</sup>	:	0.312	9 LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10,  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/08 (ULR- TC709922000008123F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE08	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Sodium Hypo Stack - 1
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble-Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Sodium Hypo Stack - 1		
2.	Height	m	: 35		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 42		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.157	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/09 (ULR- TC709922000008124F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE09	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Sodium Hypo Stack - 2
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Sodium Hypo Stack - 2
2.	Height	m	: 35
3.	Diameter	mm	: 450
4.	Temperature	°C	: 43
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A.
7.	Quantity of fuel used		: N.A.

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.938	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/10 (ULR- TC709922000008125F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22SE10	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed ✓	Thimble:Packed	Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Aluminium Chloride Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 39		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cb	mg/Nm <sup>3</sup>	: 0.701	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/11 (ULR- TC709922000008128F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed Bladder: Clamped		
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Stable Bleaching Powder Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 200		
4.	Temperature	°c	: 46		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.341	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





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## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/12 (ULR- TC709922000008127F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147B88246 - 109AP225E12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed Bladder: Clamped		
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 39		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Ch	mg/Nm <sup>3</sup>	: 0.812	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/13 (ULR- TC709922000008128F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22SE13	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 13:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham Verma	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°C	:	41		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used	
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.571	9	LAB-SOP-104	

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/14 (ULR- TC709922000008129F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE14	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 13:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham Verma	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 40		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.491	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/15

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP225E15	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: HCL Stack - 1
6.	Sampling Time: 13:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	HCL Stack - 1		
2.	Height	m	:	35		
3.	Diameter	mm	:	150		
4.	Temperature	°c	:	39		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	HCL	mg/Nm <sup>3</sup>	:	11.30	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/16

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.			
2.	Sample ID: 2147888246 - 109AP22SE16	3.	Client Representative: Mr.Vikas Valand	
4.	Sample Date: 16.04.2022	5.	Sampling Location: HCL Stack - 2	
6.	Sampling Time: 13:40 hr	7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022	
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed✓	Bladder: Clamped
17.	Sample Received Date: 18.04.2022			

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 2		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°c	: 39		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 13.45	35	APHA 23 <sup>rd</sup> Edition: 4500 - G C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/17

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat, Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE17	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: HCL Stack - 3
6.	Sampling Time: 14:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 3		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°C	: 41		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/km <sup>3</sup>	: 15.16	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/18

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE18	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: HCL Stack - 4
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped		
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	HCL Stack - 4	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°C	:	40	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	14.04	35 APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AFR22/109/19

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22SE19	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Phosphoric Acid Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Disipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped		
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Phosphoric Acid Plant
2.	Height	m	: 35
3.	Diameter	mm	: 350
4.	Temperature	°C	: 42
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 7.61	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C
2.	HF	mg/Nm <sup>3</sup>	: N.D.	6	IS 11255 (Part 5): 1990

Remark : N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: APR22/109/20

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2147888245 – 109AP22SE01	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 10:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Calcium Chloride Plant		
2.	Height	m	: -		
3.	Diameter	mm	: -		
4.	Temperature	°c	: 74		
5.	Velocity	m/s	: 5.4		
6.	Type of fuel used		: N.A.		
7.	Quantity of fuel used		: N.A.		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	3.29	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/21

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22SE07	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed      Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Chlorinated Paraffin Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 39		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 2.15	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: APR22/109/22

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Aluminium Chloride Plant
2.	Height	m	: 35
3.	Diameter	mm	: 350
4.	Temperature	°C	: 39
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 3.23	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/23


#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed Bladder: Clamped		
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Stable Bleaching Powder Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 200		
4.	Temperature	°c	: 46		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Units (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 6.05	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/24

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP225E12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 39		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 5.38	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/25

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.			
2.	Sample ID: 2147888246 – 109AP22SE13	3.	Client Representative: Mr.Vikas Valand	
4.	Sample Date: 16.04.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)	
6.	Sampling Time: 13:20 hr	7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022	
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed	Bladder: Clamped
17.	Sample Received Date: 18.04.2022			

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 41		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 2.17	20	APHA 23 <sup>rd</sup> Edition: 4500 - O C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/20

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat, Pin code-392140.		
2.	Sample ID: 2147886246 – 109AP22SE14	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 13:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 40		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 1.08	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: APR22/109/02 (ULR- TC709922000008117F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22SE02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: D.G.Set – 1
6.	Sampling Time: 10:35 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set – 1		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 115		
5.	Velocity	m/s	: 6.1		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 53	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 16.48	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	: 12.31	50	IS 5182 (Part 6) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/03 (ULR- TC709922000008118F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE03	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: D.G.Set - 2
6.	Sampling Time: 19:00 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped		
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	D.G.Set - 2		
2.	Height	m	:	36		
3.	Diameter	mm	:	450		
4.	Temperature	°c	:	109		
5.	Velocity	m/s	:	6.12		
6.	Type of fuel used		:	HSD		
7.	Quantity of fuel used	lit/hr	:	600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	Particulate Matter	mg/Nm <sup>3</sup>	:	33	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	:	13.52	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	:	8.02	50	IS 5182 (Part 6) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/04 (ULR- TC709922000008119F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP225E04	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: D.G.Set - 3
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	D.G.Set - 3		
2.	Height	m	:	36		
3.	Diameter	mm	:	450		
4.	Temperature	°C	:	135		
5.	Velocity	m/s	:	6.05		
6.	Type of fuel used		:	HSD		
7.	Quantity of fuel used	lit/hr	:	600		
S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	Particulate Matter	mg/Nm <sup>3</sup>	:	47	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	:	18.93	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	:	4.23	50	IS 5182 (Part 6) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/05 (ULR- TC709922000008120F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 109AP22SE05	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: D.G.Set - 4
6.	Sampling Time: 11:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: D.G.Set - 4
2.	Height	m	: 11
3.	Diameter	mm	: 450
4.	Temperature	°C	: 120
5.	Velocity	m/s	: 6.2
6.	Type of fuel used		: HSD
7.	Quantity of fuel used	lit/hr	: 600

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 40	150	IS 11255 (Part 1) :
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 21.66	100	IS 11255 (Part 2) :
3.	Oxides of Nitrogen (NOx)	ppm	: 6.97	50	IS 5182 (Part 6 )

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: APR22/109/06 (ULR- TC70992200008121F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 109AP22SE06	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 16.04.2022	5.	Sampling Location: D.G.Set – 5
6.	Sampling Time: 11:55 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 18.04.2022	9.	Analysis Completed on : 18.04.2022
10.	Reporting Date: 28.04.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Shubham	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 18.04.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: D.G.Set – 5
2.	Height	m	: 11
3.	Diameter	mm	: 450
4.	Temperature	°c	: 125
5.	Velocity	m/s	: 6.0
6.	Type of fuel used		: HSD
7.	Quantity of fuel used	lit/hr	: 600

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 38	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 23.65	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 11.24	50	IS 5182 (Part 6 ) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

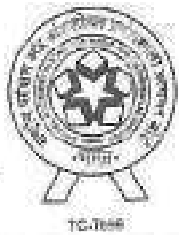
Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: MAY22/120/27 (ULR- TC709922000010537F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-	3. Client Representative: Mr. Vikas Valand
2. Sample ID: 2147888246 - 120MY22AQ01	5. Sampling Location: Nr. Aluminum Plant
4. Sampling Date: 19.05.2022	7. Sampling Duration: 24 Hrs.
6. Sampling time: 11:15 hr	9. Analysis Completed on : 24.05.2022
8. Analysis commenced on: 24.05.2022	11. Discipline: Chemical
10. Reporting Date: 02.06.2022	13. Group: Atmospheric Pollution
12. Sample Collected By: Mr. Vimal Chauhan	15. Product: Ambient Air
14. Sampling Procedure: IS Method	
15. Description of Sample: Sampling Bottles: Sealed ✓ Fiber Paper: Packed ✓ Bladder: Clamped ✓	
17. Environment Condition: Temp: Normal Humidity: Medium Rain: No Rain Wind Direction: Up wind Wind speed: Smooth Cloud cover: Clear sky Wind blowing from: - Station category: Industrial	
18. Sample Received Date: 24.05.2022	

**TEST RESULTS**

Sr. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg/m <sup>3</sup>	: 49	100	IS 5182 (Part 23) : 2005 Guidelines By CPCB(Vol-1)
2.	PM <sub>2.5</sub>	µg/m <sup>3</sup>	: 19	60	
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	: 9.64	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg/m <sup>3</sup>	: 18.10	80	IS 5182 (Part 6) : 2005
5.	O <sub>3</sub>	µg/m <sup>3</sup>	: 2.66	100	IS 5182 (Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	: 1.84	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg/m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - AMBIENT**

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO. : MAY22/120/28 (ULR- TC709922000010538F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd. - Chemical Division, "Caustic Plant-Vilayat" Plot No.1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-			
2. Sample ID: 2147888246 - 120MY22AQ02	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 19.05.2022	5. Sampling Location: Nr.PAC Plant		
6. Sampling time: 11:25 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 24.05.2022	9. Analysis Completed on : 24.05.2022		
10. Reporting Date: 02.06.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
15. Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Fiber Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Cloud cover: Clear sky
18. Sample Received Date: 24.05.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norma/BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	57	100	IS 5182 (Part 21) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	14	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	7.67	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	16.43	80	IS 5182 (Part 6) : 2006
5.	O <sub>3</sub>	µg /m <sup>3</sup>	1.77	100	IS 5182 (Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	2.45	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1923

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.
- END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO. : LAB-FMT-051	Issue No. : 02	Revision No. : 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: MAY22/120/29 (ULR- TC708922000010539F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-	3. Client Representative: Mr. Vikas Valand
2. Sample ID: 2147888246 - 120MY22AQ03	5. Sampling Location: Nr. Main Gate
4. Sampling Date: 20.05.2022	7. Sampling Duration: 24 Hrs
6. Sampling time: 11:30 hr	9. Analysis Completed on : 24.05.2022
8. Analysis commenced on: 24.05.2022	11. Discipline: Chemical
10. Reporting Date: 02.06.2022	13. Group: Atmospheric Pollution
12. Sample Collected By: Mr. Vimal Chauhan	15. Product: Ambient Air
14. Sampling Procedure: IS Method	
16. Description of Sample: Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓ Bladder: Clamped ✓
17. Environment Condition: Temp: Normal Humidity: Medium	Wind speed: Smooth Cloud cover: Clear sky
Rain: No Rain Wind Direction: Cross wind	Wind blowing from: - Station category: Industrial
18. Sample Received Date: 24.05.2022	

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification/SPCE Norms/RTS Standards	Method Used
1.	PM <sub>10</sub>	µg / m <sup>3</sup>	45	100	IS 5182 (Part 25) : 2006
2.	PM <sub>2.5</sub>	µg / m <sup>3</sup>	12	60	Guidelines By CPCB (Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg / m <sup>3</sup>	6.00	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg / m <sup>3</sup>	15.66	80	IS 5182 (Part 6) : 2006
5.	CO	µg / m <sup>3</sup>	2.21	100	IS 5182 (Part 19) : 1982
6.	Ammonia (NH <sub>3</sub> )	µg / m <sup>3</sup>	3.48	400	Guidelines By CPCB (Vol-1)
7.	H <sub>2</sub> S	µg / m <sup>3</sup>	N.D.	500	IS 5182 (Part 7) : 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: MAY22H20/39 (ULR- TC709922000010540F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grosim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-	3. Client Representative: Mr. Vikas Valand
2. Sample ID: 2147868246 - 120MY22AQ04	5. Sampling Location: Nr. Marketing Yard
4. Sampling Date: 20.05.2022	7. Sampling Duration: 24 Hrs
6. Sampling time: 11:40 hr	9. Analysis Completed on : 24.05.2022
8. Analysis commenced on: 24.05.2022	11. Discipline: Chemical
10. Reporting Date: 02.06.2022	13. Group: Atmospheric Pollution
12. Sample Collected By: Mr. Vimal Chauhan	15. Products: Ambient Air
14. Sampling Procedure: IS Method	
16. Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Filter Paper: Packed <input checked="" type="checkbox"/> Bladders: Clamped <input checked="" type="checkbox"/>	
17. Environment Condition: Temp: Normal Humidity: Medium Wind speed: Smooth Cloud cover: Clear sky Rain: No Rain Wind Direction: Up wind Wind blowing from: - Station category: Industrial	
18. Sample Received Date: 24.05.2022	

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	60	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	9	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	8.33	80	IS 5182 (Part 7) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	14.90	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	1.33	100	IS 5182 (Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	2.98	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DCC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.09.2021





871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: MAY22/120/31

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat, Taluka-Vagra, Gujarat, Pin code-			
2. Sample ID: 2147889246 - 120MY22AQ01	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 19.05.2022	5. Sampling Location: Nr. Aluminum Plant		
6. Sampling time: 11:15 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 24.05.2022	9. Analysis Completed on : 24.05.2022		
10. Reporting Date: 02.06.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No-Rain	Wind Direction: Up wind	Wind blowing from: -
18. Sample Received Date: 24.05.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 792	5000	IS 5182 (Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: 4.71	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	150	IS 5102 (Part 21): 2004
4.	HF	$\mu\text{g}/\text{m}^3$	: 0.98	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya      Designation : Sr. Chemist

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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.
- END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 01	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01.01.2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: MAY22/120/32

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra-Gujarat, Pin code-			
2. Sample ID: 2147888246 - 120MY22AQ02	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 19.05.2022	5. Sampling Location: Nr. PAC Plant		
6. Sampling time: 11:25 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 24.05.2022	9. Analysis Completed on : 24.05.2022		
10. Reporting Date: 02.06.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Relm: No Rain	Wind Direction: Up wind	Cloud cover: Clear sky
18. Sample Received Date: 24.05.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SO&R Norms/ BIS Standards	Method Used
1.	CO	µg/m <sup>3</sup>	652	3000	IS 5182 (Part 10): 1999
2.	HCL	µg/m <sup>3</sup>	3.85	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg/m <sup>3</sup>	N.D.	160	IS 5182 (Part 21): 2001
4.	HF	µg/m <sup>3</sup>	0.70	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg/m <sup>3</sup>	N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: MAY22/120/33

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-vilayat Taluka-Vagra,Gujarat.Pin code-			
2. Sample ID: 2147888246 – 120MY22AQ03	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 20.05.2022	5. Sampling Location: Nr.Main Gate		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 24.05.2022	9. Analysis Completed on : 24.05.2022		
10. Reporting Date: 02.06.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>
17. Environment Conditions:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Cross wind	Cloud cover: Clear sky
18. Sample Received Date: 24.05.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	031	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	4.93	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	1.22	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pantya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01.01.2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: MAY22/120/34

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2. Sample ID: 2147888246 - 120MY22AQ04	3. Client Representative: Mr. Vikas Veland		
4. Sampling Date: 20.05.2022	5. Sampling Location: Mr. Marketing Yard		
6. Sampling time: 11:40 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 24.05.2022	9. Analysis Completed on : 24.05.2022		
10. Reporting Date: 02.06.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: -
18. Sample Received Date: 24.05.2022			
<b>TEST RESULTS</b>			

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg / m <sup>3</sup>	702	5000	IS 5182(Part 10): 1999
2.	HCL	µg / m <sup>3</sup>	4.28	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg / m <sup>3</sup>	N.D.	100	IS 5182(Part 21): 2001
4.	HF	µg / m <sup>3</sup>	0.63	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg / m <sup>3</sup>	N.D.	2000	IS 5182 (Part 20): 1982
Remark: N.D. - Not Detected.					
Authorized By -					
Name : Bhojishah Andya			Designation : Sr. Chemist		

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Recording of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01.01.2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

**REPORT NO.: MAY22/120/41**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasm Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO- Vilayat Taluka-Vagra, Gujarat. Pincode- 392140.	
2.	Sample ID: 2147888246 – 120MY22-IW01	3. Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5. Sampling location: Brine Sludge
6.	Analysis commenced on: 21.05.2022	7. Analysis Completed on: 02.06.2022
8.	Reporting Date: 02.06.2022	9. Sample Collected By: Mr. Vimal Chauhan
10.	Physical Status: Solid	11. Discipline: Chemical
12.	Sample Category: -	13. Group: Pollution and Environment
14.	Colour: Brown	15. Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags. ✓	
17.	Sample Received Date: 21.05.2022	

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH		7.04	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	33.15	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	1.23	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN <sup>-</sup> E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	17.58	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	3.6	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	N.D.	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P - C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

**REPORT NO.: MAY22/120/42**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO: Vilayat Taluka-Vagra Gujarat. Pincode-392140.	3.	Client Representative: Mr. Vikas Valand
2.	Sample ID: 2147888246 – 120MY22HW02	5.	Sampling location: Phosphoric Acid
4.	Sample Date: 19.05.2022	7.	Analysis Completed on: 02.06.2022
6.	Analysis commenced on: 21.05.2022	9.	Sample Collected By: Mr. Vimal Chauhan
8.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
10.	Physical Status: Solid	13.	Group: Pollution and Environment
12.	Sample Category: -	15.	Product: Solid Waste
14.	Colour: Gray		
16.	Description of sample: Packed and sealed in polythene bags. ✓		
17.	Sample Received Date: 23.05.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ISIRI Norms/ BIS Standards	Method Used
1.	pH		5.98	N.A.	APHA 23 <sup>rd</sup> Edition 4500 H <sup>+</sup> B
2.	% Moisture Contents	%	36.64	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COO	gm/kg	1.94	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN <sup>-</sup> E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	12.48	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	2.2	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	0.082	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P - C

Remarks: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
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  - 2) If analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company (MoEF Approved)



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - NOISE

REPORT NO.: MAY22/120/43 (ULR- TC709922000010545F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bhanuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: Z147888246 - 120MY22N001	3.	Client Representative: Mr. Vinas Veland
4.	Sampling Date: 19.05.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 19.05.2022	7.	Analysis Completed on: 19.05.2022
8.	Reporting Date: 02.06.2022	9.	Sampling Location: --
10.	Discipline: Chemical	13.	Sample Received Date : 19.05.2022
11.	Group: Atmospheric Pollution		
12.	Product: Ambient Noise Levels		

#### TEST RESULTS

S. No.	Location	Day		Night		Method
		Time	Reading dB(A)	Time	Reading dB(A)	
1.	Nr. Main Gate	11:00 hr	51.3	21:45 hr	49.8	IS 9989: 1981
2.	Nr. ALCP Plant	11:30 hr	59.3	22:00 hr	56.3	IS 9989: 1981
3.	Nr. PAC Plant	11:15 hr	67.8	22:05 hr	65.3	IS 9989: 1981
4.	Nr. CL2 Area	11:20 hr	54.3	22:15 hr	53.2	IS 9989: 1981
5.	Nr. ETP	11:45 hr	57.3	22:20 hr	55.5	IS 9989: 1981
6.	Near Coal Tippler	11:40 hr	54.2	22:30 hr	53.1	IS 9989: 1981
7.	Fiber Main Gate	12:00 hr	52.3	22:50 hr	51.7	IS 9989: 1981
8.	Fiber Material Gate	12:05 hr	51.3	-	-	IS 9989: 1981

Remark :

Authorized By:

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE :
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - NOISE

DOC. NO.: LAB-FMT-087	Issue No.: 01	Revision No.: 02
Effective Date: 01.07.2020	Issue Date: 01-05-2015	Revision Date: 01.07.2020



# KADAM ENVIRONMENTAL CONSULTANTS

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/01 (ULR- TC709922000010523F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No.1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY22SE01	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 15:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Calcium Chloride Plant		
2.	Height	m	-		
3.	Diameter	mm	-		
4.	Temperature	°C	73		
5.	Velocity	m/s	5.4		
6.	Type of fuel used		N.A.		
7.	Quantity of fuel used		N.A.		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	17	150	IS 11255 (Part-1) : 1985

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : MAY22/120/07 (JLR- TC709922000010529F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2147698246 – 120MY22SE07	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:15 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Chlorinated Paraffin Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: -		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	mg/Nm <sup>3</sup>	: 0.361	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) The analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO. : LAB-FME-052	Issue No. : 01	Revision No. : 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: MAY22/120/08 (ULR- TC709922000010530F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2.	Sample ID: 2147888246 - 120MY22SE08	3.	Client Representative: Mr. Vikas Veland	
4.	Sample Date: 19.05.2022	5.	Sampling Location: Sodium Hypo Stack - 1	
6.	Sampling Time: 11:40 hr	7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022	
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed	Bladder: Clamped
17.	Sample Received Date: 24.05.2022			

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Sodium Hypo Stack - 1		
2.	Height	m	35		
3.	Diameter	mm	450		
4.	Temperature	°C	-		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Ch	mg/Nm <sup>3</sup>	1.135	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/09 (ULR- TC709922000010531F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division: "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147698246 - 120MY22SE09	3.	Client Representative: Mr. Vikas Veland
4.	Sample Date: 19.05.2022	5.	Sampling Location: Sodium Hypo Stack - 2
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Sodium Hypo Stack - 2		
2.	Height	m	35		
3.	Diameter	mm	450		
4.	Temperature	°C	39		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	O <sub>2</sub>	mg/Nm <sup>3</sup>	1.914	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: MAY23/120/10 (ULR- TC709822000010532E)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.			
2.	Sample ID: Z147838246 - 120MY22SE10	3.	Client Representative: Mr Vikas Valand	
4.	Sample Date: 19.05.2022	5.	Sampling Location: Aluminium Chloride Plant	
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022	
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed	Bladder: Clamped
17.	Sample Received Date: 24.05.2022			

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	Aluminium Chloride Plant		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°c	:	42		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	Co	mg/Nm <sup>3</sup>	:	0.618	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: MAY22/120/11 (ULR- TC709822000010533F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, 'Caustic Plant-Vilayat' Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.			
2.	Sample ID: 2147888246 – 120MY225E11	3.	Client Representative: Mr.Vikas Valand	
4.	Sample Date: 19.05.2022	5.	Sampling Location: Stable Bleaching Powder Plant.	
6.	Sampling Time: 14:45 hr	7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022	
10.	Reporting Date: 02.05.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed	Bladder: Clamped
17.	Sample Received Date: 24.05.2022			

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description			
1.	Source		Stable Bleaching Powder Plant			
2.	Height	m	:	35		
3.	Diameter	mm	:	200		
4.	Temperature	°c	:	39		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used	
1.	O <sub>2</sub>	mg/Nm <sup>3</sup>	:	0.445	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

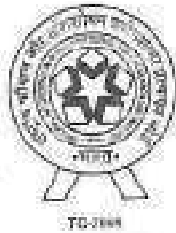
Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: MAY22/120/12 (ULR- TC798922000010534F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s- Grasim Industries Ltd.,- Chemical Division: "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY22SE12	3.	Client Representative: Mr Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	35		
3.	Diameter	mm	350		
4.	Temperature	°c	40		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO <sub>2</sub>	mg/Nm <sup>3</sup>	0.726	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

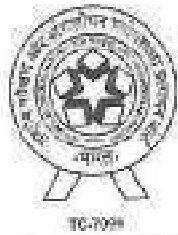
Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAE-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/13 (ULR- TC709922000010535F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY225E13	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 12:35 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on: 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble Packed Bladder: Clamped		
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	35		
3.	Diameter	mm	350		
4.	Temperature	°C	42		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Co	mg/Nm <sup>3</sup>	0.528	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

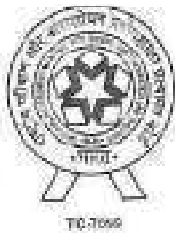
Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/14 (ULR- TC709922000910536F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: Z147888246 - 120MY22SE14	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on: 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S. No.	Parameters	Unit (SI)	Description		
1.	Source		Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	35		
3.	Diameter	mm	350		
4.	Temperature	°C	40		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Co	mg/Nm <sup>3</sup>	0.435	0	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

**REPORT NO.:** MAY22/120/15

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code- 392140.		
2.	Sample ID: 2147888246 – 120MY225E15	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: HCL Stack - 1
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed ✓ / Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Description
1.	Source				HCL Stack - 1
2.	Height	m			35
3.	Diameter	mm			150
4.	Temperature	°C			40
5.	Velocity	m/s			-
6.	Type of fuel used				N.A
7.	Quantity of fuel used				N.A
1.	HCl	mg/Nm <sup>3</sup>	12.42	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl/C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/16

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC, Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-392140.		
2.	Sample ID: 2147888246 – 120MY22SE16	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: HCL Stack - 2
6.	Sampling Time: 11:50 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	HCL Stack - 2	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°C	:	40	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	10.80	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/17

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 120MY22SE17	3.	Client Representative: Mr. Vikas Veland
4.	Sample Date: 19.05.2022	5.	Sampling Location: HCL Stack - 3
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>   Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Description
1.	Source				HCL Stack - 3
2.	Height	m		35	
3.	Diameter	mm		150	
4.	Temperature	°c		42	
5.	Velocity	m/s		-	
6.	Type of fuel used			N.A	
7.	Quantity of fuel used			N.A	
1.	HCL	mg/Nm <sup>3</sup>	13.0 <sup>1</sup>	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01-03-2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/18

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY22SE18	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: HCL Stack - 4
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Description
1.	Source				HCL Stack - 4
2.	Height	m		35	
3.	Diameter	mm		150	
4.	Temperature	°c		40	
5.	Velocity	m/s		-	
6.	Type of fuel used			N.A	
7.	Quantity of fuel used			N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	11.34	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.
- END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/19

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147688246 – 120MY22SE19	3.	Client Representative: Mr Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Phosphoric Acid Plant
6.	Sampling Time: 14:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description
1.	Source		:	Phosphoric Acid Plant
2.	Height	m	:	35
3.	Diameter	mm	:	350
4.	Temperature	°C	:	40
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A
7.	Quantity of fuel used		:	N.A

S. No.	Parameters	Unit (SI)	:	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	8.64	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C
2.	HF	mg/Nm <sup>3</sup>	:	N.D.	6	IS 11255 (Part 5): 1990

Remark : N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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- END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-PMT-052	Issue No.: 02	Revision No.: 01
Effective Date: 01/03/2021	Issue Date: 01/01/2015	Revision Date: 01/03/2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/20

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 120MY22SE01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 15:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Calcium Chloride Plant	
2.	Height	m	:	-	
3.	Diameter	mm	:	-	
4.	Temperature	°C	:	73	
5.	Velocity	m/s	:	5.4	
6.	Type of fuel used		:	N.A.	
7.	Quantity of fuel used		:	N.A.	
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	5.97	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.
- END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/21

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 120MY22SE07	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:15 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed ✓	Thimble: Packed	Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Chlorinated Paraffin Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°c	:	-	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	5.97	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.
- END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/22

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasm Industries Ltd., - Chemical Division, 'Caustic Plant Vilayat' Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped		
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Aluminium Chloride Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°c	:	42	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	4.35	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : **Bhavisha Pandya**

Designation : **Sr. Chemist**

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/23

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 14:45 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed    Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Stable Bleaching Powder Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	200	
4.	Temperature	°C	:	39	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	5.92	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/24

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 120MY225E12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed. Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Description
1.	Source				Poly Aluminium Chloride Plant (Old Powder Plant)
2.	Height	m			35
3.	Diameter	mm			350
4.	Temperature	°C			40
5.	Velocity	m/s			-
6.	Type of fuel used				N.A
7.	Quantity of fuel used				N.A
1.	HCL	mg/Nm <sup>3</sup>	2.70	20	APHA 23 <sup>rd</sup> Edition - 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/25

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 – 120MY225E13	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 12:35 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Poly Aluminium Chloride Plant (New Powder Plant)	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	42	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	5.43	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.
- END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/26

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY225E14	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 19.05.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Trimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		Poly Aluminium Chloride Plant (Liquid Plant)			
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°C	:	40		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used	
1.	HCL	mg/Nm <sup>3</sup>	:	2.16	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Taxic Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Mekarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/02 (ULR- TC708922000010524F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Yagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY225E02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.05.2022	5.	Sampling Location: D.G.Set - 1
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		D.G.Set - 1		
2.	Height	m	36		
3.	Diameter	mm	450		
4.	Temperature	°C	134		
5.	Velocity	m/s	6.4		
6.	Type of fuel used		HSD		
7.	Quantity of fuel used	lit/hr	600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	45	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	20.17	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	10.95	50	IS 5182 (Part 6) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001:2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodra-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/03 (ULR- TC709922000010525F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY225E03	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.05.2022	5.	Sampling Location: D.G.Set - 2
6.	Sampling Time: 12:05 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		D.G.Set - 2		
2.	Height	m	36		
3.	Diameter	mm	450		
4.	Temperature	°C	140		
5.	Velocity	m/s	6.4		
6.	Type of fuel used		HSD		
7.	Quantity of fuel used	lit/hr	600		
S. No.	Parameters	Unit (SI)	Results	Specifications/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	42	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	17.54	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	11.91	50	IS 5182 (Part 6) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-062	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/170/04 (ULR- TC709922000010526F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY22SE04	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.05.2022	5.	Sampling Location: D.G. Set - 3
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G. Set - 3		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°c	: 142		
5.	Velocity	m/s	: 6.3		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 39	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 23.39	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 7.31	50	IS 5182 (Part 6) : 2006

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/05 (ULR- TC709922000019527F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PG-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2147888246 - 120MY225E05	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.05.2022	5.	Sampling Location: D.G.Set - 4
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on: 24.05.2022
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 24.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		D.G.Set - 4		
2.	Height	m	11		
3.	Diameter	mm	450		
4.	Temperature	°C	140		
5.	Velocity	m/s	6.3		
6.	Type of fuel used		HSD		
7.	Quantity of fuel used	lit/hr	600		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	48	150	IS 11255 (Part 1) :
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	14.69	100	IS 11255 (Part 2) :
3.	Oxides of Nitrogen (NOx)	ppm	9.32	50	IS 5102 (Part 6 )

Remark :

Authorized By -

Name : Bhavisha Pandya

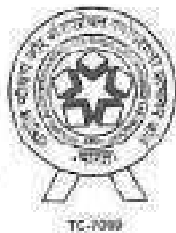
Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: MAY22/120/06 (ULR- TC789922000010528F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2.	Sample ID: 2147888246 - 120MY22SE06	3.	Client Representative: Mr. Vikas Valand	
4.	Sample Date: 20.05.2022	5.	Sampling Location: D.G.Set - 5	
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 20 Mins	
8.	Analysis commenced on: 24.05.2022	9.	Analysis Completed on : 24.05.2022	
10.	Reporting Date: 02.06.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 24.05.2022			

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		D.G.Set - 5		
2.	Height	m	: 11		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 146		
5.	Velocity	m/s	: 6.3		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 50	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 21.93	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 12.19	50	IS 5182 (Part 6) : 2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUN22/113/27 (ULR- TC709922000012567F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-			
2. Sample ID: 2252908246 – 113JN22AQ01	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 17.06.2022	5. Sampling Location: Nr. Aluminum Plant		
6. Sampling time: 11:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Batteries: Clamped <input checked="" type="checkbox"/>
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Cloud cover: Clear sky
18. Sample Received Date: 20.06.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	PM <sub>10</sub>	µg/m <sup>3</sup>	52	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg/m <sup>3</sup>	13	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	9.50	80	IS 5182 (Part 2) : 2004
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg/m <sup>3</sup>	17.96	80	IS 5182 (Part 6) : 2006
5.	CO	µg/m <sup>3</sup>	1.77	100	IS 5182 (Part 19) : 1982
6.	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	1.22	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg/m <sup>3</sup>	N.D.	500	IS 5182 (Part 7) : 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01/03/2021	Issue Date: 01-01-2015	Revision Date: 01/03/2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUN22/113/28 (ULR- TC708922000012568F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Coastic Plant-Vilayat" Plot No.1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-			
2. Sample ID: 2252908246 - 113IN22AQ02	3. Client Representative: Mr. Vikas Veland		
4. Sampling Date: 17.06.2022	5. Sampling Location: Nr.PAC Plant		
6. Sampling time: 11:15 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Pladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Cloud cover: Clear sky
18. Sample Received Date: 20.06.2022			
Station category: Industrial			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	63	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	17	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	6.99	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	15.87	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	2.21	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	3.06	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FHT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

**REPORT NO. : JUN22/113/29 (ULR- TC709922000012569F)**

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-			
2. Sample ID: 2252908246 - 1133N22AQ03	3. Client Representative: Mr. Vikas Vaid		
4. Sampling Date: 18.06.2022	5. Sampling Location: Nr. Main Gate		
6. Sampling time: 11:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: -
18. Sample Received Date: 20.06.2022			
17. Cloud cover: Clear sky			
17. Station category: Industrial			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	49	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	19	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	7.45	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	14.97	80	IS 5182 (Part 6) : 2006
5.	CL <sub>2</sub>	µg /m <sup>3</sup>	1.33	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	1.99	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	300	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO. : LAB-FMT-051	Issue No. : 02	Revision No. : 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodra-10.

Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUN22/113130 (ULR- TC708922000012570F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-			
2. Sample ID: 7752908246 - 1131N22AQ04	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 18.06.2022	5. Sampling Location: Nr. Marketing Yard		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022.		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bledder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: -
18. Sample Received Date: 20.06.2022			
Cloud cover: Clear sky Station category: Industrial			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	PM <sub>10</sub>	µg / m <sup>3</sup>	: 55	100	IS 5182 (Part 2 ) : 2006
2.	PM <sub>2.5</sub>	µg / m <sup>3</sup>	: 11	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg / m <sup>3</sup>	: 5.84	80	IS 5182 (Part 2 ) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg / m <sup>3</sup>	: 16.01	80	IS 5182 (Part 2 ) : 2006
5.	CL <sub>2</sub>	µg / m <sup>3</sup>	: 2.66	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg / m <sup>3</sup>	: 3.48	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg / m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remarks: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUN22/113/31

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-			
2. Sample ID: 2252908246 – 113JN22AQ01	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 17.06.2022	5. Sampling Location: Nr. Aluminum Plant		
6. Sampling time: 11:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Cloud cover: Clear sky
18. Sample Received Date: 20.06.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 719	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: 3.64	200	APHA 23 <sup>rd</sup> Edition 4500 CLC
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: 0.82	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhausha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUN22/113132

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-			
2. Sample ID: 2252906246 - 113JN22AQ02	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 17.06.2022	5. Sampling Location: Nr.PAC Plant		
6. Sampling time: 11:15 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Conditions:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: -
18. Sample Received Date: 20.06.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCC Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 689	5000	IS 5182 (Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: 4.07	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	160	IS 5182 (Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: 0.59	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1983

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: JUN22/113/33

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-			
2. Sample ID: 2252906246 - 113JN22AQ03	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 18.06.2022	5. Sampling Location: Nr.Main Gate		
6. Sampling time: 11:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Conditions:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: -
18. Sample Received Date: 20.06.2022			

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg/m <sup>3</sup>	: 0.9	5000	IS 5182 (Part 10): 1999
2.	HCL	µg/m <sup>3</sup>	: 3.21	200	APHA 23 <sup>rd</sup> Edition/4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg/m <sup>3</sup>	: N.O.	160	IS 5182 (Part 21): 2001
4.	HF	µg/m <sup>3</sup>	: 0.96	99	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg/m <sup>3</sup>	: N.O.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Shalisha Paridya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: JUN22/11334

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-392140.			
2. Sample ID: 2252908246 - 113JN22AQD4	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 18.06.2022	5. Sampling Location: Nr. Marketing Yard		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 20.06.2022	9. Analysis Completed on : 20.06.2022		
10. Reporting Date: 01.07.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Up wind	Cloud cover: Clear sky
18. Sample Received Date: 20.06.2022.			

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 696	5000	IS 5182 (Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: 4.71	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	100	IS 5182 (Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: 0.19	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Parthiya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

**REPORT NO.: JUN22/113/41**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. *Caustic Plant-Vilayat* Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 – 113JN22HW01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling location: Brine Sludge
6.	Analysis commenced on: 24.06.2022	7.	Analysis Completed on: 28.06.2022
8.	Reporting Date: 01.07.2022	9.	Sample Collected By: Mr. Vimal Chauhan
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Brown	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags ✓		
17.	Sample Received Date: 24.06.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH		7.09	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	30.16	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	3.92	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN <sup>-</sup> E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	14.96	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	2.6	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	N.D.	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P – C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
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  - 2) No analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

**REPORT NO.: JUN22/113/42**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: 22S2908246 – 113N22HW02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling location: Phosphoric Acid
6.	Analysis commenced on: 24.06.2022	7.	Analysis Completed on: 28.06.2022
8.	Reporting Date: 01.07.2022	9.	Sample Collected By: Mr. Vimal Chauhan
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Brown	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags, ✓		
17.	Sample Received Date: 24.06.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH		6.87	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	35.66	N.A.	APHA 23 <sup>rd</sup> edition 2540 C
3.	COD	gm/kg	4.47	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN- E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	18.16	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	1.4	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	0.13	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P – C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : **Bhavlata Parthya**

Designation : **Sr.Chemist**

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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT – SOLID WASTE		
DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - NOISE

REPORT NO.: JUN22/113/43 (ULR- TC709922000012575F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 - 113JN22N001	3.	Client Representative: Mr. Vikas Valand
4.	Sampling Date: 17.06.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 17.06.2022	7.	Analysis Completed on: 17.06.2022
8.	Reporting Date: 01.07.2022	9.	Sampling Location: --
10.	Discipline: Chemical	13.	Sample Received Date : 17.06.2022
11.	Group: Atmospheric Pollution		
12.	Product: Ambient Noise Levels		

#### TEST RESULTS

S. No.	Location	Day		Night		Method
		Time	Reading dB(A)	Time	Reading dB(A)	
1.	Nr. Main Gate	11:50 hr	52.3	22:00 hr	51.7	IS 9989: 1981
2.	Nr. ALCP Plant	12:00 hr	56.2	22:15 hr	53.2	IS 9989: 1981
3.	Nr. PAC Plant	12:15 hr	64.3	22:20 hr	62.3	IS 9989: 1981
4.	Nr. CL2 Area	12:10 hr	54.7	22:25 hr	53.2	IS 9989: 1981
5.	Nr. ETP	12:40 hr	57.5	22:30 hr	56.7	IS 9989: 1981
6.	Near Coal Tippler	12:45 hr	61.3	22:05 hr	59.2	IS 9989: 1981
7.	Fiber Main Gate	13:10 hr	51.2	22:30 hr	49.8	IS 9989: 1981
8.	Fiber Material Gate	13:15 hr	55.3	22:10 hr	51.2	IS 9989: 1981

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE :
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-----**END OF REPORT**-----

#### TEST REPORT FORMAT - NOISE

DOC. NO.: LAB-FMT-087	Issue No.: 01	Revision No.: 02
Effective Date.: 01.07.2020	Issue Date: 01-05-2015	Revision Date: 01.07.2020



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/H13/01 (ULR- TC709922000012553F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bhanuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 113JN22SE01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 14:20 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	Calcium Chloride Plant	
2.	Height	m	:	-	
3.	Diameter	mm	:	-	
4.	Temperature	°C	:	73	
5.	Velocity	m/s	:	5.5	
6.	Type of fuel used		:	N.A.	
7.	Quantity of fuel used		:	N.A.	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 15	150	IS 11255 (Part 1) : 1985

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 03	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/07 (ULR- TC709922000012559F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE07	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 13:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Chlorinated Paraffin Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 35		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.802	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 03	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/08 (ULR- TC709922000012560F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin. code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE08	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Sodium Hypo Stack - 1
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed
17.	Sample Received Date: 20.06.2022	Bladder: Clamped	

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Sodium Hypo Stack – 1
2.	Height	m	: 35
3.	Diameter	mm	: 450
4.	Temperature	°C	: 32
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method used
1.	CO <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.120	9	LAB-SOP-104

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 03	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 08.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/09 (ULR- TC709922000012561F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2.	Sample ID: 2252908246 - 113JN22SE09	3.	Client Representative: Mr. Vikas Valand	
4.	Sample Date: 17.06.2022	5.	Sampling Location: Sodium Hypo Stack - 2	
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022	
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/>	Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 20.06.2022			

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Sodium Hypo Stack - 2		
2.	Height	m	: 35		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.893	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO. : LAB-FMT-052	Issue No.: 02	Revision No. : 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/10 (ULR- TC709822000012562F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed: <input type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Aluminium Chloride Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 32		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Result	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.685	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) No analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 03	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/11 (ULR- TC709922000012563F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bhanuch, PO-Vilayat Taluka-Vagra, Gujarat. Ph code-392140.		
2.	Sample ID: 2252908246 - 113JN22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 18.06.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 14:25 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: TS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Stable Bleaching Powder Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 200		
4.	Temperature	°C	: 42		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.472	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/12 (ULR- TC709822000012564F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No-1, GIDC Vilayat Industrial Estate, Bhanuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 113JN22SE12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 13:50 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed: Bladder: Clamped		
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S. No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.668	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 03	Revision No.: 03
Effective Date: 01.03.2023	Issue Date: 01-01-2015	Revision Date: 01.03.2023



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/13 (ULR- TC709922000012565F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE13	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 13:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed: <input type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	35		
3.	Diameter	mm	350		
4.	Temperature	°C	34		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	0.493	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

\*\*\*\*\*END OF REPORT\*\*\*\*\*

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/14 (ULR- TC709922000012566F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE14	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed Bladder: Clamped		
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°c	:	32		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	O <sub>2</sub>	mg/Nm <sup>3</sup>	:	0.566	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

\*\*\*\*\*END OF REPORT\*\*\*\*\*

TEST REPORT FORMAT - STACK		
DQC. NO.: LAB-FMT-052	Issue No.: 03	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUN22/113/15

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE15	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: HCL Stack - 1
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed✓ Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 1		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°c	: 32		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 11.05	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUN22/113/16

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Villayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE16	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: HCL Stack - 2
6.	Sampling Time: 11:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed✓ Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	HCL Stack – 2	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°c	:	34	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	12.18	35 APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Dhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/17

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE17	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: HCL Stack - 3
6.	Sampling Time: 11:50 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 3		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°c	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 12.71	35	APHA 22 <sup>nd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/18

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE18	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: HCL Stack - 4
6.	Sampling Time: 12:15 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	HCL Stack - 4	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°C	:	36	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	10.66	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-RMT-052	Issue No.: 02	Revision No.: 03
Effective Dates: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

**REPORT NO. : JUN22/113/19**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE19	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 18.06.2022	5.	Sampling Location: Phosphoric Acid Plant
6.	Sampling Time: -	7.	Sampling Duration: -
8.	Analysis commenced on: -	9.	Analysis Completed on: -
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: -		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description
1.	Source		:	Phosphoric Acid Plant
2.	Height	m	:	35
3.	Diameter	mm	:	350
4.	Temperature	°C	:	-
5.	Velocity	m/s	:	-
6.	Type of fuel used		:	N.A
7.	Quantity of fuel used		:	N.A

S. No.	Parameters	Unit (SI)	:	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	-	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C
2.	HF	mg/Nm <sup>3</sup>	:	-	6	IS 11255 (Part 5): 1990

**Remark : Plant was shut down during the sampling.**

**Authorized By -**

**Name : Bhavisha Pandya**

**Designation : Sr. Chemist**

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/20

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 113JN22SE01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 14:20 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)		Description	
1.	Source		:	Calcium Chloride Plant	
2.	Height	m	:	-	
3.	Diameter	mm	:	-	
4.	Temperature	°C	:	73	
5.	Velocity	m/s	:	5.5	
6.	Type of fuel used		:	N.A.	
7.	Quantity of fuel used		:	N.A.	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	4.77	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/21

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE07	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 13:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Chlorinated Paraffin Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	35	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	3.72	20	APHA 23 <sup>rd</sup> Edition; 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 01	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/22

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)		Description	
1.	Source		:	Aluminium Chloride Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	32	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.10	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl-C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

\*\*\*\*\*END OF REPORT\*\*\*\*\*

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-PHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-03-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/23

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 18.06.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 14:25 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed      Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description		
1.	Source		:	Stable Bleaching Powder Plant		
2.	Height	m	:	35		
3.	Diameter	mm	:	200		
4.	Temperature	°C	:	42		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S.No.	Parameters	Unit (SI)	:	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	5.98	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

**Remark :**

**Authorized By -**

**Name : Bhavisha Pandya**

**Designation : Sr. Chemist**

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 08.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUN22/113/24

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 113JN22SE12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 13:50 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 20.06.2022		

**STACK DETAILS**

S. No.	Parameters	Unit (SI)	Description		
1.	Source		Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 4.24	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUN22/113/25

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE13	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 13:40 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 20.06.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 5.29	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/11326

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE14	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 13:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)		Description		
1.	Source		:	Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°c	:	32		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	HCL	mg/Nm <sup>3</sup>	:	2.63	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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\*\*\*\*\*END OF REPORT\*\*\*\*\*

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.:03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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(MoEF Approved)

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/02 (ULR- TC709922000012554F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE02	3.	Client Representative: Mr. Vikas Vaiani
4.	Sample Date: 17.06.2022	5.	Sampling Location: D.G.Set – 1
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped		
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set – 1		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 128		
5.	Velocity	m/s	: 6.1		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 53	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 19.87	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	: 11.08	50	IS 5182 (Part 6) :2006

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/03 (ULR- TC709922000012555F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 113JN22SE03	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 17.06.2022	5.	Sampling Location: D.G.Set - 2
6.	Sampling Time: 11:25 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.05.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 2		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°c	: 134		
5.	Velocity	m/s	: 6.0		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr.	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCR Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 46	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 18.73	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 10.71	50	IS 5182 (Part 6) :2006

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/04 (ULR- TC709922000012656F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN225E04	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 18.06.2022	5.	Sampling Location: D.G Set – 3
6.	Sampling Time: 11:10 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set – 3		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°c	: 139		
5.	Velocity	m/s	: 6.4		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 57	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 21.61	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 8.10	50	IS 5182 (Part 6) :2006

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-053	Issue No.: 03	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/05 (ULR- TC709922000012557F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 113JN22SE05	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 18.06.2022	5.	Sampling Location: D.G.Set – 4
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set – 4		
2.	Height	m	: 11		
3.	Diameter	mm	: 450		
4.	Temperature	°c	: 142		
5.	Velocity	m/s	: 6.3		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 48	150	IS 11255 (Part 1) :
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 16.04	100	IS 11255 (Part 2) :
3.	Oxides of Nitrogen (NOx)	ppm	: 7.26	50	IS 5182 (Part 6 )

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUN22/113/08 (ULR- TC709922000012558F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 113JN22SE06	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 18.06.2022	5.	Sampling Location: D.G.Set - 5
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 20.06.2022	9.	Analysis Completed on : 20.06.2022
10.	Reporting Date: 01.07.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 20.06.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 5		
2.	Height	m	: 11		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 140		
5.	Velocity	m/s	: 6.4		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 51	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 13.22	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	: 11.51	50	IS 5182 (Part 6) :2006

Remark :

Authorized By - 

Name : Bhavisha Pandya

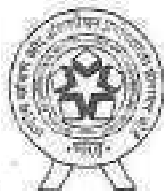
Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-PHT-052	Issue No.: 02	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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TC-7091

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUL22/146/27 (ULR- TC709922000014809E)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No.1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-				
2.	Sample ID: 2252908246 - 146JU22AQ01	3.	Client Representative: Mr. Vikas Veland		
4.	Sampling Date: 25.07.2022	5.	Sampling Location: Nr. Aluminum Plant		
6.	Sampling time: 11:15 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022		
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladders: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Partly Cloudy
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 27.07.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	47	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	22	80	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	8.77	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	16.85	80	IS 5182 (Part 6) : 2006
5.	CO	µg /m <sup>3</sup>	2.21	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	1.84	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7) : 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

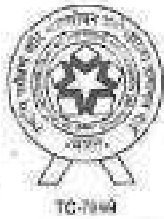
Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

END OF REPORT

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001:2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodra-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUL22/146/28 (ULR- TC709922000014810F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Coastic Plant-Vilayat" Plot No.1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-				
2. Sample ID: 2252908246 - 146JU22AQ02	3. Client Representative: Mr. Vikas Valand			
4. Sampling Date: 25.07.2022	5. Sampling Location: Nr.PAC Plant			
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs			
8. Analysis commenced on: 27.07.2022	9. Analysis Completed on : 27.07.2022			
10. Reporting Date: 05.08.2022	11. Discipline: Chemical			
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution			
14. Sampling Procedure: IS Method	15. Product: Ambient Air			
16. Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladders: Clamped <input checked="" type="checkbox"/>	
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Partly Cloudy
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -	Station category: Industrial
18. Sample Received Date: 27.07.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	58	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	20	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	8.33	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	14.06	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	2.66	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	2.45	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Shavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FHT-051	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





TC-2022

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871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: JUL22/146/29 (ULR- TC709022000014611F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vadra, Gujarat, Pin code:-			
2. Sample ID: 2252908246 - 146JU22AQ03	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 26.07.2022	5. Sampling Location: Nr. Main Gate		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 27.07.2022	9. Analysis Completed on : 27.07.2022		
10. Reporting Date: 05.08.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 27.07.2022			
19. Cloud cover: Partly Cloudy			
20. Station category: Industrial			

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	PM <sub>10</sub>	µg / m <sup>3</sup>	: 53	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg / m <sup>3</sup>	: 14	50	Guidelines By CPCB (Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg / m <sup>3</sup>	: 6.58	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg / m <sup>3</sup>	: 17.96	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg / m <sup>3</sup>	: 0.88	100	IS 5182 (Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg / m <sup>3</sup>	: 0.89	400	Guidelines By CPCB (Vol-1)
7.	H <sub>2</sub> S	µg / m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remarks: N.D. - Not Detected.

Authorized By:

Name: Bhavisha Pandya

Designation: Sr. Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - AMBIENT**

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



TC-1048

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Phone : (O) 0265 - 6131000, 6131001**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: JUL22/14600 (ULR- TC708922000014812F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Coastal Plant Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-				
2.	Sample ID: 2252908246 - 146JU22AQDM	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 26.07.2022	5.	Sampling Location: Nr. Marketing Yard		
6.	Sampling time: 12:00 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022		
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladders: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Partly Cloudy
	Rain: No Rain	Wind Direction: Down wind		Wind blowing from: -	Station category: Industrial
18.	Sample Received Date: 27.07.2022				

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	63	100	IS 5182 (Part 22) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	18	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	7.01	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NOx)	µg /m <sup>3</sup>	15.52	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	1.77	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	2.49	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - AMBIENT**

DOC. NO.: LAB-PHT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUL22/146/32

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd. - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-				
2.	Sample ID: 2252908246 - 146JU22AQ01	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 25.07.2022	5.	Sampling Location: Nr. Aluminum Plant		
6.	Sampling time: 11:15 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022		
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Partly Cloudy
	Rain: No Rain	Wind Direction: Up wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 27.07.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 670	5000	IS 5182(Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: 2.78	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	$\mu\text{g}/\text{m}^3$	: 0.87	60	IS 5183 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Panchiya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01.01.2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUL22/146/33

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasm Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-			
2. Sample ID: 2252908246 - 146JU22AQ02	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 25.07.2022	5. Sampling Location: Nr.PAC Plant		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 27.07.2022	9. Analysis Completed on : 27.07.2022		
10. Reporting Date: 05.08.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Conditions:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Wind: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 27.07.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 712	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: 3.85	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: 0.70	40	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -
Name : Bhavisha Parthiya
Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01/03/2021	Issue Date: 01/01/2015	Revision Date: 01/03/2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUL22/146/34

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC, Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-				
2.	Sample ID: 2252908246 - 146JU22AQ03	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 26.07.2022	5.	Sampling Location: Nr. Main Gate		
6.	Sampling time: 11:30 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022		
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Partly Cloudy
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 27.07.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 090	5000	IS 5182(Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: 2.57	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	$\mu\text{g}/\text{m}^3$	: 0.75	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: JUL22/146/35

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code- 392140.			
2. Sample ID: 2252908246 - 146JU22AQD4	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 26.07.2022	5. Sampling Location: Nr. Marketing Yard		
6. Sampling time: 12:00 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 27.07.2022	9. Analysis Completed on : 27.07.2022		
10. Reporting Date: 05.08.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal Chauhan	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 27.07.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	738	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	3.64	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	0.59	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By:

Name : Bhausha Perdiya      Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

\*\*\*\*\*END OF REPORT\*\*\*\*\*

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01.01.2005	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

**REPORT NO. : JUL22/146/42**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pincode-392140.		
2.	Sample ID: 2252908246 – 146JU22HW01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling location: Brine Sludge
6.	Analysis commenced on: 26.07.2022	7.	Analysis Completed on: 05.08.2022
8.	Reporting Date: 05.08.2022	9.	Sample Collected By: Mr. Vimal Chauhan
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Brown	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags. ✓		
17.	Sample Received Date: 26.07.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH	:	7.19	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	32.01	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	4.47	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500-CN- E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0005	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	11.04	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	2.4	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	N.D.	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P – C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

**REPORT NO.: JUL22/146/43**

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 – 146JU22HW02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling location: Phosphoric Acid
6.	Analysis commenced on: 26.07.2022	7.	Analysis Completed on: 05.08.2022
8.	Reporting Date: 05.08.2022	9.	Sample Collected By: Mr. Vimal Chauhan
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Green	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags ✓		
17.	Sample Received Date: 26.07.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH		7.05	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	37.38	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	3.76	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500-CN E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	16.48	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/lq	3.8	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	0.032	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P – C

Remark: 5 % leadate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

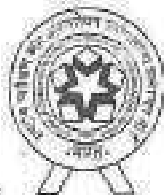
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-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





# KADAM ENVIRONMENTAL CONSULTANTS

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Phone : (0) 0265 - 6131000, 6131001



TC-7899

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - NOISE

REPORT NO.: JUL22/146/44 (ULR- TG709922000019818F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat, Taluka-Vagra,Gujarat. Pincode:302140.		
2.	Sample ID: 2252908246 - 146JU22N001	3.	Client Representative: Mr.Vikas Valand
4.	Sampling Date: 25.07.2022	5.	Sample Collected By: Mr. Vimal Chauhan
6.	Analysis commenced on: 25.07.2022	7.	Analysis Completed on: 25.07.2022
8.	Reporting Date: 05.08.2022	9.	Sampling Location: --
10.	Discipline: Chemical	13.	Sample Received Date : 25.07.2022
11.	Group: Atmospheric Pollution		
12.	Product: Ambient Noise Levels		

#### TEST RESULTS

S. No.	Location	Day		Night		Method
		Time	Reading dB(A)	Time	Reading dB(A)	
1.	Nr. Main Gate	10:30 hr	52.3	23:00 hr	50.2	IS 9989: 1981
2.	Nr. ALCP Plant	11:00 hr	59.4	23:30 hr	57.3	IS 9989: 1981
3.	Nr.PAC Plant	11:30 hr	67.3	24:00 hr	64.6	IS 9989: 1981
4.	Nr.CI2 Area	12:00 hr	55.3	00:30 hr	53.1	IS 9989: 1981
5.	Nr.ETP	12:30 hr	59.7	01:00 hr	57.2	IS 9989: 1981
6.	Near Coal Tippler	13:00 hr	61.3	01:30 hr	59.5	IS 9989: 1981
7.	Fiber Main Gate	13:30 hr	53.2	02:00 hr	50.9	IS 9989: 1981
8.	Fiber Material Gate	14:00 hr	55.3	02:30 hr	53.6	IS 9989: 1981

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE :
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - NOISE

DOC. NO.: LAB-FMT-087	Issue No.: 01	Revision No.: 02
Effective Date.: 01.07.2020	Issue Date: 01-05-2015	Revision Date: 01.07.2020



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : JUL22/146/01 (ULR- TC708922000014795F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.07.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Calcium Chloride Plant		
2.	Height	m	: -		
3.	Diameter	mm	: -		
4.	Temperature	°C	: 74		
5.	Velocity	m/s	: 5.5		
6.	Type of fuel used		: N.A.		
7.	Quantity of fuel used		: N.A.		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 18	150	IS 11255 (Part 1) : 1985

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

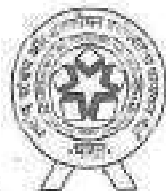
NOTE:

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- 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
- 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-057	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



TC-168

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146107 (ULR- TC709922000014601E)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE07	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022.		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Chlorinated Paraffin Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.794	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

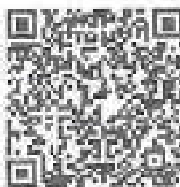
Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) No analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/DB (ULR- TC709922000014802F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE08	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Sodium Hypo Stack - 1
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Sodium Hypo Stack - 1		
2.	Height	m	: 35		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	SO <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.971	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under 'Sample Details'

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodra-10.  
Phone : (0) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/09 (ULR- TG709922000014803F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE09	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Sodium Hypo Stack - 2
6.	Sampling Time: 12:25 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed: <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Sodium Hypo Stack - 2		
2.	Height	m	: 35		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.700	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

END OF REPORT

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



TC-2024

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/10 (ULR- TC709922000014804F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE10	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed Bladder: Clamped		
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Aluminium Chloride Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 38		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ISIRI Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.521	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

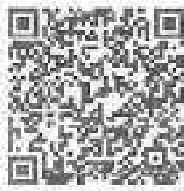
Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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TC-7049

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22M46/11 (ULR- TC709922000014805F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat,Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE11	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: 15 Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed      Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Stable Bleaching Powder Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 200		
4.	Temperature	°C	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.419	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

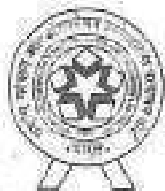
Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) No analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Detail.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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TC-099

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/12 (ULR- TC709922000014806E)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE12	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:35 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°c	:	30		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	:	0.562	9	LAB-SCP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001:2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10,  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/46/13 (ULR- TC709922000014807F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE13	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 13:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/>
			Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	Poly Aluminium Chloride Plant (New Powder Plant)	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	33	
5.	velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO <sub>2</sub>	mg/Nm <sup>3</sup>	:	0.491	9 LAB-SOP-104

Remark :

Authorized By -

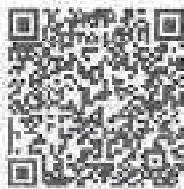
Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodra-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/14 (ULR-TC70992200014608F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No.1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE14	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:45 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Poly Aluminium Chloride Plant (Liquid Plant)
2.	Height	m	: 35
3.	Diameter	mm	: 350
4.	Temperature	°C	: 34
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Cl	mg/Nm <sup>3</sup>	: 0.535	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JVL22/146/15

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE15	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: HCL Stack - 1
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>
17.	Sample Received Date: 27.07.2022	Bladder: Clamped	

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		HCL Stack - 1		
2.	Height	m	35		
3.	Diameter	mm	150		
4.	Temperature	°c	34		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
E. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	12.71	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/16

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2.	Sample ID: 2252908246 – 146JU22SE16	3.	Client Representative: Mr. Vikas Valand	
4.	Sample Date: 25.07.2022	5.	Sampling Location: HCL Stack - 2	
6.	Sampling Time: 11:35 hr	7.	Sampling Duration: 15 Mins	
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022	
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 27.07.2022			

#### STACK DETAILS

S.No.	Parameters	Unit (SI)		Description	
1.	Source		:	HCL Stack – 2	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°c	:	34	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	10.59	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUL22/146/17

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE17	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: HCL Stack - 3
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 3		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°C	: 32		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	11.57	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/18

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No-1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22SE18	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: HCL Stack - 4
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	HCL Stack - 4	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°c	:	32	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	12.10	35	APHA, 23 <sup>rd</sup> Edition: 4500 - Cl-C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/19

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE19	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.07.2022	5.	Sampling Location: Phosphoric Acid Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 20 Mins.
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)		Description	
1.	Source		:	Phosphoric Acid Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°c	:	38	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	6.44	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C
2.	HF	mg/Nm <sup>3</sup>	N.D.	6	IS:11255 (Part 5): 1990

Remark : N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUL22/146/20

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat, Taluka-Vagra,Gujarat, Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22SE01	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 26.07.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	Calcium Chloride Plant	
2.	Height	m	:	-	
3.	Diameter	mm	:	-	
4.	Temperature	°C	:	74	
5.	Velocity	m/s	:	5.6	
6.	Type of fuel used		:	N.A.	
7.	Quantity of fuel used		:	N.A.	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl <sup>-</sup> C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/21

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22SE07	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Chlorinated Paraffin Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	34	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	3.71	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : JUL22/146/22

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Results	Description
1.	Source			Aluminium Chloride Plant
2.	Height	m	35	
3.	Diameter	mm	350	
4.	Temperature	°C	38	
5.	Velocity	m/s	-	
6.	Type of fuel used		N.A	
7.	Quantity of fuel used		N.A	

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.15	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

\*\*\*\*\*END OF REPORT\*\*\*\*\*

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/148/23

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 22S2908246 – 146JU22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Stable Bleaching Powder Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	200	
4.	Temperature	°C	:	36	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCR Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	4.80	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

**Remark :**

**Authorized By -**

**Name : Bhavisha Pandya**

**Designation : Sr. Chemist**

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2) No analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.09.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/24

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22SE12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:35 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Poly Aluminium Chloride Plant (Old Powder Plant)	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	30	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	3.14	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUL22/146/25

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22SE13	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 13:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed      Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°c	:	33		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	HCL	mg/nm <sup>3</sup>	:	4.22	20	APHA 23 <sup>rd</sup> Edition; 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FNT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: JUL22/146/28

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22SE14	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 25.07.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:45 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source:		Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	35		
3.	Diameter	mm	350		
4.	Temperature	°C	34		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	3.18	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: JUL22/146/02 (ULR- TC708922006014796E)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE02	3.	Client Representative: Mr. Vikas Valland
4.	Sample Date: 26.07.2022	5.	Sampling Location: D.G.Set - 1
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chughan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped		
17.	Sample Received Date: 27.07.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 1		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 142		
5.	Velocity	m/s	: 6.6		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 47	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 11.75	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 9.32	50	IS 5182 (Part 6) : 2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAM-FMT-052	Issue No : 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : JUL22/146/03 (ULR- TC709922000014797F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE03	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.07.2022	5.	Sampling Location: D.G.Set - 2
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		D.G.Set - 2		
2.	Height	m	36		
3.	Diameter	mm	450		
4.	Temperature	°C	146		
5.	Velocity	m/s	6.6		
6.	Type of fuel used		HSD		
7.	Quantity of fuel used	lit/hr	600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	50	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	14.83	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	8.44	50	IS 5182 (Part 6) : 2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

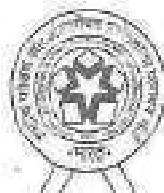
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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAR-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





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Phone : (O) 0265 - 8131000, 8131001



TC-7098

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/148/04 (ULR- TC709822000014798F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE04	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.07.2022	5.	Sampling Location: D.G.Set - 3
6.	Sampling Time: 12:25 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Yimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 3		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 138		
5.	Velocity	m/s	: 6.3		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 59	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 17.80	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 10.37	50	IS 5182 (Part 6) : 2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/05 (ULR- TC709922000014799F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No. 1, GIDC-Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 146JU22SE05	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.07.2022	5.	Sampling Location: D.G.Set – 4
6.	Sampling Time: 13:20 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		D.G.Set – 4		
2.	Height	m	: 11		
3.	Diameter	mm	: 450		
4.	Temperature	°c	: 142		
5.	Velocity	m/s	: 6.3		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 52	150	IS 11255 (Part 1) :
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 13.09	100	IS 11255 (Part 2) :
3.	Oxides of Nitrogen (NOx)	ppm	: 11.27	50	IS 5182 (Part 6 )

#### Remark :

Authorized By -

Name : Bhavisha Pandya

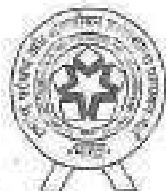
Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: JUL22/146/06 (ULR- TC709922000014800F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grosim Industries Ltd., Chemical Division. "Caustic Plant-Vilayat" Plot No. 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pini code-392140.		
2.	Sample ID: 2252908246 - 146JU22SE06	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 26.07.2022	5.	Sampling Location: D.G.Set - 5
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 27.07.2022	9.	Analysis Completed on : 27.07.2022
10.	Reporting Date: 05.08.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal Chauhan	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 27.07.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 5		
2.	Height	m	: 11		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 140		
5.	Velocity	m/s	: 6.4		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 61	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 16.15	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	: 9.72	50	IS 5182 (Part 6) : 2006

Remark :

Authorized By -

Name : Bhavisha Pandya

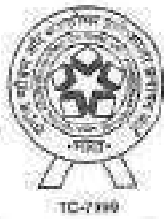
Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

Doc. No.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001:2015 Certified Company

(MoEF Approved)

671/B/3, Near Himalaya Machinery GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: AUG22/162/27 (ULR- TC708922000016731F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-				
2.	Sample ID: 2252908246 - 162AU22AQ01	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 27.08.2022	5.	Sampling Location: Nr. Aluminum Plant		
6.	Sampling time: 11:15 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022		
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 29.08.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	: 41	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	: 19	60	Guidelines by CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	: 8.76	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	: 15.16	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	: N.D.	400	Guidelines by CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

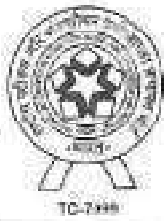
Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

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B71/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: AUG22/162/28 (ULR- TC709922000016732E)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-				
2.	Sample ID: 2252908246 – 162AU22AQ02	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 27.08.2022	5.	Sampling Location: Nr.PAC Plant		
6.	Sampling time: 12:00 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022		
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Filter Papers: Packed ✓	Balder: Clamped ✓	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind.	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 29.08.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	: 60	100	IS 5182 (Part 23 ) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	: 17	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	: 6.84	80	IS 5182 (Part 2 ) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	: 12.66	80	IS 5182 (Part 6 ) : 2005
5.	CO	µg /m <sup>3</sup>	: N.D.	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	: N.D.	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By

Name : Bhavisha Kogude

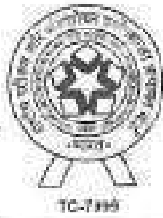
Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001:2015 Certified Company

(MoEF Approved)

B71/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO. : AUG22/162/29 (ULR- TC708822000016733F)

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-			
2. Sample ID: 2252908246 - 162AU22AQ03	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 26.08.2022	5. Sampling Location: Nr. Main Gate		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 29.08.2022	9. Analysis Completed on : 29.08.2022		
10. Reporting Date: 06.09.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Kishan Bhatt	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 29.08.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg / m <sup>3</sup>	43	100	IS 5182 (Part 22) : 2006
2.	PM <sub>2.5</sub>	µg / m <sup>3</sup>	13	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg / m <sup>3</sup>	7.36	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg / m <sup>3</sup>	15.57	80	IS 5101 (Part 6) : 2006
5.	CO <sub>2</sub>	µg / m <sup>3</sup>	N.D.	100	IS 5182 (Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg / m <sup>3</sup>	N.D.	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg / m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

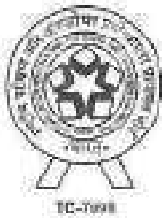
Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - AMBIENT**

REPORT NO.: AUG22/182/30 (ULR- TC709922008018734F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code:			
2. Sample ID: 2252908246 - 162AU22AQ04	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 26.08.2022	5. Sampling Location: Nr. Marketing Yard		
6. Sampling time: 11:45 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 29.08.2022	9. Analysis Completed on : 29.08.2022		
10. Reporting Date: 06.09.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Kishan Bhatt	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Cloud cover: Clear sky
18. Sample Received Date: 29.08.2022			

**TEST RESULTS**

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	: 53	100	IS 5182 (Part 21 ) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	: 11	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	: 5.84	80	IS 5182 (Part 2 ) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	: 13.27	40	IS 5102 (Part 6 ) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	: N.D.	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	: N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Roshya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - AMBIENT**

DOC NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO. : AUG22/182/31

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Gasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO Vilayat Taluka Vagra, Gujarat. Pin code-				
2. Sample ID: 2252908246 - 162AU22AQ01	3. Client Representative: Mr. Vikas Valand			
4. Sampling Date: 27.08.2022	5. Sampling Location: Nr. Aluminum Plant			
6. Sampling time: 11:15 hr	7. Sampling Duration: 24 Hrs			
8. Analysis commenced on: 29.08.2022	9. Analysis Completed on : 29.08.2022			
10. Reporting Date: 06.09.2022	11. Discipline: Chemical			
12. Sample Collected By: Mr. Kishan Bhatt	13. Group: Atmospheric Pollution			
14. Sampling Procedure: IS Method	15. Product: Ambient Air			
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓	
17. Environment Conditions:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -	Station category: Industrial
18. Sample Received Date: 29.08.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	µg/m <sup>3</sup>	: 744	5000	IS 5182(Part 10): 1986
2.	HCL	µg/m <sup>3</sup>	: N.D.	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg/m <sup>3</sup>	: N.D.	150	IS 5182(Part 21): 2001
4.	HF	µg/m <sup>3</sup>	: N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg/m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: AUG22/162/22

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-				
2.	Sample ID: 2252908246 - 162AU22AQ02	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 27.08.2022	5.	Sampling Location: Nr.PAC Plant		
6.	Sampling time: 12:00 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022		
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing From: -	Station category: Industrial	
18.	Sample Received Date: 29.08.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 835	5000	IS 5182 (Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: N.D.	200	APHA 20 <sup>th</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	160	IS 5182 (Part 21): 2001
4.	HF	$\mu\text{g}/\text{m}^3$	: N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982
Remark: N.D. - Not Detected.					
Authorized By -					
Name: Bhavisha Pandya			Designation: Sr. Chemist		

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO : AUG22/H62/23

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-			
2. Sample ID: 2252908246 – 162AU22AQ03	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 26.08.2022	5. Sampling Location: Nr,Main Gate		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 29.08.2022	9. Analysis Completed on : 29.08.2022		
10. Reporting Date: 06.09.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Kishan Bhatt	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 29.08.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	CO	µg/m <sup>3</sup>	: 1122	5000	IS 5182(Part 10): 1999
2.	HCL	µg/m <sup>3</sup>	: N.D.	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg/m <sup>3</sup>	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg/m <sup>3</sup>	: N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg/m <sup>3</sup>	: N.D.	3600	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Parodiya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01-03-2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO. : AUG22H8204

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code: 392140.			
2. Sample ID: 2252908246 - 162AU22AQ04	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 26.08.2022	5. Sampling Location: Nr. Marketing Yard		
6. Sampling time: 11:45 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 29.08.2022	9. Analysis Completed on : 29.08.2022		
10. Reporting Date: 06.09.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Kishan Bhatt	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Cloud cover: Clear sky
		Wind blowing from: -	Station category: Industrial
18. Sample Received Date: 29.08.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 709	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: N.D.	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name: Bhavisha Parthiya

Designation: Sr. Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162/02 (ULR- TC709922000016718F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU225E02	3.	Client Representative: Mr. Vikas Veland
4.	Sample Date: 27.08.2022	5.	Sampling Location: D.G. Set - 1
6.	Sampling Time: 11:15 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed ✓ Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G. Set - 1		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 128		
5.	Velocity	m/s	: 6.26		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 50	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 17.03	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	: 8.76	50	IS 5182 (Part 6) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) The analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001:2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/03 (ULR- TC709922000016719F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE03	3.	Client Representative: Mr. Vikas Veland
4.	Sample Date: 27.08.2022	5.	Sampling Location: D.G.Set - 2
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 2		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 129		
5.	Velocity	m/s	: 6.27		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 52	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 11.38	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 10.92	50	IS 5182 (Part 6) : 2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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871/B13, Near Himalaya Machinery, GIDC Makerpura, Vadodra-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/04 (ULR- TC709922000016720F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE04	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 27.08.2022	5.	Sampling Location: D.G.Set – 3
6.	Sampling Time: 11:50 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	D.G.Set – 3	
2.	Height	m	:	36	
3.	Diameter	mm	:	450	
4.	Temperature	°c	:	126	
5.	Velocity	m/s	:	6.2	
6.	Type of fuel used		:	HSD	
7.	Quantity of fuel used	lit/hr	:	600	
S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	:	55	150 IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	:	14.23	100 IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	:	7.42	50 IS 5182 (Part 6) :2006

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162/05 (ULR- TC709922000016721F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE05	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 27.08.2022	5.	Sampling Location: D.G.Set - 4
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	D.G.Set - 4		
2.	Height	m	:	11		
3.	Diameter	mm	:	450		
4.	Temperature	°C	:	129		
5.	Velocity	m/s	:	6.05		
6.	Type of fuel used		:	HSD		
7.	Quantity of fuel used	lit/hr	:	600		
S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used	
1.	Particulate Matter	mg/Nm <sup>3</sup>	:	49	150	IS 11255 (Part 1) :
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	:	12.71	100	IS 11255 (Part 2) :
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	:	9.46	50	IS 5182 (Part 6) :

Remark :

Authorized By -

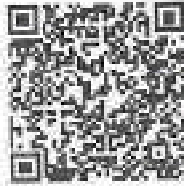
Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FHT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/06 (ULR- TC709922000016722F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE06	3.	Client Representative: Mr.Vikas Veland
4.	Sample Date: 27.08.2022	5.	Sampling Location: D.G.Set – 5
6.	Sampling Time: 12:35 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set – 5		
2.	Height	m	: 11		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 123		
5.	Velocity	m/s	: 6.22		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 57	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 15.65	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 10.13	50	IS 5182 (Part 6) :2006

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

REPORT NO.: AUG22/162/41

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 - 162AU22HW01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling location: Brine Sludge
6.	Analysis commenced on: 01.09.2022	7.	Analysis Completed on: 06.09.2022
8.	Reporting Date: 07.09.2022	9.	Sample Collected By: Mr. Kishan Bhatt
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: brown	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags. ✓		
17.	Sample Received Date: 01.09.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ RIS Standards	Method Used
1.	pH	:	7.36	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	31.16	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	3.68	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN <sup>-</sup> E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	16.16	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	2.8	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	N.D.	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P - C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pethiya

Designation : Sr.Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting or sample, if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT – SOLID WASTE****REPORT NO.: AUG22/162/42****SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode: 392140.		
2.	Sample ID: 2252908246 – 162AU22HW02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling location: Phosphoric Acid
6.	Analysis commenced on: 01.09.2022	7.	Analysis Completed on: 06.09.2022
8.	Reporting Date: 07.09.2022	9.	Sample Collected By: Mr. Kishan Bhatt
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Bottel Green	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags. ✓		
17.	Sample Received Date: 01.09.2022		

**TEST RESULTS**

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH	:	6.89	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	34.25	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	4.62	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN-E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0009	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	18.16	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	2.2	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	0.08	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P - C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Parthya

Designation : Sr.Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Data 6.

-----END OF REPORT-----

**TEST REPORT FORMAT – SOLID WASTE**

DCC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2019	Revision Date: 01.03.2021



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TC-7149

## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - NOISE

REPORT NO.: AUG22/162/43 (ULR- TC709922000016739F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra.Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 - 162AU22NO01	3.	Client Representative: Mr. Vikas Valand
4.	Sampling Date: 26.08.2022	5.	Sample Collected By: Mr. Kishan Bhatt
6.	Analysis commenced on: 26.08.2022	7.	Analysis Completed on: 26.08.2022
8.	Reporting Date: 06.09.2022	9.	Sampling Location: --
10.	Discipline: Chemical	13.	Sample Received Date : 26.08.2022
11.	Group: Atmospheric Pollution		
12.	Product: Ambient Noise Levels		

#### TEST RESULTS

S. No.	Location	Day		Night		Method
		Time	Reading dB(A)	Time	Reading dB(A)	
1.	Nr. Main Gate	11:30 hr	57.3	23:00 hr	50.1	IS 9989: 1981
2.	Nr. ALCP Plant	13:25 hr	55.2	23:10 hr	51.3	IS 9989: 1981
3.	Nr.PAC Plant	13:10 hr	64.3	23:20 hr	61.2	IS 9989: 1981
4.	Nr.CL2 Area	14:15 hr	55.8	23:30 hr	54.6	IS 9989: 1981
5.	Nr.ETP	14:00 hr	61.8	23:40 hr	59.4	IS 9989: 1981
6.	Near Coal Tippler	13:40 hr	57.3	23:50 hr	55.2	IS 9989: 1981
7.	Fiber Main Gate	11:40 hr	51.2	24:00 hr	49.3	IS 9989: 1981
8.	Fiber Material Gate	11:50 hr	53.3	00:10 hr	51.6	IS 9989: 1981

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE :
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

END OF REPORT

#### TEST REPORT FORMAT - NOISE

DOC. NO.: LAB-FMT-067	Issue No. : 01	Revision No.: 02
Effective Date: 01.07.2020	Issue Date: 01-05-2015	Revision Date: 01.07.2020



# KADAM ENVIRONMENTAL CONSULTANTS

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571/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/01 (ULR- TC709922000010717F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU23SE01	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 27.08.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 13:10 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Calcium Chloride Plant
2.	Height	m	: -
3.	Diameter	mm	: -
4.	Temperature	°c	: 75
5.	Velocity	m/s	: 5.4
6.	Type of fuel used		: N.A.
7.	Quantity of fuel used		: N.A.

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 16	150	IS 11255 (Part 1) : 1985

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

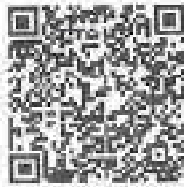
NOTE:

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162/07 (ULR- TC709922000016723F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE07	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed    Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Chlorinated Paraffin Plant
2.	Height	m	: 35
3.	Diameter	mm	: 350
4.	Temperature	°c	: 36
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.807	: 9	LAB-SOP-104

Remark :

Authorized By -

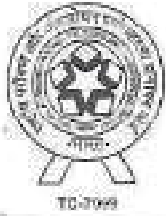
Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-03-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162/08 (ULR- TC709922000616724F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE08	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Sodium Hypo Stack - 1
6.	Sampling Time: 11:50 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Sodium Hypo Stack - 1		
2.	Height	m	: 35		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 37		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.990	9	LAB-SOP-104

Remark :

Authorized By

Name : Bhavisha Pandya

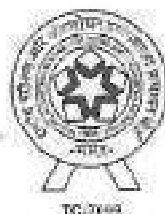
Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162109 (ULR- TC709922060016725F)

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE09	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Sodium Hypo Stack - 2
6.	Sampling Time: 12:50 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Sodium Hypo Stack – 2
2.	Height	m	: 35
3.	Diameter	mm	: 450
4.	Temperature	°C	: 36
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.697	9	LAB-SOP-104

Remark :

Authorized By -

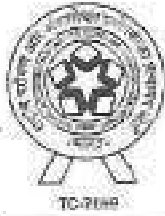
Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

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(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodra-10.  
Phone : (0) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/HO (ULR- TC708922000016726F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., Chemical Division. "Causbic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 13:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Aluminium Chloride Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 37		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.497	9	LAB-SCP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO. - LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-03-2015	Revision Date: 01.03.2021





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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/11 (ULR- TC709922000016727F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 13:40 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on: 29.08.2022
10.	Reporting Date: 08.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Stable Bleaching Powder Plant
2.	Height	m	: 35
3.	Diameter	mm	: 200
4.	Temperature	°C	: 37
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCR Norms/ BIS Standards	Method Used
1.	Ob	mg/Nm <sup>3</sup>	0.387	9	LAB-SOP-104

Remark :

Authorized By -

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Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/182/12 (ULR- TC709922000016728F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE12	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed
17.	Sample Received Date: 29.08.2022		Bladder: Clamped

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Co	mg/Nm <sup>3</sup>	: 0.595	9	LAB-SOP-104

Remark :

Authorized By -

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Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/13 (ULR- TC709922000016729F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division, "Caustic Plant-Vilayat" Plot No-1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE13	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Tumble:Packed Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 38		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCL Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.477	9	LAB-SOP-104

Remark :

Authorized By -

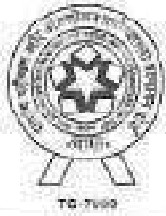
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Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/14 (ULR- TC709922000016730F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU225E14	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Scaled <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 37		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A.		
7.	Quantity of fuel used		: N.A.		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	O <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.586	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/15

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2.	Sample ID: 2252908246 - 162AJ27SE15	3.	Client Representative: Mr. Vikas Valand	
4.	Sample Date: 26.08.2022	5.	Sampling Location: HCL Stack - 1	
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 10 Mins	
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022	
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 29.08.2022			

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 1		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°c	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 11.72	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162/16

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162A1J27SE16	3.	Client Representative: Mr. Vkas Veland
4.	Sample Date: 26.08.2022	5.	Sampling Location: HCL Stack - 2
6.	Sampling Time: 14:10 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	HCL Stack - 2	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°c	:	38	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	12.87	35 APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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**END OF REPORT****TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/17

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2752908246 – 162AU22SE17	3.	Client Representative: Mr. Vkas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: HCL Stack - 3
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description		
1.	Source		:	HCL Stack - 3		
2.	Height	m	:	35		
3.	Diameter	mm	:	150		
4.	Temperature	°C	:	36		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)		Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	:	10.66	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162/18

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat, Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE18	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: HCL Stack - 4
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 4		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°C	: 37		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 11.25	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : AUG22/182/10

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE19	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 27.08.2022	5.	Sampling Location: Phosphoric Acid Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins.
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Phosphoric Acid Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	36	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	5.88	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C
2.	HF	mg/Nm <sup>3</sup>	N.D.	6	IS 11255 (Part 5): 1990

Remark : N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : AUG22/162/20

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AJ22SE01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 27.08.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 13:10 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)		Description	
1.	Source		:	Calcium Chloride Plant	
2.	Height	m	:	-	
3.	Diameter	mm	:	-	
4.	Temperature	°c	:	75	
5.	Velocity	m/s	:	5.4	
6.	Type of fuel used		:	N.A.	
7.	Quantity of fuel used		:	N.A.	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.40	20	APHA 23rd Edition: 4500 - Cl C

Remark :

Authorized By :

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO. : LAB-FMT-052	Issue No. : 02	Revision No. : 03
Effective Date. : 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: AUG22/162/21

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE07	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Disciplina: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed ✓	Thimble: Packed	Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Chlorinated Paraffin Plant		
2.	Height	m	35		
3.	Diameter	mm	350		
4.	Temperature	°C	36		
5.	Velocity	m/s	-		
6.	Type of fuel used		N.A		
7.	Quantity of fuel used		N.A		
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.65	20	APHA 23rd Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DDC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : AUG22/162/22

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 13:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Aluminium Chloride Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°c	:	37	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	1.60	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

**Remark :**

**Authorized By -**

**Name : Bhavisha Pandya**

**Designation : Sr. Chemist**

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO. : LAB-FMT-052	Issue No. : 02	Revision No. : 03
Effective Date. : 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : AUG22/182/23

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No. 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Yagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 13:40 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed    Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Stable Bleaching Powder Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	200	
4.	Temperature	°C	:	37	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/SPCR Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	3.73	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 09-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: AUG22/162/24

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE12	3.	Client Representative: Mr. Vkas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	:	Description	
1.	Source		:	Poly Aluminium Chloride Plant (Old Powder Plant)	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	36	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.13	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

**Remark :**

**Authorized By -**

**Name : Bhavisha Pandya**

**Designation : Sr. Chemist**

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**REPORT NO.: AUG22/162/25**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No.1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 162AU22SE13	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 12:20 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble:Packed Bladder: Clamped		
17.	Sample Received Date: 29.08.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 38		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 3.75	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : AUG22/162/26

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 162AU22SE14	3.	Client Representative: Mr. Vkas Valand
4.	Sample Date: 26.08.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 29.08.2022	9.	Analysis Completed on : 29.08.2022
10.	Reporting Date: 06.09.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Kishan Bhatt	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 29.08.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 37		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 3.21	20	APHA 23 <sup>rd</sup> Edition: 4500 - O C

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 01	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





# KADAM ENVIRONMENTAL CONSULTANTS

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871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: SEP22/139/29 (ULR- TC709922000018279F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PG-Vilayat Taluka-Vagra.Gujarat.Pin code-		
2.	Sample ID: 2252908246 - 139SE22AQ01	3.	Client Representative: Mr. Vikas Valand
4.	Sampling Date: 20.09.2022	5.	Sampling Location: Nr. ALCP Plant
6.	Sampling time: 11:30 hr	7.	Sampling Duration: 24 Hrs
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/> Bladder: Clamped <input checked="" type="checkbox"/>
17.	Environment Condition:	Temp: Normal Humidity: Medium	Wind speed: Smooth Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: - Station category: Industrial
18.	Sample Received Date: 22.09.2022		

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	45	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	15	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	9.64	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	17.40	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	3.10	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	2.45	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Paridya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: SEP22/139/30 (ULR- TC709922000018280F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Pkt No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-		
2.	Sample ID: 2252908246 - 1395E22AQ02	3.	Client Representative: Mr. Vikas Valand
4.	Sampling Date: 20.09.2022	5.	Sampling Location: Nr. PAC Plant
6.	Sampling time: 11:45 hr	7.	Sampling Duration: 24 Hrs
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/> Bladder: Clamped <input checked="" type="checkbox"/>
17.	Environment Condition:	Temp: Normal Humidity: Medium	Wind speed: Smooth Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: - Station category: Industrial
18.	Sample Received Date: 22.09.2022		

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	51	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	10	60	Guidelines By CPCB (Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	7.89	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	13.64	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	2.66	100	IS 5182 (Part 19) : 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	N.D.	400	Guidelines By CPCB (Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7) : 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: SEP22/139/31 (ULR- TC709922000018281F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-		
2.	Sample ID: 2252908246 - 139SE22AQ03	3.	Client Representative: Mr. Vikas Valand
4.	Sampling Date: 21.09.2022	5.	Sampling Location: Nr. Main Gate
6.	Sampling time: 11:30 hr	7.	Sampling Duration: 24 Hrs
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>
17.	Environment Condition:	Temp: Normal	Humidity: Medium
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
17.		Wind speed: Smooth	Bladder: Clamped <input checked="" type="checkbox"/>
			Cloud cover: Clear sky
18.	Sample Received Date: 22.09.2022		
			Station category: Industrial

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	PM <sub>10</sub>	µg / m <sup>3</sup>	57	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg / m <sup>3</sup>	17	60	Guidelines By CPCB (Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg / m <sup>3</sup>	5.70	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg / m <sup>3</sup>	16.85	80	IS 5182 (Part 6) : 2006
5.	CL <sub>2</sub>	µg / m <sup>3</sup>	1.77	100	IS 5182 (Part 19) : 1982
6.	Ammonia (NH <sub>3</sub> )	µg / m <sup>3</sup>	0.50	400	Guidelines By CPCB (Vol-1)
7.	H <sub>2</sub> S	µg / m <sup>3</sup>	N.D.	500	IS 5182 (Part 7) : 1973

Remark: N.D. - Not Detected.

Authorized By

Name: Bhavisha Pandya

Designation: Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: SEP22/139/32 (ULR- TC709922000018262F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra,Gujarat.Pin code-				
2.	Sample ID: 2252908246 - 139SE22AQ04	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 21.09.2022	5.	Sampling Location: Nr. Marketing Yard		
6.	Sampling time: 12:00 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022		
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 22.09.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	PM <sub>10</sub>	µg /m <sup>3</sup>	49	100	IS 5182 (Part 23) : 2006
2.	PM <sub>2.5</sub>	µg /m <sup>3</sup>	14	60	Guidelines By CPCB(Vol-1)
3.	Sulphur Dioxide (SO <sub>2</sub> )	µg /m <sup>3</sup>	6.14	80	IS 5182 (Part 2) : 2001
4.	Oxides of Nitrogen (NO <sub>x</sub> )	µg /m <sup>3</sup>	14.52	80	IS 5182 (Part 6) : 2006
5.	Cl <sub>2</sub>	µg /m <sup>3</sup>	0.47	100	IS 5182(Part 19): 1982
6.	Ammonia (NH <sub>3</sub> )	µg /m <sup>3</sup>	0.93	400	Guidelines By CPCB(Vol-1)
7.	H <sub>2</sub> S	µg /m <sup>3</sup>	N.D.	500	IS 5182 (Part 7): 1973

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FRM-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO. : SEP22/139/33

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-			
2. Sample ID: 2252908246 - 139SE22AQ01	3. Client Representative: Mr. Vikas Valand		
4. Sampling Date: 20.09.2022	5. Sampling Location: Nr. ALCP Plant		
6. Sampling time: 11:30 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 22.09.2022	9. Analysis Completed on : 22.09.2022		
10. Reporting Date: 01.10.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 22.09.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	CO	µg /m <sup>3</sup>	: 721	5000	IS 5182(Part 10): 1999
2.	HCL	µg /m <sup>3</sup>	: 3.21	200	APHA 23 <sup>d</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg /m <sup>3</sup>	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg /m <sup>3</sup>	: N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg /m <sup>3</sup>	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: SEP22/139/34

#### SAMPLE DETAILS

1. Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-			
2. Sample ID: 2252908246 - 139SE22AQ02	3. Client Representative: Mr. Vikas Valand.		
4. Sampling Date: 20.09.2022	5. Sampling Location: Nr. PAC Plant		
6. Sampling time: 11:45 hr	7. Sampling Duration: 24 Hrs		
8. Analysis commenced on: 22.09.2022	9. Analysis Completed on : 22.09.2022		
10. Reporting Date: 01.10.2022	11. Discipline: Chemical		
12. Sample Collected By: Mr. Vimal	13. Group: Atmospheric Pollution		
14. Sampling Procedure: IS Method	15. Product: Ambient Air		
16. Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓
17. Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -
18. Sample Received Date: 22.09.2022			

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	CO	µg / m <sup>3</sup>	675	5000	IS 5182(Part 10): 1999
2.	HCL	µg / m <sup>3</sup>	2.78	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	µg / m <sup>3</sup>	N.D.	160	IS 5182(Part 21): 2001
4.	HF	µg / m <sup>3</sup>	N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	µg / m <sup>3</sup>	N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By: **Name: Bhavisha Pandya** Designation: Sr. Chemist

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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - AMBIENT		
DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

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## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: SEP22/139/35

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Pkt No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-				
2.	Sample ID: 2252908246 - 139SE22AQ03	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 21.09.2022	5.	Sampling Location: Nr. Main Gate		
6.	Sampling time: 11:30 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022		
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Filter Paper: Packed <input checked="" type="checkbox"/>	Bladder: Clamped <input checked="" type="checkbox"/>	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 22.09.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 893	5000	IS 5182(Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: 1.71	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	$\mu\text{g}/\text{m}^3$	: N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982

Remark: N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT


### LABORATORY TEST REPORT - AMBIENT

REPORT NO.: SEP22/139/38

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra Gujarat. Pin code-392140.				
2.	Sample ID: 2252908246 - 139SE22AQ04	3.	Client Representative: Mr. Vikas Valand		
4.	Sampling Date: 21.09.2022	5.	Sampling Location: Nr. Marketing Yard		
6.	Sampling time: 12:00 hr	7.	Sampling Duration: 24 Hrs		
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022		
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical		
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution		
14.	Sampling Procedure: IS Method	15.	Product: Ambient Air		
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Filter Paper: Packed ✓	Bladder: Clamped ✓	
17.	Environment Condition:	Temp: Normal	Humidity: Medium	Wind speed: Smooth	Cloud cover: Clear sky
	Rain: No Rain	Wind Direction: Down wind	Wind blowing from: -	Station category: Industrial	
18.	Sample Received Date: 22.09.2022				

#### TEST RESULTS

S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	CO	$\mu\text{g}/\text{m}^3$	: 790	5000	IS 5182(Part 10): 1999
2.	HCL	$\mu\text{g}/\text{m}^3$	: 1.93	200	APHA 23 <sup>rd</sup> Edition 4500 Cl-C
3.	Hydrocarbon(HC) NMHC	$\mu\text{g}/\text{m}^3$	: N.D.	160	IS 5182(Part 21): 2001
4.	HF	$\mu\text{g}/\text{m}^3$	: N.D.	60	IS 5182 (Part 13): 1991
5.	CS <sub>2</sub>	$\mu\text{g}/\text{m}^3$	: N.D.	2000	IS 5182 (Part 20): 1982
Remark: N.D. - Not Detected.					
Authorized By - 					
Name : Bhavisha Pandya			Designation : Sr. Chemist		

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details:

-----END OF REPORT-----

#### TEST REPORT FORMAT - AMBIENT

DOC. NO.: LAB-FMT-051	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





# KADAM ENVIRONMENTAL CONSULTANTS

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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

REPORT NO.: SEP22/139/43

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 – 139SE22HW01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling location: Brine Sludge
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 01.10.2022
8.	Reporting Date: 01.10.2022	9.	Sample Collected By: Mr. Vimal
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Brown	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags. ✓		
17.	Sample Received Date: 01.09.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	pH	:	7.26	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	33.99	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	3.84	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	17.52	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	3.8	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	N.D.	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P - C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Pandya

Designation : Sr.Chemist

- NOTE:
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT – SOLID WASTE

REPORT NO.: SEP22/139/44

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 – 1395E22HW02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling location: Phosphoric Acid
6.	Analysis commenced on: 30.09.2022	7.	Analysis Completed on: 01.10.2022
8.	Reporting Date: 01.10.2022	9.	Sample Collected By: Mr. Vimal
10.	Physical Status: Solid	11.	Discipline: Chemical
12.	Sample Category: -	13.	Group: Pollution and Environment
14.	Colour: Grey	15.	Product: Solid Waste
16.	Description of sample: Packed and sealed in polythene bags. ✓		
17.	Sample Received Date: 01.09.2022		

#### TEST RESULTS

S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	pH	:	6.81	N.A.	APHA 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	% Moisture Contents	%	36.50	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
3.	COD	gm/kg	4.78	N.A.	APHA 23 <sup>rd</sup> Edition 5220 B
4.	Cyanide	gm/kg	N.D.	N.A.	APHA: 23 <sup>rd</sup> Edition 4500 CN <sup>-</sup> E
5.	Chromium	gm/kg	<0.0002	N.A.	APHA 23 <sup>rd</sup> Edition 3500 Cr - B
6.	Copper	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
7.	Lead	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
8.	Nickel	gm/kg	<0.0004	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
9.	Zinc	gm/kg	<0.0006	N.A.	APHA 23 <sup>rd</sup> Edition 3111 B
10.	Total Inorganic Solids	%	18.8	N.A.	APHA 23 <sup>rd</sup> Edition 2540 C
11.	Total Alkalinity as CaCO <sub>3</sub>	gm/kg	3.2	N.A.	APHA 23 <sup>rd</sup> Edition 2320 B
12.	Phosphate	gm/kg	0.30	N.A.	APHA 23 <sup>rd</sup> Edition 4500 P - C

Remark: 5 % leachate solution prepared in DM Water W/v. / N.D. - Not Detected.

Authorised By -

Name : Bhavisha Paddya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re-analysis of sample will be done, if requested within 7 days from the date of reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT – SOLID WASTE

DOC. NO.: LAB-FMT-053	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - NOISE

REPORT NO.: SEP22/139/45(ULR- TC709922000018283F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pincode-392140.		
2.	Sample ID: 2252908246 - 1395E22N001	3.	Client Representative: Mr. Vikas Valand
4.	Sampling Date: 20.09.2022	5.	Sample Collected By: Mr. Vimal
6.	Analysis commenced on: 20.09.2022	7.	Analysis Completed on: 20.09.2022
8.	Reporting Date: 01.10.2022	9.	Sampling Location: --
10.	Discipline: Chemical	13.	Sample Received Date : 20.09.2022
11.	Group: Atmospheric Pollution		
12.	Product: Ambient Noise Levels		

#### TEST RESULTS

S. No.	Location	Day		Night		Method
		Time	Reading dB(A)	Time	Reading dB(A)	
1.	Nr. Main Gate	12:10 hr	51.3	23:00 hr	48.6	IS 9989: 1981
2.	Nr. ALCP Plant	11:30 hr	54.3	23:15 hr	51.4	IS 9989: 1981
3.	Nr. PAC Plant	13:00 hr	64.3	23:30 hr	62.1	IS 9989: 1981
4.	Nr. CL <sub>2</sub> Area	12:10 hr	54.2	23:45 hr	52.7	IS 9989: 1981
5.	Nr. ETP	12:20 hr	57.3	24:00 hr	55.2	IS 9989: 1981
6.	Near Coal Tippler	12:15 hr	52.4	24:15 hr	50.1	IS 9989: 1981
7.	Fiber Main Gate	12:50 hr	49.8	24:30 hr	46.5	IS 9989: 1981
8.	Fiber Material Gate	12:40 hr	52.3	01:00 hr	50.4	IS 9989: 1981

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE :
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
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-----END OF REPORT-----

#### TEST REPORT FORMAT - NOISE

DOC. NO.: LAB-FMT-087	Issue No.: 01	Revision No.: 02
Effective Date: 01.07.2020	Issue Date: 01-05-2015	Revision Date: 01.07.2020



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/01 (ULR- TC709922000018265F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252906246 - 139SE22SE01	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		Calcium Chloride Plant		
2.	Height	m	-		
3.	Diameter	mm	-		
4.	Temperature	°C	73		
5.	Velocity	m/s	5.9		
6.	Type of fuel used		N.A.		
7.	Quantity of fuel used		N.A.		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	19	150	IS 11255 (Part 1) : 1985

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/07 (ULR- TC709922000018271F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasm Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE07	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Chlorinated Paraffin Plant
2.	Height	m	: 35
3.	Diameter	mm	: 350
4.	Temperature	°C	: 36
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.793	9	LAB-SCP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : SEP22/139/08 (ULR- TC709022000018272F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 1395E225E08	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Sodium Hypo Stack - 1
6.	Sampling Time: 12:10 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble: Packed Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Sodium Hypo Stack - 1		
2.	Height	m	: 35		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.774	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/09 (ULR- TC709922000018273F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE09	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Sodium Hypo Stack - 2
6.	Sampling Time: 12:15 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed ✓	Thimble:Packed	Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Sodium Hypo Stack – 2		
2.	Height	m	: 35		
3.	Diameter	mm	: 450		
4.	Temperature	°c	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.598	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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  - 2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/10 (ULR- TC709922000018274F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE10	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	Aluminium Chloride Plant	
2.	Height	m	:	35	
3.	Diameter	mm	:	350	
4.	Temperature	°C	:	34	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	:	0.591	9 LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/11 (ULR- TC709922000018275F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE11	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Stable Bleaching Powder Plant
6.	Sampling Time: 15:00 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed
17.	Sample Received Date: 22.09.2022		Bladder: Clamped

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: Stable Bleaching Powder Plant
2.	Height	m	: 35
3.	Diameter	mm	: 200
4.	Temperature	°C	: 36
5.	Velocity	m/s	: -
6.	Type of fuel used		: N.A
7.	Quantity of fuel used		: N.A

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.463	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 8131000, 8131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/12 (ULR- TC709922000018276F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed Bladder: Clamped		
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°C	:	34		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	:	0.536	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/13 (ULR- TC709922000018277F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE13	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 13:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed      Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 0.690	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/14 (ULR- TC709922000018278F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE14	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:45 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed      Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°c	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Cl <sub>2</sub>	mg/Nm <sup>3</sup>	: 1.018	9	LAB-SOP-104

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : SEP22/139/15

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE15	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: HCL Stack - 1
6.	Sampling Time: 11:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		:	HCL Stack - 1	
2.	Height	m	:	35	
3.	Diameter	mm	:	150	
4.	Temperature	°c	:	32	
5.	Velocity	m/s	:	-	
6.	Type of fuel used		:	N.A	
7.	Quantity of fuel used		:	N.A	
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	10.52	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: SEP22/139/16

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2.	Sample ID: 2252908246 - 139SE22SE16	3.	Client Representative: Mr. Vikas Valand	
4.	Sample Date: 20.09.2022	5.	Sampling Location: HCL Stack - 2	
6.	Sampling Time: 11:35 hr	7.	Sampling Duration: 10 Mins	
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022	
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/>	Bladder: Clamped
17.	Sample Received Date: 22.09.2022			

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	HCL Stack - 2		
2.	Height	m	:	35		
3.	Diameter	mm	:	150		
4.	Temperature	°C	:	32		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S.No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	HCL	mg/Nm <sup>3</sup>	:	12.62	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: SEP22/138/17

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 1395E22SE17	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: HCL Stack - 3
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: HCL Stack - 3		
2.	Height	m	: 35		
3.	Diameter	mm	: 150		
4.	Temperature	°c	: 30		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 11.50	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: SEP22/139/18

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 1395E225E18	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: HCL Stack - 4
6.	Sampling Time: 12:05 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	HCL Stack - 4		
2.	Height	m	:	35		
3.	Diameter	mm	:	150		
4.	Temperature	°C	:	34		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	HCL	mg/Nm <sup>3</sup>	:	10.06	35	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/19

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE19	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: Phosphoric Acid Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 15 Mins.
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description			
1.	Source		:	Phosphoric Acid Plant		
2.	Height	m	:	35		
3.	Diameter	mm	:	350		
4.	Temperature	°C	:	36		
5.	Velocity	m/s	:	-		
6.	Type of fuel used		:	N.A		
7.	Quantity of fuel used		:	N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used	
1.	HCL	mg/Nm <sup>3</sup>	:	6.39	20	AP-1A 23 <sup>rd</sup> Edition; 4500 - Cl C
2.	HF	mg/Nm <sup>3</sup>	:	N.D.	6	IS 11255 (Part 5): 1990

Remark : N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/20

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE20	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: CMS Plant (HCL Scrubber)
6.	Sampling Time: 14:20 hr	7.	Sampling Duration: 15 Mins.
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: CMS Plant (HCL Scrubber)		
2.	Height	m	: -		
3.	Diameter	mm	: -		
4.	Temperature	°C	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	9.06	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark : N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: SEP22/139/21

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE21	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Methanol Vent
6.	Sampling Time: 14:40 hr	7.	Sampling Duration: 15 Mins.
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Methanol Vent		
2.	Height	m	: -		
3.	Diameter	mm	: -		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	VOC	µg /m <sup>3</sup>	: N.D.	N.A	Gas Chromatography

Remark : N.D. - Not Detected.

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT - STACK**

REPORT NO.: SEP22/139/22

**SAMPLE DETAILS**

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE01	3.	Client Representative: Mr.Vikas Veland
4.	Sample Date: 21.09.2022	5.	Sampling Location: Calcium Chloride Plant
6.	Sampling Time: 14:30 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

**STACK DETAILS**

S.No.	Parameters	Unit (SI)	Description
1.	Source	:	Calcium Chloride Plant
2.	Height	m	-
3.	Diameter	mm	-
4.	Temperature	°C	73
5.	Velocity	m/s	5.9
6.	Type of fuel used	:	N.A.
7.	Quantity of fuel used	:	N.A.

S. No.	Parameters	Unit (SI)	Results	Specification/SPCB Norms/BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.98	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

**TEST REPORT FORMAT - STACK**

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/23


#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE07	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: Chlorinated Paraffin Plant
6.	Sampling Time: 12:00 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample: Sampling Bottles: Sealed <input checked="" type="checkbox"/> Thimble: Packed Bladder: Clamped		
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Chlorinated Paraffin Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.65	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/24


#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE10	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Aluminium Chloride Plant
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Aluminium Chloride Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 2.13	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By - 

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date.: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/25

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division, "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.			
2.	Sample ID: 2252908246 - 139SE22SE11	3.	Client Representative: Mr. Vikas Valand	
4.	Sample Date: 20.09.2022	5.	Sampling Location: Stable Bleaching Powder Plant	
6.	Sampling Time: 15:00 hr	7.	Sampling Duration: 10 Mins	
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022	
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical	
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution	
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission	
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed	Bladder: Clamped
17.	Sample Received Date: 22.09.2022			

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Stable Bleaching Powder Plant		
2.	Height	m	: 35		
3.	Diameter	mm	: 200		
4.	Temperature	°C	: 36		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 3.18	20	APHA 23 <sup>rd</sup> Edition: 4500 - C C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE:
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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/26

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 1395E22SE12	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Old Powder Plant)
6.	Sampling Time: 12:40 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Old Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	2.12	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021





## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/27

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE13	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (New Powder Plant)
6.	Sampling Time: 13:30 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble:Packed <input type="checkbox"/> Bladder: Clamped <input type="checkbox"/>
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (New Powder Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	1.59	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/28

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE14	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 20.09.2022	5.	Sampling Location: Poly Aluminium Chloride Plant (Liquid Plant)
6.	Sampling Time: 12:45 hr	7.	Sampling Duration: 10 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: Poly Aluminium Chloride Plant (Liquid Plant)		
2.	Height	m	: 35		
3.	Diameter	mm	: 350		
4.	Temperature	°C	: 34		
5.	Velocity	m/s	: -		
6.	Type of fuel used		: N.A		
7.	Quantity of fuel used		: N.A		
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms / BIS Standards	Method Used
1.	HCL	mg/Nm <sup>3</sup>	: 2.65	20	APHA 23 <sup>rd</sup> Edition: 4500 - Cl C

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/02 (ULR- TC709922000018286F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE02	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: D.G.Set - 1
6.	Sampling Time: 11:00 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		D.G.Set - 1		
2.	Height	m	36		
3.	Diameter	mm	450		
4.	Temperature	°C	138		
5.	Velocity	m/s	6.3		
6.	Type of fuel used		HSD		
7.	Quantity of fuel used	lit/hr	600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	43	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	14.55	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	10.61	50	IS 11255 (Part 7) : 2005

Remark :

Authorized By :

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/03 (ULR- TC709922090018267F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE03	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: D.G.Set - 2
6.	Sampling Time: 11:45 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 2		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 139		
5.	Velocity	m/s	: 6.3		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification / SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	48	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	13.13	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	11.19	50	IS 11255 (Part 7) :2005

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO. : SEP22/139/04 (ULR- TC708922000018268F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE04	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: D.G.Set – 3
6.	Sampling Time: 12:25 hr	7.	Sampling Duration: 30 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set – 3		
2.	Height	m	: 36		
3.	Diameter	mm	: 450		
4.	Temperature	°C	: 142		
5.	Velocity	m/s	: 6.3		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 53	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 16.04	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NO <sub>x</sub> )	ppm	: 9.62	50	IS 11255 (Part 7) :2005

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



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## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/05 (ULR- TC708922000018268F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd., - Chemical Division. "Caustic Plant-Vilayat" Plot No 1, GIDC Vilayat Industrial Estate, Bharuch, PO-Vilayat Taluka-Vagra, Gujarat, Pin code-392140.		
2.	Sample ID: 2252908246 - 139SE22SE05	3.	Client Representative: Mr. Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: D.G.Set - 4
6.	Sampling Time: 12:05 hr	7.	Sampling Duration: 15 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed <input checked="" type="checkbox"/>	Thimble: Packed <input checked="" type="checkbox"/> Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description		
1.	Source		: D.G.Set - 4		
2.	Height	m	: 11		
3.	Diameter	mm	: 450		
4.	Temperature	°c	: 134		
5.	Velocity	m/s	: 6.2		
6.	Type of fuel used		: HSD		
7.	Quantity of fuel used	lit/hr	: 600		
S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 40	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 14.69	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 10.36	50	IS 11255 (Part 7) : 2005

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

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-----END OF REPORT-----

#### TEST REPORT FORMAT - STACK

DOC. NO.: LAB-FMT-052	Issue No.: 07	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodra-10.

Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT

### LABORATORY TEST REPORT - STACK

REPORT NO.: SEP22/139/06 (ULR- TC709922000018270F)

#### SAMPLE DETAILS

1.	Name & Address of Client: M/s. Grasim Industries Ltd.,- Chemical Division. "Caustic Plant-Vilayat" Plot No 1,GIDC Vilayat Industrial Estate,Bharuch,PO-Vilayat Taluka-Vagra.Gujarat. Pin code-392140.		
2.	Sample ID: 2252908246 – 139SE22SE06	3.	Client Representative: Mr.Vikas Valand
4.	Sample Date: 21.09.2022	5.	Sampling Location: D.G.Set – 5
6.	Sampling Time: 14:00 hr	7.	Sampling Duration: 20 Mins
8.	Analysis commenced on: 22.09.2022	9.	Analysis Completed on : 22.09.2022
10.	Reporting Date: 01.10.2022	11.	Discipline: Chemical
12.	Sample Collected By: Mr. Vimal	13.	Group: Atmospheric Pollution
14.	Sampling Procedure: IS Method	15.	Product: Stack Emission
16.	Description of Sample:	Sampling Bottles: Sealed ✓	Thimble:Packed Bladder: Clamped
17.	Sample Received Date: 22.09.2022		

#### STACK DETAILS

S.No.	Parameters	Unit (SI)	Description
1.	Source		: D.G.Set – 5
2.	Height	m	: 11
3.	Diameter	mm	: 450
4.	Temperature	°c	: 143
5.	Velocity	m/s	: 6.3
6.	Type of fuel used		: HSD
7.	Quantity of fuel used	lit/hr	: 600

S. No.	Parameters	Unit (SI)	Results	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Particulate Matter	mg/Nm <sup>3</sup>	: 47	150	IS 11255 (Part 1) : 1985
2.	Sulphur Dioxide(SO <sub>2</sub> )	ppm	: 17.29	100	IS 11255 (Part 2) : 1985
3.	Oxides of Nitrogen (NOx)	ppm	: 8.94	50	IS 11255 (Part 7) :2005

Remark :

Authorized By -

Name : Bhavisha Pandya

Designation : Sr. Chemist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

TEST REPORT FORMAT - STACK		
DOC. NO.: LAB-FMT-052	Issue No.: 02	Revision No.: 03
Effective Date: 01.03.2021	Issue Date: 01-01-2015	Revision Date: 01.03.2021


**Form No. - 37**

(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	CA Plant	Total Dust	Handy Air Sampler	1	-	0.01

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. SHUBHAM VERMA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodera. (Date 15.04.2022)




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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CA Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.32

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CA Plant	NOx	Handy Air Sampler	1	-	0.21

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CA Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 CH-C	-	-	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CA Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
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**Register containing particulars of monitoring of working environment required under section 7-A(a)(c)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	SBP Plant	Total Dust	Handy Air Sampler	1	-	0.83

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. SHUBHAM VERMA


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1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	SBP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.39

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


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1. Name of the Department/Plant - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	SBP Plant	NOx	Handy Air Sampler	1	-	0.20

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	SBP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. SHUBHAM VERMA

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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	SBP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182 (Part 19): 1982	-	The results is within the limits.	For 	MR. SHUBHAM VERMA


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**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	PAC Powder New	Total Dust	Handy Air Sampler	1	-	0.81

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. SHUBHAM VERMA


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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder New	SO <sub>2</sub>	Handy Air Sampler	1	-	0.49

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder New	NOx	Handy Air Sampler	1	-	0.31

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


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3. Particulars of sampling

S.No.	Location /- Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder New	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. SHUBHAM VERMA


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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder New	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. SHUBHAM VERMA


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 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder Old	Total Dust	Handy Air Sampler	1	-	0.73

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. SHUBHAM VERMA


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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder Old	SO <sub>2</sub>	Handy Air Sampler	1	-	0.58

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. SHUBHAM VERMA

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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder Old	NOx	Handy Air Sampler	1	-	0.38

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder Old	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. SHUBHAM VERMA


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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder Old	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. SHUBHAM VERMA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)


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Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	ALCP Plant	Total Dust	Handy Air Sampler	1	-	0.93

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. SHUBHAM VERMA


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1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	ALCP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.45

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	ALCP Plant	NOx	Handy Air Sampler	1	-	0.25

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	ALCP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	ALCP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. SHUBHAM VERMA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)




**Form No. - 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	Chemical Dosing Area	Total Dust	Handy Air Sampler	1	-	0.78

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5162(Part 4): 1999	-	-	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	Chemical Dosing Area	SO <sub>2</sub>	Handy Air Sampler	1	-	0.50

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	Chemical Dosing Area	NOx	Handy Air Sampler	1	-	0.39

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	Chemical Dosing Area	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	Chemical Dosing Area	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. SHUBHAM VERMA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	CPW (Paraffin Storage area)	Total Dust	Hardy Air Sampler	1	-	0.66

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodra. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - CPW (Paraffin Storage area)
2. Raw Material by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CPW (Paraffin Storage area)	SO <sub>2</sub>	Handy Air Sampler	1	-	0.33

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process ;
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CPW (Paraffin Storage area)	NOx	Handy Air Sampler	1	-	0.18

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. SHUBHAM VERMA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CPW (Paraffin Storage area)	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 CH-C	-	-	For 	MR. SHUBHAM VERMA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CPW (Paraffin Storage area)	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. SHUBHAM VERMA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **April - 2022** by Kadam Environmental Consultants, Vadodara. (Date 15.04.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process -
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	CA Plant	Total Dust	Handy Air Sampler	1	-	1.20

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahe) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B.)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CA Plant
2. Raw Material/by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CA Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.12

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CA Plant	NOx	Handy Air Sampler	1	-	0.34

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CA Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.11

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CA Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	0.34

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling.

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	SBP Plant	Total Dust	Handy Air Sampler	1	-	1.40

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	SBP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.11

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	SBP Plant	NOx	Handy Air Sampler	1	-	0.42

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	SBP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.09

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	SBP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	0.33

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder New	Total Dust	Handy Air Sampler	1	-	1.30

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022).

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder New	SO <sub>2</sub>	Handy Air Sampler	1	-	0.17

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder New	NOx	Handy Air Sampler	1	-	0.36

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
 [Prescribed under Rule 12-B]

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder New	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.1

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodra. (Date 19.05.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder New	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	0.34

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)


**Form No. - 37**

(Prescribed under Rule 12-B.)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder Old	Total Dust	Handy Air Sampler	1	-	1.60

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder Old	SO <sub>2</sub>	Handy Air Sampler	1	-	0.14

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder Old	NOx	Handy Air Sampler	1	-	0.32

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 5): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B.)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder Old	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.08

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder Old	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	0.31

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date: 19.05.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	ALCP Plant	Total Dust	Hardy Air Sampler	1	-	1.40

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	ALCP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.21

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	ALCP Plant	NOx	Handy Air Sampler	1	-	0.43

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 5): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	ALCP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.08

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	ALCP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	0.34

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant - Chemical Dosing Area  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	Chemical Dosing Area	Total Dust	Handy Air Sampler	1	-	1.50

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	Chemical Dosing Area	SO <sub>2</sub>	Handy Air Sampler	1	-	0.19

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	Chemical Dosing Area	NOx	Handy Air Sampler	1	-	0.34

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2005	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	Chemical Dosing Area	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.11

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant: - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	Chemical Dosing Area	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	0.40

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	CPW (Paraffin Storage area)	Total Dust	Handy Air Sampler	1	-	1.10

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(s)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CPW (Paraffin Storage area)	SO <sub>2</sub>	Handy Air Sampler	1	-	0.18

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CPW (Paraffin Storage area)	NOx	Handy Air Sampler	1	-	0.44

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CPW (Paraffin Storage area)	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.12

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-		For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CPW (Paraffin Storage area)	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	0.34

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **May - 2022** by Kadam Environmental Consultants, Vadodara. (Date 19.05.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant, - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	CA Plant	Total Dust	Handy Air Sampler	1	-	0.73

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CA Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.90

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VJMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CA Plant	NOx	Handy Air Sampler	1	-	1.03

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CA Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.08

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 CH-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CA Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	SBP Plant	Total Dust	Handy Air Sampler	1	-	0.85

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	SBP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.78

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	SBP Plant	NOx	Handy Air Sampler	1	-	1.21

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	SBP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.05

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 C-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	SBP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder New	Total Dust	Handy Air Sampler	1	-	0.77

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadem Environmental Consultants, Vadodara. (Date 17.06.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder New	SO <sub>2</sub>	Handy Air Sampler	1	-	0.93

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder New	NOx	Handy Air Sampler	1	-	0.33

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUDHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder New	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.10

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder New	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder Old	Total Dust	Handy Air Sampler	1	-	0.80

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant: - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder Old	SO <sub>2</sub>	Handy Air Sampler	1	-	0.85

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder Old	NOx	Handy Air Sampler	1	-	1.23

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUDHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder Old	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.09

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder Old	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	ALCP Plant	Total Dust	Handy Air Sampler	1	-	0.61

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	ALCP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.68

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	ALCP Plant	NOx	Handy Air Sampler	1	-	1.09

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	ALCP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.13

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 CHC	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	ALCP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(s)(e)

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	Chemical Dosing Area	Total Dust	Handy Air Sampler	1	-	0.75

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	Chemical Dosing Area	SO <sub>2</sub>	Handy Air Sampler	1	-	0.81

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	Chemical Dosing Area	NOx	Handy Air Sampler	1	-	1.12

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	Chemical Dosing Area	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.22

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	Chemical Dosing Area	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(c)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	CPW (Paraffin Storage area)	Total Dust	Handy Air Sampler	1	-	0.70

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of June - 2022 by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CPW (Paraffin Storage area)	SO <sub>2</sub>	Handy Air Sampler	1	-	0.79

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CPW (Paraffin Storage area)	NO <sub>x</sub>	Handy Air Sampler	1	-	1.01

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CPW (Paraffin Storage area)	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.20

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)

**Form No. - 37**  
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**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CPW (Paraffin Storage area)	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **June - 2022** by Kadam Environmental Consultants, Vadodara. (Date 17.06.2022)



# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10,  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	CA Plant	Total Dust	Handy Air Sampler	1	-	0.81

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHALHAVAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT

Form No. - 37  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CA Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.13

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001		The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Piece Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CA Plant	NOx	Handy Air Sampler	1	-	0.29

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT


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Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CA Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
	APHA 23 <sup>rd</sup> Edition 4500 Cl-C			For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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(MoEF Approved) Environmental Consultants

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## ENVIRONMENTAL MONITORING REPORT

Form No. - 37  
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Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CA Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19)- 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :-
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	SBP Plant	Total Dust	Handy Air Sampler	1	-	0.75

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999			For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahe) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

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Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	SBP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.25

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT

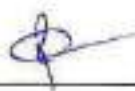
Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	SBP Plant	NOx	Handy Air Sampler	1	-	0.38

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)



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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

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Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	SBP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

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Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	SBP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.

Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	PAC Powder New	Total Dust	Handy Air Sampler	1	-	0.73

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN

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1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder New	SO <sub>2</sub>	Handy Air Sampler	1	-	0.18

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder New	NOx	Handy Air Sampler	1	-	0.33

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For: 	MR. VIMAL CHAUHAN

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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder New	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C			For 	MR. VIMAL CHAUHAN

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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder New	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182 (Part 19): 1982	-	The results is within the limits.	For: 	MR. VIMAL CHAUHAN

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1. Name of the Department/Plant. - PAC Powder Old

2. Raw Material, by products and finished products involving in the process :

3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder Old	Total Dust	Handy Air Sampler	1	-	0.80

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUDHAN

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3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder Old	SO <sub>2</sub>	Handy Air Sampler	1	-	0.20

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder Old	NOx	Handy Air Sampler	1	-	0.48

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

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1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder Old	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder Old	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	ALCP Plant	Total Dust	Handy Air Sampler	1	-	0.85

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN

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1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	ALCP Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.23

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

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1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	ALCP Plant	NOx	Handy Air Sampler	1	-	0.41

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	ALCP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

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1. Name of the Department/Plant. - ALOP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	ALCP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

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Form No. - 37

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Register containing particulars of monitoring of working environment required under section 7-A(s)(e)

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	Chemical Dosing Area	Total Dust	Handy Air Sampler	1	-	0.69

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN

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2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	Chemical Dosing Area	SO <sub>2</sub>	Handy Air Sampler	1	-	0.28

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

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1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	Chemical Dosing Area	NOx	Handy Air Sampler	1	-	0.57

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

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2. Raw Material, by products and finished products involving in the process ;
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	Chemical Dosing Area	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

**ENVIRONMENTAL MONITORING REPORT**


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	Chemical Dosing Area	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

# KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	CPW (Paraffin Storage area)	Total Dust	Handy Air Sampler	1	-	0.77

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CPW (Paraffin Storage area)	SO <sub>2</sub>	Handy Air Sampler	1	-	0.22

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)



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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - CPW (Paraffin Storage area)
2. Raw Material by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CPW (Paraffin Storage area)	NOx	Handy Air Sampler	1	-	0.39

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

**ENVIRONMENTAL MONITORING REPORT**


Form No. - 37

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CPW (Paraffin Storage area)	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CPW (Paraffin Storage area)	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
0 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of July - 2022 by Kadam Environmental Consultants, Vadodara. (Date 25.07.2022)

**ENVIRONMENTAL MONITORING REPORT****LABORATORY TEST REPORT – MICROBIOLOGY**

REPORT NO.: JUL22/082/05(ULR- TC709922000014418F)

**SAMPLE DETAILS**

1.	Name & Address of Client : M/s. Voltas Ltd., Siddhi Industrial Estate, Waghodia GIDC, Vadodara, Gujarat.		
2.	Sample ID:2149738246 – 082JU22EF01	8.	Client Representative: Mr. Naveen Goyal
3.	Sample Date: 27.07.2022	9.	Sample Collected By: Mr.Ronak
4.	Packing Condition & Quantity: Sealed ✓	10.	Discipline: Biological
5.	Analysis commenced on: 29.07.2022	11.	Group: Environment and Pollution
6.	Analysis Completed on: 01.08.2022	12.	Product: STP Inlet
7.	Reporting Date: 05.08.2022	13.	Sampling Method: IS 1622
14.	Sampling Location: STP Inlet	15.	Sample Received Date : 29.07.2022

**TEST RESULTS**

S. No.	Parameters	Results	Unit (SI)	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Fecal Coliform Bacteria	1600	MPN /100ml	N.A.	APHA 23 <sup>rd</sup> Edition (9221 C, E)
Remark :					
Authorised By-					
Name: Priyanka Kotak			Designation: Microbiologist		

- NOTE :
- 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.
  - 2) Re-sampling may be done, if required, with written approval of the laboratory.
  - 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

**TEST REPORT FORMAT - MICROBIOLOGY**

DOC. NO.: LAB-FMT-217	Issue No.: 01	Revision No.: 01
Effective Date: 01.03.2021	Issue Date: 01.07.2020	Revision Date: 01.03.2021

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## ENVIRONMENTAL MONITORING REPORT



### LABORATORY TEST REPORT – MICROBIOLOGY

REPORT NO. : JUL22/082/05(ULR- TC709922000014418F)

#### SAMPLE DETAILS

1.	Name & Address of Client : M/s. Voltas Ltd., Siddhi Industrial Estate, Waghodia GIDC, Vadodara, Gujarat.	8.	Client Representative: Mr. Naveen Goyal
2.	Sample ID:2149738246 – 082JU22EF01	9.	Sample Collected By: Mr.Ronak
3.	Sample Date: 27.07.2022	10.	Discipline: Biological
4.	Packing Condition & Quantity: Sealed ✓	11.	Group: Environment and Pollution
5.	Analysis commenced on: 29.07.2022	12.	Product: STP Inlet
6.	Analysis Completed on: 01.08.2022	13.	Sampling Method: IS 1622
7.	Reporting Date: 05.08.2022	14.	Sample Received Date : 29.07.2022
14.	Sampling Location: STP Inlet		

#### TEST RESULTS

S. No.	Parameters	Results	Unit (SI)	Specification/ SPCB Norms/ BIS Standards	Method Used
1.	Fecal Coliform Bacteria	1500	MPN /100ml	N.A.	APHA 23 <sup>rd</sup> Edition (9221 C, E)

Remark :

Authorised By-

Name: Priyanka Kotak

Designation: Microbiologist

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
2) Re-sampling may be done, if required, with written approval of the laboratory.  
3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

#### TEST REPORT FORMAT - MICROBIOLOGY

DOC. NO.: LAB-FMT-217	Issue No.: 01	Revision No.: 01*
Effective Date: 01.03.2021	Issue Date: 01.07.2020	Revision Date: 01.03.2021

# KADAM ENVIRONMENTAL CONSULTANTS

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## ENVIRONMENTAL MONITORING REPORT


Form No. - 37

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CMS Plant
2. Raw Material by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	CMS Plant	Total Dust	Handy Air Sampler	1	-	0.72

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehej) in the month of August - 2022 by Kadam Environmental Consultants, Vadodara. (Date 26.08.2022)


**ENVIRONMENTAL MONITORING REPORT****Form No. - 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CMS Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CMS Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of August - 2022 by Kadam Environmental Consultants, Vadodara. (Date 26.08.2022)


**ENVIRONMENTAL MONITORING REPORT****Form No. - 37**

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CMS Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CMS Plant	NOx	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **August - 2022** by Kadam Environmental Consultants, Vadodara. (Date 26.08.2022)




**ENVIRONMENTAL MONITORING REPORT****Form No. - 37**

(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CMS Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CMS Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **August - 2022** by Kadam Environmental Consultants, Vadodara. (Date 26.08.2022)

**ENVIRONMENTAL MONITORING REPORT**


Form No. - 37

(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CMS Plant
2. Raw Material, by products and finished products involving in the process ;
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CMS Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. VIMAL CHAUHAN

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **August - 2022** by Kadam Environmental Consultants, Vadodara. (Date 26.08.2022)

**Form No. - 37**

(Prescribed under Rule 12-B )


Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant: - CA Plant

2. Raw Material, by products and finished products involving in the process :

3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	CA Plant	Total Dust	Handy Air Sampler	1	-	0.88

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara, (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - CA Plant
2. Raw Material, by products and finished products involving in the process -
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
2	CA Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.48

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2). 2001	-	The result is within the limit.	For 	MR. JAVID HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dabhol) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - CA Plant  
 2. Raw Material/By products and finished products involving in the process  
 3. Particulars of sampling

S.No.	Location / Operation monitored	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CA Plant	NOx	Hardy Air Sampler	1	-	0.55

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6). 2006	.	The result is within the limit.	For 	MR JAVEN HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. : CA Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CA Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.35

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C			For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed Under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant - CA Plant
2. Raw Material/by products and finished products involving in the process -
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CA Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	.	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	.	The results is within the limits.		MR. JAVED HAVELIWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadim Environmental Consultants, Vadodara. (Date 20.09.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - SBP Plant  
 2. Raw Material, by products and finished products involving in the process  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	SBP Plant	Total Dust	Handy Air Sampler	1	-	0.73

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182 (Part 4): 1999	-		For 	MR. JAVED HAVELIWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahanu) in the month of September - 2022 by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

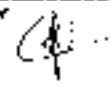


**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(c)**

1. Name of the Department/Plant : SBP Plant
2. Raw Material, by products and finished products involving in the process
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	SBP Plant	SO <sub>2</sub>	Handy Air Sampler	1	.	0.03

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5162(Part 2): 2001	.	The result is within the limit.	For 	MR INVEED HAVELTWALA


Work Place Monitoring done at M/s. Grissm Industries Ltd. (Chemical Division, Dahej) in the month of September - 2022 by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - SBP Plant
2. Raw Material, by products and finished products involving in the process
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	SBP Plant	NOx	Handy Air Sampler	1	-	0.66

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5162(Part 6)-2006	-	The result is within the limit.	For 	MR JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahanu) in the month of **September - 2022** by Kadani Environmental Consultants, Vadodava. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant: - SBP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	SBP Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.30

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B.)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(c)**

1. Name of the Department/Plant - SBP Plant
2. Raw Material, by products and finished products involving in the process -
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	SBP Plant	Chlorine (Cl <sub>2</sub> )	Nandy Air Sampler	1	-	N.D

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
0 mg/m <sup>3</sup>	IS 5182 (Part 19) 1982	-	The results is within the limits.	For 	MR. JAVED HAVELWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd (Chemical Division, Dabhi) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(3)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder New	Total Dust	Handy Air Sampler	1	-	0.80

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4)- 1999	-	-	for 	M.L. JAVED HAFIDVALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahe) in the month of September - 2022 by Karim Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process.
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder New	SO <sub>2</sub>	Handy Air Sampler	1	-	0.50

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001		The result is within the limit.	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 20/09/2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(c)

- 1 Name of the Department/Plant - PAC Powder New  
 2 Raw Material, by products and finished products involving in the process :  
 3 Particulars of sampling

S No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder New	NOx	Handy Air Sampler	1		0.00

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New
2. Raw Material, by products and finished products involving in the process .
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder New	Hydrogen Chloride(HCL)	Handy Air Sampler	1		0.43

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
	APHA 23 <sup>16</sup> Edition 4500 Cl-C			For 	MR. JAVED HAVELIWALA

Work Place Monitoring done at M/s. Gras m Industries Ltd. (Chemical Division, Dahej) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 23.09.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder New  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder New	Chlorine (Cl <sub>2</sub> )	Hardy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	For 	MR. JAVED NAVELTWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(b)(e)**

1. Name of the Department/Plant - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	PAC Powder Old	Total Dust	Handy Air Sampler	1	-	0.79

TWA conc (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
10mg/m <sup>3</sup>	IS 5182(Part 1)- 1999	-	-	For 	MR. JAVED NAVEED

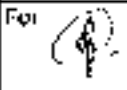
Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehq) in the month of September - 2022 by Kadani Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(e)(e)**

1. Name of the Department/Plant. - PAC Powder Old  
 2. Raw Material, by products and finished products involving in the process  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	PAC Powder Old	SO <sub>2</sub>	Handy Air Sampler	1	-	0.51

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5162(Part 2): 2003	-	The result is within the limit.		MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehej) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 20.09 2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	PAC Powder Old	NOx	Handy Air Sampler	1	-	0.58

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS:5182(Part 6): 2006	-	The result is within the limit.	For 	MR. JAVED HAVELIWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	PAC Powder Old	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.40

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR JAVED HAVELIIVALA


Work Place Monitoring done at M/s. Grashm Industries Ltd. (Chemical Division, Dahaj) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - PAC Powder Old  
 2. Raw Material, by products and finished products involving in the process  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	PAC Powder Old	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	FOR 	MR. JAVER HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant, - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	ALCP Plant	Total Dust	Handy Air Sampler	1	-	0.69

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant: - ALCP Plant  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
2	ALCP Plant	SO <sub>2</sub>	Handy Air Sampler	1	.	0.58

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5162(Part 2): 2001	-	The result is within the limit.	For 	MR JAVED HAVELIWALA

Work Place Monitoring done at: M/s. Grasim Industries Ltd (Chemical Division, Dahej) in the month of **September** - 2022 by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B.)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - ALCP Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	ALCP Plant	NOx	Handy Air Sampler	1	-	0.80

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-E)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	ALCP Plant	Hydrogen Chloride(HCl)	Handy Air Sampler	1	-	0.28

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
	APHA 23 <sup>rd</sup> Edition 4500 C-C			For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - ALCP Plant  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	ALCP Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182 (Part 19): 1984	-	The results is within the limits.	For 	MR. JAVID HAVELWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara (Date 20.09.2022)


**Form No. - 37**

(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(a)

1. Name of the Department/Plant, - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process ;
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contaminator		Result
				No. of samples	Range	mc/m <sup>3</sup>
1	2	3	4	5	6	7
1	Chemical Dosing Area	Total Dust	Handy Air Sampler	1	-	0.70

TWA conc (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4)- 1999			Flr 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd (Chemical Division, Dahaj) in the month of **September** - 2022 by Kaxiani Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - Chemical Dosing Area  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	Chemical Dosing Area	SO <sub>2</sub>	Handy Air Sampler	1	-	0.68

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 5182(Part 2): 2001	-	The result is within the limit.	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 17-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant - Chemical Dosing Area
2. Raw Material/by products and finished products involving in the process
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	Chemical Dosing Area	NOx	Handy Air Sampler	1	-	0.71

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (In Block Letter)
8	9	10	11	12	13
6 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	-	The result is within the limit.	For 	MR. JAVED BAVELJWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahoj) in the month of September - 2022 by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(a)**

1. Name of the Department/Plant. - Chemical Dosing Area
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	Chemical Dosing Area	Hydrogen Chloride(HCL)	Hancy Air Sampler	1	-	0.48

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
	APHA 23 <sup>rd</sup> Edition 4500 CHL			For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Daboj) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - Chemical Dosing Area  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	Chemical Dosing Area	Chlorine (Cl <sub>2</sub> )	Hardy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1982	-	The results is within the limits.	FOR 	MR. JAVED HAVELIWALA

Work Place Monitoring done at M/s. Grasini Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)




**Form No. - 37**

(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
1	CPW (Paraffin Storage area)	Total Dust	Handy Air Sampler	1	-	0.88

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. JAVED HAVELIWALA

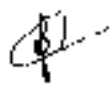
Work Place Monitoring done at M/s, Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant CPW (Paraffin Storage area)  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
2	CPW (Paraffin Storage area)	SO <sub>2</sub>	Handy Air Sampler	1	-	0.55

TWA conc (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5102(Part 2): 2001	-	The result is within the limit.	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant - CPW (Paraffin Storage area)  
 2. Raw Material/by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/Nm <sup>3</sup>
1	2	3	4	5	6	7
3	CPW (Paraffin Storage area)	NOx	Handy Air Sampler	1	.	0.55

TWA conc (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 6): 2006	.	The result is within the limit.	For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s Grasim Industries Ltd. (Chemical Division, Dahej) in the month of September - 2022 by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

Form No. - 37  
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under section 7-A(a)(e)

1. Name of the Department/Plant. - CPW (Paraffin Storage area)
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CPW (Paraffin Storage area)	Hydrogen Chloride(HCl)	Handy Air Sampler	1	.	0.31

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
	APHA 23 <sup>rd</sup> Edition 4500 Cl-C			For 	MR. JAVED HAVELIWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahan) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CPW (Paraffin Storage area)  
 2. Raw Material, by products and finished products involving in the process :  
 3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CPW (Paraffin Storage area)	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.D.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
9 mg/m <sup>3</sup>	IS 5182(Part 19): 1992	-	The results is within the limits.	FOI 	MR. JAVED HAVELWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dabhol) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 20.09 2022)


**Form No. - 37**

(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CMS Plant
2. Raw Material by products and finished products involving in the process :-
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Result mg/m <sup>3</sup>
				No. of samples	Range	
1	2	3	4	5	6	7
1	CMS Plant	Total Dust	Handy Air Sampler	1	-	0.65

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 4): 1999	-	-	For 	MR. JAVED HAVELIWALA

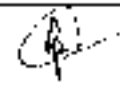
Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CMS Plant
2. Raw Material, by products and finished products involving in the process
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
2	CMS Plant	SO <sub>2</sub>	Handy Air Sampler	1	-	0.81

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 2): 2003	-	The result is within the limit.	For 	MR. JAVED NAVELLWALA

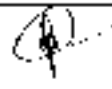
Work Place Monitoring done at M/s. Grasim Industries Ltd (Chemical Division, Dahanu) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12-B )

**Register containing particulars of monitoring of working environment required under section 7-A(2)(e)**

1. Name of the Department/Plant. - CMS Plant
2. Raw Material, by products and finished products involving in the process
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
3	CMS Plant	NOx	Handy Air Sampler	1	-	0.68

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
10 mg/m <sup>3</sup>	IS 5182(Part 6): 2005	-	The result is within the limit.	For 	MR JAVED HAVELIWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahaj) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)




**Form No. - 37**  
(Prescribed under Rule 12-B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CMS Plant
2. Raw Material, by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
4	CMS Plant	Hydrogen Chloride(HCL)	Handy Air Sampler	1	-	0.39

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
-	APHA 23 <sup>rd</sup> Edition 4500 Cl-C	-	-	For 	MR. JAVED HAMEED TWALA


Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dehej) in the month of **September - 2022** by Kadam Environmental Consultants, Vadodra. (Date 20.09.2022)

**Form No. - 37**  
(Prescribed under Rule 12 B)

**Register containing particulars of monitoring of working environment required under section 7-A(a)(e)**

1. Name of the Department/Plant. - CMS Plant
2. Raw Material/by products and finished products involving in the process :
3. Particulars of sampling

S.No.	Location / Operation mentioned	Identified contaminant	Sampling Instrument Used	Airborne Contamination		Average conc.
				No. of samples	Range	mg/m <sup>3</sup>
1	2	3	4	5	6	7
5	CMS Plant	Chlorine (Cl <sub>2</sub> )	Handy Air Sampler	1	-	N.O.

TWA conc. (as given in 2nd Schedule)	Reference Method	Number of workers exposed at the location being monitored	Remarks	Signature of person taking samples	Name (in Block Letter)
8	9	10	11	12	13
5 mg/m <sup>3</sup>	IS 4182(Part 10) 1982	-	The results are within the limits	For 	MR. JAYESH HAVELIWALA

Work Place Monitoring done at M/s. Grasim Industries Ltd. (Chemical Division, Dahej) in the month of September - 2022 by Kadam Environmental Consultants, Vadodara. (Date 20.09.2022)



May 28, 2022

**Grasim Industries Limited**

A-2, Aditya Birla Centre, S.K.Ahira Marg, Worli, Mumbai,  
Mumbai, Maharashtra-400030  
9702014400

Dear Customer,

**Sub: Business Public Liability Insurance (Under PLI Act 1991) Policy No: 3133202292753704000**

We thank you for having preferred us for your *Insurance* requirements. We at HDFC ERGO General Insurance believe "*Insurance*" as not only to be an assurance to indemnify in the event of unfortunate circumstances, but one that signifies protection and support, which you can count on when you need it most.

The Insurance Policy enclosed herewith is a written agreement providing confirmation of our responsibility towards you that puts insurance coverage into effect against stipulated perils.

Please note that the policy has been issued based on the information contained in the proposal form and / or documents received from you or your representative / broker.

Name of the Intermediary: Aditya Birla Insurance Brokers Ltd  
Intermediary Code: 200500288952

Where the proposal form is not received, information obtained from you or your representative /broker, whether orally or otherwise, is captured in the policy document.

If you wish to contact us in reference to your existing policy and /or other general insurance solutions offered by us, you may write to our correspondence address as mentioned below. Alternatively, you may visit our website [www.hdfcergo.com](http://www.hdfcergo.com). To enable us to serve you better, you are requested to quote your Policy Number in all correspondences.

Thanking you once again for choosing HDFC ERGO General Insurance Company Limited and looking forward to many more years of association.

Yours sincerely,

Authorised Signatory

## Public Liability Insurance (Under PLI Act 1991)

### SCHEDULE

Policy No: 3133202292753704000

- Item 1. Insured** : Grasim Industries Limited
- Item 2. Producer** : Aditya Birla Insurance Brokers Ltd
- Item 3. Financial Interest** : Not Applicable
- Item 4. Mailing address of the Insured** : A-2, Aditya Birla Centre, S.K.Ahira Marg, Worli, Mumbai, Mumbai, Maharashtra, 400030.
- Item 5. Pan Card Number** : AAACG4464B
- Item 6. Business** : Grasim Industries Limited is the flagship of the Aditya Birla Group. It started as a textiles manufacturer in India in 1947. Today, it is a leading global player in VSF, the largest chemicals (Chlor-Alkali-s), largest cement producer and Diversified Financial Services (NBFC, AssetManagement and Life Insurance) player in India, The company has also announced entry into paints business.
- Item 7. Policy Period** : From 00:01 hours : 01 April 2022  
To (Midnight) : 31 March 2023
- Item 8. Premium** : Rs. 62,309.00
- Item 9. Premium & Coverage Statement** : Refer to Page 2
- 9.1 Premium Computation
- 9.2 Insurance Limits & Excess
- Item 10. Clauses, Conditions & Warranties :**

Form Number	Form Name	Effective Date	Date Issued
PL-02-0032	Policy Schedule	1 April 2022	28 May 2022
PL-02-0031	Insurance contract	1 April 2022	28 May 2022

Subject otherwise to terms and conditions of Public Liability Insurance Policy.

Signed for and on behalf of HDFC ERGO General Insurance Company Limited, on 28 May 2022



Authorised Signatory

GST Registration No: 27AABCL5045N1Z8. The contract will be cancelled ab initio in case; the consideration under the policy is not realized.

" The stamp duty of ₹ 0.50 paid by Demand Draft, vide Receipt/Challan no. LOA/CSD/303/2022/1381 dated 28/03/2022 as prescribed in Government of Maharashtra Order No. Mudrank-2017/CR.97/M-1, dated the 09th January 2018".

**Note:** Where the proposal form is not received, information obtained from insured, whether orally or otherwise, is captured in the policy document. Discrepancies, if any, in the information contained in the policy document may be pointed out by an insured within 15 days from the policy issue date after which information contained in the policy document shall be deemed to have been accepted as correct.

<b>Branch</b>	Leela Business Park, 6th Flr, Andheri - Kurla Rd, Mumbai, 400059. Tel.: +91-22-66383600
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**Warranties :**

Warranted that there are no known losses and /or circumstances that may lead to losses or claims under this policy (except the claims and / or circumstances already reported to HDFC ERGO General Insurance Co. Ltd.).

This policy is issued basis the information and representations provided by or on behalf of the insured (whether by way of a proposal form or otherwise), and it is thus warranted that such information/representations are true, accurate, and complete, and that no other material information has been withheld.

If the policy document, schedule or endorsement contains any inadvertent error or omission in regards the information provided to us, you are requested to inform us within 15 days of receipt of the policy document so that we can correct any such error or omission.

**Broker Name : Aditya Birla Insurance Brokers Ltd****Broker Code : 200500288952**

## Premium & Coverage Statement

(Item. 9 of Schedule, Attached to and forming part of Policy No: 3133202292753704000)

### 9.1 Premium Computation

Premium Details	Amount (Rs.)
Net Premium	28,582.00
GST 18% : Central Tax 9% ( Rs. 2572.38 ) + State Tax 9% ( Rs. 2572.62 )	5,145.00
Add: Contribution to Environment Relief Fund	28,582.00
Total Premium	62,309.00
Invoice Number :	2052800281461
GSTN :	27AAACG4464B9ZQ
Place of Supply	Maharashtra
SAC Code	997139

### 9.2 Insurance Limits & Excess

#### Insurance Limits

Details	Amount (Rs.)
Each Accident Insurance Limit	50,000,000.00
Aggregate Insurance Limit	150,000,000.00

#### Excess

Compulsory Excess	Not Applicable
Voluntary Excess	Not Applicable

**Public Liability Insurance (Under PLI Act 1991)****1. OPERATIVE CLAUSE**

WHEREAS the Insured named in the Schedule hereto and carrying on the business described in the said schedule has applied to HDFC ERGO GENERAL INSURANCE COMPANY LIMITED (hereinafter called 'the Company') for the indemnity hereinafter contained and has made a written proposal and declaration which shall be the basis of this contract and is deemed to be incorporated herein and has paid the premium and statutory contribution towards the Environment Relief Fund as consideration for or on account of such indemnity in accordance with the manner prescribed under Section 64VB of the Insurance Act, 1938 and as per the provisions of the Public Liability Insurance Act and the rules framed there under.

NOW THIS POLICY WITNESSETH that subject to the terms, conditions and exclusions herein contained or endorsed or otherwise expressed herein, to indemnify the Insured or Owner against the statutory liability arising out of accidents occurring during the currency of the policy due to handling of hazardous substances as provided for in the said Act and the Rules framed thereunder.

**2. DEFINITIONS**

For the purpose of this policy, the following terms shall have the meaning as set forth hereunder:

- (i) "Act" unless otherwise specifically mentioned shall mean the Public Liability Insurance Act 1991 as amended from time to time;
- (ii) "Accident" means an accident involving a fortuitous, sudden or unintentional occurrence while handling any hazardous substance resulting in continuous, intermittent or repeated exposure to death of, or injury to any person or damage to any property but does not include an accident by reason only of war or radioactivity;
- (iii) "Handling" in relation to any hazardous substance means the manufacture, processing, treatment, package, storage, transportation by vehicle, use, collection, destruction, conversion, offering for sale, transfer or the like of such hazardous substance;
- (iv) "Hazardous Substance" and group means any substance or preparation which is defined as hazardous substance under the Public Liability Insurance Act, 1991 and the Rules framed thereunder;
- (v) "Owner" or "Insured" means a person who owns, or has control over handling of any hazardous substance at the time of accident and includes:
  - (a) in the case of a firm, any of its partners
  - (b) in the case of an association, any of its members, and
  - (c) in the case of a company, any of its directors, managers, secretaries or other officers who is/are directly in charge of, and is/are responsible to the company for the conduct of the business of the company;
- (vi) "Turnover" shall mean
  - (a) In case of Manufacturing Units - Entire annual gross sales turnover including all levies and taxes of manufacturing units handling hazardous substance as defined in the Public Liability Insurance Act, 1991. For the purpose of this insurance, the term "Units" shall mean all operations being carried out in the manufacturing complex in one location.
  - (b) In case of Godowns/ Warehouse Owners – Total annual rental receipts of premises handling hazardous substance as defined in the Public Liability Insurance Act, 1991.
  - (c) In case of Transport Operators – Total annual freight receipts

(d) In all other cases – Total annual gross receipts

### 3. EXCLUSIONS

The Company shall not be liable:

- (i) for any wilful or intentional non-compliance of any statutory requirements;
- (ii) in respect of fines, penalties, punitive and /or exemplary damages;
- (iii) under any law or legislation except in so far as provided for in Section 8 (1) & 8 (2) of the Act;
- (iv) in respect of damage to property owned, leased or hired or under hire purchase or on loan to the Insured or otherwise in the Insured or Owner's control, care or custody;
- (v) for any liability directly or indirectly occasioned by, happening through or in consequence of war, invasion, act of foreign enemy, hostilities (whether war be declared or not) civil war, rebellion, revolution, insurrection or military or usurped power;
- (vi) for any liability directly or indirectly caused by or contributed to by:
  - (a) Ionising radiation or contamination by radioactivity from any nuclear fuel or from any nuclear waste from the combustion of nuclear fuel
  - (b) the radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly or nuclear component thereof;
- (vii) for matter outside the scope of Public Liability Insurance Act, 1991.
- (viii) in respect of losses/liability arising outside India.

### 4. CONDITIONS

- 1) The Insured Owner shall give written notice to the Company as soon as reasonable practicable of any claim made against the Insured Owner or of any specific event or circumstance that may give rise to a claim. The Insured Owner shall immediately give to the Company copies of notice of application forwarded by the Collector and all such additional information and/or assistance that the company may require.
- 2) No admission, offer, promise or payment shall be made or given by or on behalf of the Insured owner under this policy without the written consent of the Company.
- 3) The Company shall not be liable for any claim for relief made after five years from the date of occurrence of the accident.
- 4) The Insured Owner shall keep record of annual turnover, and at the time of renewal of insurance declare such turnover and all other details as may be required by the Company. The Company shall at all reasonable times have full rights to call for and examine such records.
- 5) If at the time of happening of any accident resulting in a claim under the policy there be any other insurance covering the same liability,



then the Company shall not be liable to pay or contribute more than its rateable proportion of such liability.

- 6) The Company may cancel this policy by giving seven days' notice in writing of such cancellation to the Insured's last known address and in such an event the Company will return a pro-rata portion of the premium (subject to a minimum retention of 25 per cent of the annual premium) for the unexpired part of the insurance.

The policy may also be cancelled by the Insured by giving thirty days' notice in writing to the Company, in which event the Company will retain premium at short period scale as set forth in the table below, provided there is no claim under the policy during the Policy Period.

In case of any claim under the policy no refund of premium shall be allowed.

The Company shall have no obligation to give notice that the policy is due for renewal or renew this policy upon expiration or termination.

Table of Short Period Scales	
Period of Risk(Not exceeding)	Premium to be retained by the Company (% of the Annual Rate).
1 week	10%
1 month	25%
2 months	35%
3 months	50%
4 months	60%
6 months	75%
8 months	85%
Exceeding 8 months	Total Annual Premium

- 7) If the Company shall disclaim by the Insured Owner for any claim hereunder and such claim shall not within 12 calendar months from the date of such disclaimer have been made the subject matter of a suit in a competent Court of Law. Then the claim for all practical purpose shall be deemed to have been abandoned and shall not thereafter be recoverable hereunder or be made the subject matter of any suit.
- 8) The Company shall not be liable to make any payment in respect of any claim if such be in any manner fraudulent or supported by any person on behalf of the insured Owner and/or if the insurance has been continued in consequence of any material misstatement or non-disclosure of any material information by or on behalf of the Insured Owner. In such a case if the Company pays any amount to the claimant due to any statutory provision such amount shall be recoverable from the Insured Owner.
- 9) The policy and the Schedule shall be read together as one contract and any word or expression to which a specific meaning has been assigned in the Act and the Rules framed there under or this policy shall bear such as specific meaning.
- 10) Any dispute regarding interpretation of the terms, conditions and exceptions of the Policy shall be determined in accordance with the law and practice of a court of competent jurisdiction within India.
- 11) Any person who has a grievance against the Company, may himself or through his legal heirs make a complaint in writing to the Insurance Ombudsman in accordance with the procedure contained in The Redressal of Public Grievance Rules, 1998 (Ombudsman Rules). Proviso to Rule 16(2) of the Ombudsman Rules however, limits compensation that may be awarded by the Ombudsman, to the lower of compensation necessary to cover the loss suffered by the insured as a direct consequence of the insured peril or Rs. 20 lakhs Rupees Twenty Lakhs Only) inclusive of ex-gratia and other expenses. A copy of the said Rules shall be made available by the Company upon prior written request by the Insured.

**GRIEVANCE REDRESSAL PROCEDURE**

If you have a grievance that you wish us to redress, you may contact us with the details of your grievance through:

- Call Centre : 022-62346234/ 0120-62346234
- Emails - care@hdfcergo.com
- Designated Grievance Officer in each branch.
- Company Website - www.hdfcergo.com
- Courier : Any of our Branch office or corporate office

You may also approach the Complaint & Grievance (C&G) Cell at any of our branches with the details of your grievance during our working hours from Monday to Friday.

If you are not satisfied with our redressal of your grievance through one of the above methods, you may contact our Head of Customer Service at

The Complaint & Grievance Cell ,  
HDFC ERGO General Insurance Company Ltd.  
Customer Happiness Center,  
D-301, 3rd Floor, Eastern Business District (Magnet Mall),  
LBS Marg, Bhandup (West),MUMBAI - 400078.  
State : Maharashtra, City : Mumbai  
Pincode : 400078  
Email: grievance@hdfcergo.com

In case you are not satisfied with the response / resolution given / offered by the C&G cell, then you can write to the Principal Grievance Officer of the Company at the following address

The Chief Grievance Officer  
HDFC ERGO General Insurance Company Limited  
Customer Happiness Center,  
D-301, 3rd Floor, Eastern Business District (Magnet Mall),  
LBS Marg, Bhandup (West),Mumbai - 400078.  
State : Maharashtra, City : Mumbai  
Pincode : 400078  
E Mail: cgo@hdfcergo.com

You may also approach the nearest Insurance Ombudsman for resolution of your grievance. The contact details of Ombudsman offices are mentioned below if your grievance pertains to:

- Insurance claim that has been rejected or dispute of a claim on legal construction of the policy
- Delay in settlement of claim
- Dispute with regard to premium
- Non-receipt of your insurance document

Names of Ombudsman and Addresses of Ombudsmen Centers	
Jurisdiction	Office Address
Gujarat, Dadra & Nagar Haveli, Daman and Diu	AHMEDABAD - Shri Kuldip Singh Office of the Insurance Ombudsman, Jeevan Prakash Building, 6th floor, Tilak Marg, Relief Road, Ahmedabad - 380 001. Tel.: 079 - 25501201/02/05/06 Email: bimalokpal.ahmedabad@ecoi.co.in (mailto:bimalokpal.ahmedabad@ecoi.co.in)
Karnataka	BENGALURU - Smt. Neerja Shah Office of the Insurance Ombudsman, Jeevan Soudha Building, PID No. 57-27-N-19 Ground Floor, 19/19, 24th Main Road, JP Nagar, 1st Phase, Bengaluru - 560 078. Tel.: 080 - 26652048 / 26652049 Email: bimalokpal.bengaluru@gbic.co.in (mailto:bimalokpal.bengaluru@ecoi.co.in)
Madhya Pradesh, Chattisgarh	BHOPAL - Shri Guru Saran Shrivastava Office of the Insurance Ombudsman, Janak Vihar Complex, 2nd Floor, 6, Malviya Nagar, Opp. Airtel Office, Near New Market, Bhopal - 462 003. Tel.: 0755 - 2769201 / 2769202 Fax: 0755 - 2769203 Email: bimalokpal.bhopal@ecoi.co.in (mailto:bimalokpal.bhopal@ecoi.co.in)
Orissa.	BHUBANESHWAR - Shri Suresh Chandra Panda Office of the Insurance Ombudsman, 62, Forest park, Bhubneshwar - 751 009. Tel.: 0674 - 2596461 / 2596455 Fax: 0674 - 2596429 Email: bimalokpal.bhubaneswar@ecoi.co.in (mailto:bimalokpal.bhubaneswar@ecoi.co.in)
Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh	CHANDIGARH - Dr. Dinesh Kumar Verma Office of the Insurance Ombudsman, S.C.O. No. 101, 102 & 103, 2nd Floor, Batra Building, Sector 17 - D, Chandigarh - 160 017. Tel.: 0172 - 2706196 / 2706468 Fax: 0172 - 2708274 Email: bimalokpal.chandigarh@ecoi.co.in (mailto:bimalokpal.chandigarh@ecoi.co.in)
Tamil Nadu, Pondicherry Town and Karaikal (which are part of Pondicherry).	CHENNAI - Shri M. Vasantha Krishna Office of the Insurance Ombudsman, Fatima Akhtar Court, 4th Floor, 453, Anna Salai, Teynampet, CHENNAI - 600 018. Tel.: 044 - 24333668 / 24335284 Fax: 044 - 24333664 Email: bimalokpal.chennai@ecoi.co.in (mailto:bimalokpal.chennai@ecoi.co.in)
Delhi	DELHI - Shri Sudhir Krishna Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi - 110 002. Tel.: 011 - 23232481/23213504 Email: bimalokpal.delhi@ecoi.co.in (mailto:bimalokpal.delhi@ecoi.co.in)
Assam, Meghalaya, Manipur, Mizoram, Arunachal Pradesh, Nagaland and Tripura.	GUWAHATI - Shri Kiriti .B. Saha Office of the Insurance Ombudsman, Jeevan Nivesh, 5th Floor, Nr. Panbazar over bridge, S.S. Road, Guwahati - 781001(ASSAM). Tel.: 0361 - 2632204 / 2602205 Email: bimalokpal.guwahati@ecoi.co.in (mailto:bimalokpal.guwahati@ecoi.co.in)

Andhra Pradesh, Telangana, Yanam and part of Territory of Pondicherry.	HYDERABAD - Shri I. Suresh Babu Office of the Insurance Ombudsman,6-2-46, 1st floor, "Moin Court",Lane Opp. Saleem Function Palace,A. C. Guards, Lakdi-Ka-Pool,Hyderabad - 500 004. Tel.: 040 - 67504123 / 23312122 Fax: 040 - 23376599 Email: bimalokpal.hyderabad@ecoi.co.in (mailto:bimalokpal.hyderabad@ecoi.co.in)
Rajasthan	JAIPUR - Smt. Sandhya Baliga Office of the Insurance Ombudsman,Jeevan Nidhi - II Bldg., Gr. Floor,Bhawani Singh Marg,Jaipur - 302 005. Tel.: 0141 - 2740363 Email: Bimalokpal.jaipur@ecoi.co.in (mailto:bimalokpal.jaipur@ecoi.co.in)
Kerala, Lakshadweep, Mahe-a part of Pondicherry.	ERNAKULAM - Ms. Poonam Bodra Office of the Insurance Ombudsman,2nd Floor, Pulinat Bldg.,Opp. Cochin Shipyard, M. G. Road,Ernakulam - 682 015. Tel.: 0484 - 2358759 / 2359338 Fax: 0484 - 2359336 Email: bimalokpal.ernakulam@ecoi.co.in (mailto:bimalokpal.ernakulam@ecoi.co.in)
West Bengal, Sikkim, Andaman & Nicobar Islands.	KOLKATA - Shri P. K. Rath Office of the Insurance Ombudsman,Hindustan Bldg. Annexe, 4th Floor,4, C.R. Avenue, KOLKATA - 700 072. Tel.: 033 - 22124339 / 22124340 Fax : 033 - 22124341 Email: bimalokpal.kolkata@ecoi.co.in (mailto:bimalokpal.kolkata@ecoi.co.in)
Districts of Uttar Pradesh : Laitpur, Jhansi, Mahoba, Hamirpur, Banda, Chitrakoot, Allahabad, Mirzapur, Sonbhadra, Fatehpur, Pratapgarh, Jaunpur,Varanasi, Gazipur, Jalaun, Kanpur, Lucknow, Unnao, Sitapur, Lakhimpur, Bahraich, Barabanki, Raebareli, Sravasti, Gonda, Faizabad, Amethi, Kaushambi, Balrampur, Basti, Ambedkarnagar, Sultanpur, Maharajgang, Santkabirnagar, Azamgarh, Kushinagar, Gorkhpur, Deoria, Mau, Ghazipur, Chandauli, Ballia, Sidharathnagar	LUCKNOW -Shri Justice Anil Kumar Srivastava Office of the Insurance Ombudsman,6th Floor, Jeevan Bhawan, Phase-II,Nawal Kishore Road, Hazratganj, Lucknow - 226 001. Tel.: 0522 - 2231330 / 2231331 Fax: 0522 - 2231310 Email: bimalokpal.lucknow@ecoi.co.in (mailto:bimalokpal.lucknow@ecoi.co.in)
Goa, Mumbai Metropolitan Region excluding Navi Mumbai & Thane.	MUMBAI - Shri Milind A. Kharat Office of the Insurance Ombudsman,3rd Floor, Jeevan Seva Annexe,S. V. Road, Santacruz (W),Mumbai - 400 054. Tel.: 022 - 26106552 / 26106960 Fax: 022 - 26106052 Email: bimalokpal.mumbai@ecoi.co.in (mailto:bimalokpal.mumbai@ecoi.co.in)
State of Uttaranchal and the following Districts of Uttar Pradesh: Agra, Aligarh, Bagpat, Bareilly, Bijnor, Budaun, Bulandshehar,Etah, Kanooj, Mainpuri, Mathura, Meerut, Moradabad, Muzaffarnagar, Oraiyya, Pilibhit, Etawah, Farrukhabad, Firozbad, Gautambodhanagar, Ghaziabad, Hardoi, Shahjahanpur, Hapur, Shamli, Rampur, Kashganj, Sambhal, Amroha, Hathras, Kanshiramnagar, Saharanpur.	NOIDA - Shri Chandra Shekhar Prasad Office of the Insurance Ombudsman,Bhagwan Sahai Palace 4th Floor, Main Road,Naya Bans, Sector 15, Distt: Gautam Buddh Nagar, U.P-201301. Tel.: 0120-2514250 / 2514252 / 2514253 Email: bimalokpal.noida@ecoi.co.in (mailto:bimalokpal.noida@ecoi.co.in)
Bihar, Jharkhand.	PATNA - Shri N. K. Singh Office of the Insurance Ombudsman,1st Floor,Kalpana Arcade Building,Bazar Samiti Road,Bahadurpur, Patna 800 006. Tel.: 0612-2680952 Email: bimalokpal.patna@ecoi.co.in (mailto:bimalokpal.patna@ecoi.co.in)

Maharashtra, Area of Navi Mumbai and Thane excluding Mumbai Metropolitan Region.

PUNE - Shri Vinay Sah  
Office of the Insurance Ombudsman, Jeevan Darshan Bldg., 3rd Floor, C.T.S.  
No.s. 195 to 198, N.C. Kelkar Road, Narayan Peth, Pune - 411 030.  
Tel.: 020-41312555  
Email: bimalokpal.pune@ecoi.co.in  
(mailto:bimalokpal.pune@ecoi.co.in)

EMPLOYEE DETAILS			SR NO.	19
EMPLOYEE NAME	UDAYLAL GAYARI	AGE	45	MALE
FATHER'S NAME	PAUCHAND GAYARI	D.O.B.	09.02.1977	
DESIGNATION	JR OFFICER	DATE	29.03.2022	
DEPARTMENT	QA	EMP NO.	10063	
COMPANY NAME	GRASIM CHEMICAL DIVISION(GHL),VILAYAT			

### GENERAL EXAMINATION

WEIGHT	78	Kg	HEIGHT	178	cm
BP	122/70	mm of Hg	PULSE	80	/min
BMI	24.62	Kg/m <sup>2</sup>	BLOOD GROUP	***	
SPO2	98	%	TEMPERATURE	97.3	°F

### MEDICAL HISTORY

Past History	NIL SIGNIFICANT	Personal History	NIL SIGNIFICANT
Family History	NIL SIGNIFICANT	Addiction	NIL SIGNIFICANT
Allergic History	NIL SIGNIFICANT	Occupational History	NIL SIGNIFICANT
Present Complaints	NO SPECIFIC HISTORY OF FEVER OR COUGH	Symptoms of COVID-19	NORMAL

### VISION TESTING

ACURITY OF VISION:	RT EYE	LT EYE	COLOUR VISION	ACCEPTABLE
DISTANCE	6/6	6/6	WITHOUT GLASS	
NEAR	N/6	N/6		

### SYSTEMETIC EXAMINATION

CVS	S1, S2 - NORMAL, NO MURMUR	ENT Ex: (EAR,NOSE,THROAT)	NAD
R/S	CLEAR WITH EQUAL AIR ENTRY	SKIN Ex & Nail Ex	NAD
ABDOMEN	SOFT, NON TENDER	Musculoskeletal System	NAD
CNS	CONCIOUS & ORIENTED	Genitourinary System	NAD
IDENTIFICATION MARK	MOLE ON LEFT HAND		

ADVICE : \*\*\*  
REMARK : \*\*\*  
ECG : NORMAL  
X-RAY : NORMAL  
SPIROMETARY : WITHIN NORMAL LIMIT  
AUDIOMETARY : B/L WITHIN NORMAL LIMIT  
FITNESS STATUS : FIT

NOTE : THIS REPORT IS NOT FOR LEGAL IMPLICATION AND PURPOSE, CONFIDENTIAL REPORT ONLY FOR COMPANY USE



**DR. MAHINATH MISHRA**  
M.B.B.S., C.I.H.  
Reg. No. - G-16014  
Family Physician & Industrial  
Health Consultant

**BHARUCH** : 2nd Floor, Yash Complex,  
Opp. INOX Cinema, Zadeshwar Rd., Bharuch.  
Ph : 02542-22777/1/227882 Mo : +91 9099227882

**RAHIYAD** : Bhregu Complex,  
Ground Floor, Rahiyad Chokdi,  
Bharuch-392130 Mo : 9327783283

**VILAYAT** : Shop No.16, Sky View Shopping Centre,  
Opp. Birla Grasm, Vilayat Chokdi, Darol Road,  
Argam, Ta. Vagar, Dist. Bharuch, Mo : +91 9099227882

NAME :	UDAYLAL GAYARI	AGE :	45	YEAR
REF BY:	SELF	SEX :	MALE	
LAB NO:	19	DATE:	29.03.2022	

## HAEMATOTOLOGY REPORT

TEST	RESULT	UNIT	NORMAL RANGE
Haemoglobin	14.1	g/dl	12.0 - 18.0
WBC Count	5,500	/cmm	4,000 - 11,000
Platelet Count	283,000	/cmm	1,50,000 - 4,00,000
<b>RBC COUNT</b>	<b>5.11</b>	<b>mill/cmm</b>	<b>4.7 - 6.0</b>
P.C.V.	42.30	%	38 - 52
M.C.V.	83.91	f	78 - 96
M.C.H.	27.59	Dg	27 - 31
M.C.H.C.	32.88	%	30 - 35
<b>DIFFERENTIAL COUNT</b>			
Neutrophils	71	%	40 - 70
Lymphocytes	26	%	20 - 45
Eosinophils	1	%	1.0 - 6.0
Monocytes	2	%	2.0 - 10
Basophils	0	%	0 - 0.2
ESR (After 1st Hour)	5	mm/hr	1 - 15

## BIO-CHEMISTRY

TEST	RESULT	UNIT	NORMAL RANGE
Random Blood Glucose	88	Mg/dl	70 - 140
S.G.P.T.	43	Mg/dl	UPTO 40
S. Creatinine	0.8	Mg/dl	0.7 - 1.5
S. Uric Acid	2.5	Mg/dl	M:3.4-7.4,F:2.4-5.7

ALL BIO-CHEMISTRY IS DONE BY VECTOR VChemNext ANALYZER, "HEMATOLOGY IS DONE BY ZYBIO Z3"

## URINE EXAMINATION

### PHYSICAL EXAMINATION

COLOUR	YELLOW
PH	ACIDIC
SPECIFIC GRAVITY	Q.N.S.
TRANSPERENCY	CLEAR

### CHEMICAL EXAMINATION

ALBUMIN	ABSENT
SUGAR	ABSENT
KETONE	ABSENT
BILE SALT	ABSENT

MICROSCOPIC EXAMINATION (After Centrifugation at 2000 rpm for 5 minutes)

CRYSTAL	ABSENT	PUS CELLS	1-2	/H.P.F.
CAST	ABSENT	RED CELLS	ABSENT	/H.P.F.
BACTERIA	ABSENT	EPITHELIA CELLS	0-1	/H.P.F.
AMORPHOUS PHOSPHATE	ABSENT	OTHER	NIL	

End of report..



Lab Technologist

NAME	UDAYLAL GAYARI	AGE	45	YEAR
LAB ID	19	SEX	MALE	
REF BY	SELF	DATE	29.03.2022	

**LIPID PROFILE**

TEST	RESULT	UNIT	REFERENCE INTERVAL
Serum cholesterol	: 138.00	mg/dl	120 - 240 mg/dl
serum triglyceride	: 185.00	mg/dl	60 - 165 mg/dl
HDL cholesterol	: 63.00	mg/dl	30 - 70 mg/dl
LDL cholesterol	: 38.00	mg/dl	UPTO 150 mg/dl
CHOL /HDL chol. Ratio	: 2.19	:1	Less than 5
LDL Chol/HDL chol Ratio	: 0.60	:1	Less than 3.5
VLDL	: 37.00	mg/dl	UPTO 30 mg/dl

**IDEAL CHOLESTEROL VALUES FOR INDIAN PEOPLES**

**\* For Healthy People :**

Serum cholesterol Less than 200 mg/dl  
 Serum LDL Less than 100 mg/dl  
 Serum HDL More than 45 mg/dl  
 Serum Tryglyceride Less than 150 mg/dl  
 Serum VLDL Less than 24 mg/dl

**\* For Heart, Diabetes, High B.P. Patients:**

Serum cholesterol Less than 160 mg/dl  
 Serum LDL Less than 80 mg/dl  
 Serum HDL More than 50 mg/dl  
 Serum Tryglyceride Less than 140 mg/dl  
 Serum VLDL Less than 24 mg/dl

.....End of report.....



Lab Technologist



# AMAX\_MEDICAL\_CENTER ECG REPORT

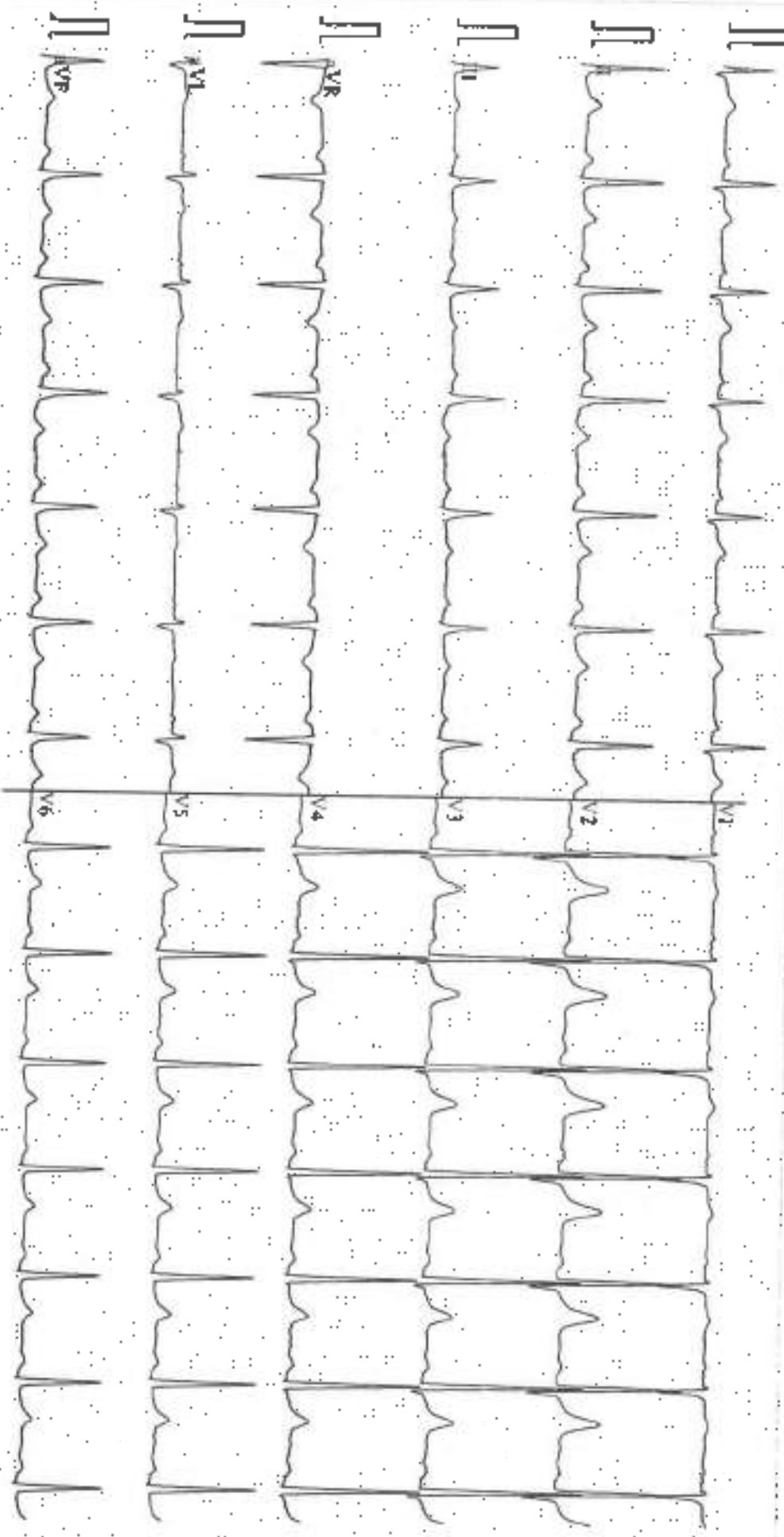
ID : 19      45 Years      Male      cml      eg      /      mmHg      Race: Unknown      Room No.:      Department:

Exam Room: Medication:

HR : 80 bpm      Diagnosis: Information:  
P : 113 ms      Sinus Rhythm  
PR : 166 ms      \*\*\*Normal ECG\*\*\*  
QRS : 86 ms

QT/QTc : 362/418 ms  
P/QRS/T : 60/67/49 °  
RV3/SV1 : 1.76u/0.784 mV

Technician  
Ref-Phys :  
Report Coloured by:

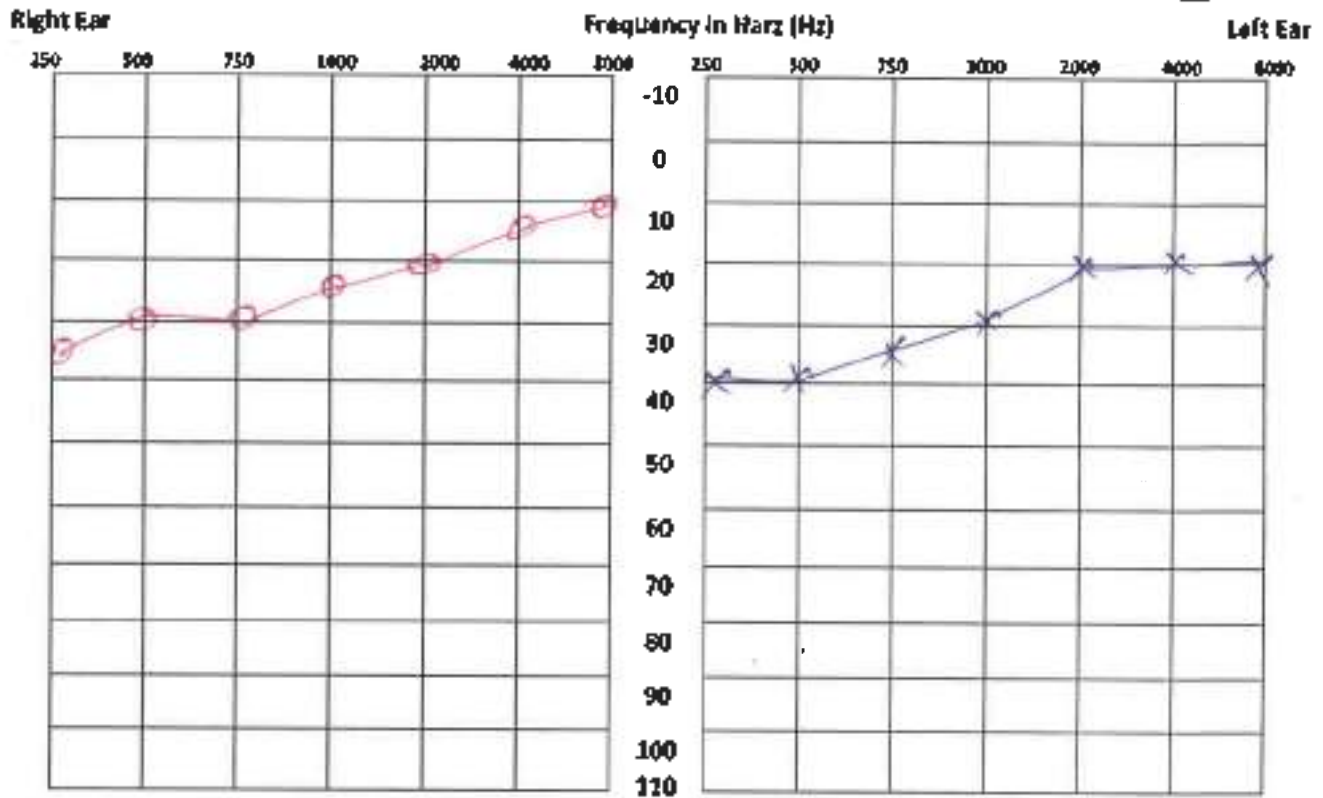


# amax MEDICAL CENTER

1st Floor, Bhuraga Complex, Rahiyad Chokdi, Ta-Vagra, Dist-Bharuch, Gujrat , CONT NO.:-7041274129

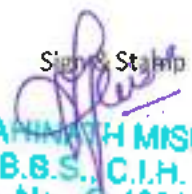
## AUDIOGRAM

Employee Name UDAYLAL GAYARI Age: 45 MALE  
Company Name GRASIM CHEMICAL DIVISION(GIL), VILAYAT Date: 29.03.2022  
Contract Name \*\*\* Sr No. 19



Air Conduction            X=Left Ear  
                                  O=Right Ear  
Bone Conduction        >=Left Ear  
                                  <=Right Ear

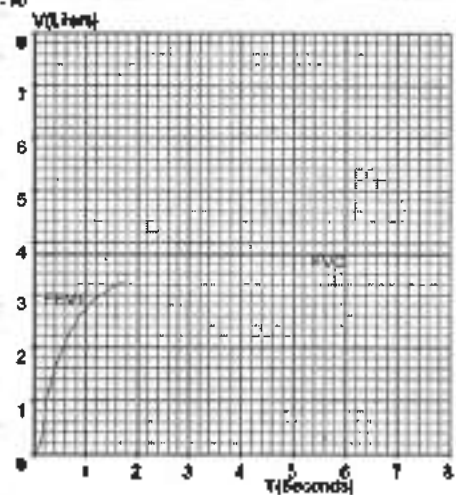
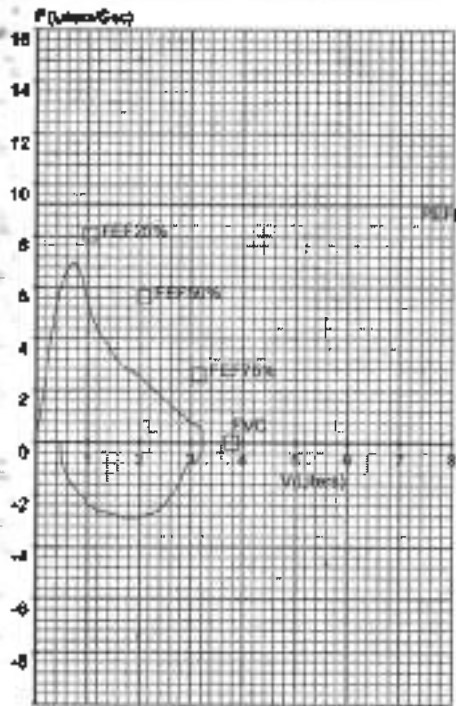
Remark:                    B/L WITHIN NORMAL LIMIT

Sign & Stamp  
  
**DR. MANINATH MISHRA**  
M.B.B.S., C.I.H.  
Reg. No.- G-16014  
Family Physician & Industrial  
Health Consultant

B-19 - UDAYLAL GAYARI  
45 Years / Male / Ht 178 Cms / 78 Kgs / Non-Smoker

**FVC TEST**  
Date: 29-03-2022 (T1)

Pred Eqn : CLARITY Eth. Corr 100 Temp. 0°C  
Ref By : MOSE

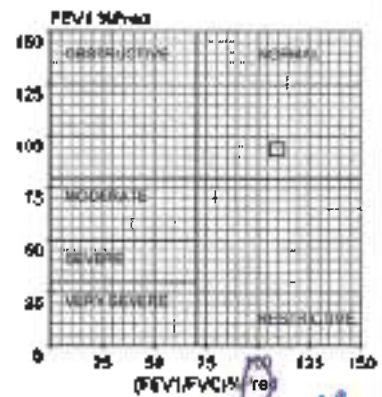
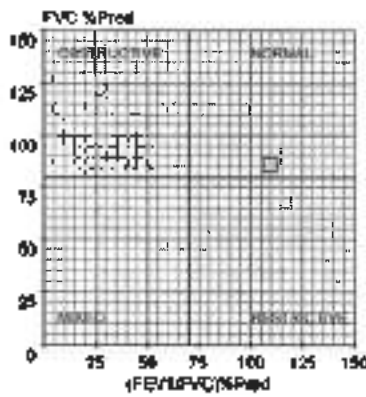


Parameter	Unit	Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.78	3.25	86	--	--	--
FEV1	[L]	3.05	2.65	87	--	--	--
FEV3	[L]	--	2.11	--	--	--	--
FEV5	[L]	--	--	--	--	--	--
FEV75	[L]	--	--	--	--	--	--
PEFR	[L/s]	9.24	6.97	75	--	--	--
FEF25-75	[L/s]	3.97	3.50	88	--	--	--
FEF75-85	[L/s]	--	1.47	--	--	--	--
FEF 2-12	[L/s]	6.98	5.90	84	--	--	--
FEF25%	[L/s]	8.05	7.60	94	--	--	--
FEF50%	[L/s]	6.68	3.27	49	--	--	--
FEF75%	[L/s]	2.63	1.78	67	--	--	--
FEV5/FVC	(%)	--	85.15	--	--	--	--
FEV1/FVC	(%)	80.55	89.06	109	--	--	--
FEV3/FVC	(%)	97.00	--	--	--	--	--
FEV5/FVC	(%)	--	--	--	--	--	--
FEV75/FVC	(%)	--	--	--	--	--	--
PET	[S]	--	1.85	--	--	--	--
ExpTime	[S]	--	0.19	--	--	--	--
LungAge	[Y]	45.00	45.00	107	--	--	--
FVC	[L]	--	2.75	--	--	--	--
PFR	[L/s]	--	2.89	--	--	--	--
FIF25%	[L/s]	--	7.07	--	--	--	--
FIF50%	[L/s]	--	4.39	--	--	--	--
FIF75%	[L/s]	--	2.79	--	--	--	--
FIV 5	[L]	--	0.37	--	--	--	--
FIV1	[L]	--	1.68	--	--	--	--
FIV3	[L]	--	--	--	--	--	--
FIV5/FVC	(%)	--	13.25	--	--	--	--
FIV1/FVC	(%)	--	57.24	--	--	--	--
FIV3/FVC	(%)	--	--	--	--	--	--

- Pre Medication Report :  
Spirometry within Normal range as FVC% >= 80 And FEV1/FVC% > 70

- Pre COPD Severity Report:  
COPD Severity within Normal range

- Doctor's Comments :



*DR. MAHNA MISHRA*  
M.B.B.S. C.I.H.  
Reg. No.- G/15014  
Family Physician & Industrial Health Consultant  
Dr. Mahna Mishra



# MADHURAM Imaging Center

Multislice CT Scan | USG | X-Ray | Colour Doppler

**Dr. Payal D. Shah**

M.B.B.S., M.D. (Radiodiagnosis)

**Dr. Darshit B. Shah**

M.B.B.S., M.D. (Radiodiagnosis)

Ex-Clinical Associate, Lilavati hospital  
(Mumbai)

Pt's Name : UDAYLAL GAYARI

ID : 17

Date : 29.03.2021

## Plain Skiagram chest (PA View)

Bilateral lung fields appear normal.

Both dome of hemi diaphragms appear normal.

Bony thorax appears normal.

Cardiac shadow appears normal.

### Conclusion:

- No significant abnormalities are seen.

Thanks for the reference.

Dr. Payal D. Shah (MBBS, MD)  
Consultant Radiologist

  
Dr. Darshit B. Shah (MBBS, MD)  
Consultant Radiologist



Ref. No: DJMIT/ETRL/CON/010

Date:03/10/2022

## THE ENVIRONMENTAL MANAGEMENT SYSTEM ADEQUACY CERTIFICATE

The Gujarat High Court introduced the Environmental Audit Scheme vide its Orders dated 20/12/1996 & 13/03/1997 and modified vide Order dated 16/09/1999. We are recognised by GPCB, Gandhinagar as Schedule-I Environmental Auditor with auditor ID 2301 for compliance with the Hon'ble High Court's directions in this matter.

We have carried out detailed study of environmental management system of M/s. Grasim Industries Limited as M/s. Grasim Industries Limited, Chemical Division, Plotno.1, GIDC, Vilayat-392012 approached us to give an Adequacy Certificate of EMS for their plant, with additional 45 MW captive power plant and Sodium Sulphate plant. The outcomes of study are detailed as under:

- A. Name of the Industry: M/s. Grasim Industries Limited**  
**B. GPCB ID : 41279**  
Address of site : M/s. Grasim Industries Limited as M/s. Grasim Industries Limited, Chemical Division, Plotno.1, GIDC, Vilayat-392012  
Details of CC&A : CCA AWH- 118058, dated: 18/06/2022 which is valid up to 02/03/2024.

At this point of time, this industry is in the process of completion of installation of **additional 45 MW Captive Power Plant and Sodium Sulphate Plant.**

Hence, Industry is applying for an amendment in their existing CC&A.

## LIST OF PRODUCTS WITH QUANTITY INCLUDING PROPOSED PRODUCT: (Table No. 1)

Sr. No.	Name of Product	Existing as per LATEST CCA issued with no. AWH- 118058 dated: 18/06/2022 (MT/Annum)	Proposed Extra (MT/Annum)	Total Proposed for AMENDED CC&A (MT/Annum)
<b>EXISTING PRODUCTS</b>				
	Caustic Soda Lye	365000	00	365000
	Hydrogen	102200000(Nm <sup>3</sup> )	00	102200000(Nm <sup>3</sup> )
	Liquid Chlorine/ Sodium Hypochlorite/ Hydrochloric Acid	328500	00	328500
	Poly Aluminum Chloride	250000	00	250000
	Chlorinated Paraffin Wax	70000	00	70000
	Aluminum Chloride	25000	00	25000
	Stable Bleaching Powder	61000	00	61000
	Phosphoric Acid	35000	00	35000
	Calcium Chloride	87600	00	87600
	Captive Power Plant	96 MW	45* MW	141 MW
	Aluminum Chloro Hydrate (Super Coagulant)	5000	00	5000
	Calcium Hypochlorite (High Strength Bleaching Powder-HSBP)	24000	00	24000
<b>Chloromethanes</b>				
	Methyl Chloride**	54000	00	54000
	Methylene Chloride (50% to 80% of total production)			
	Chloroform (15% to 40% of total production)			
	Carbon Tetra Chloride(5% to 10% of total production)			

Sr. No.	Name of Product	Existing as per LATEST CCA issued with no. AWH- 118058 dated: 18/06/2022 (MT/Annum)	Proposed Extra (MT/Annum)	Total Proposed for AMENDED CC&A (MT/Annum)
<b>PROPOSED PRODUCT</b>				
	Sodium Sulphate	0	2672***	2672

**Note-** \*Proposed as per EC issued vide letter no.: SEIAA/GUJ/EC/1(d)/287/2019, dated: 04/02/2019 and EC to CTE issued vide letter no.: GPCB/(PCB ID -41279)/506007, dated- 10/05/2019.

\*\*Produced as 1st step of manufacturing of all other product.

Based on data provided by the industry and study of the details we certify that the Environmental Management Systems provided by the unit are **Adequate and Efficient**. The capacity as stated is **Adequate and Efficacious** to achieve the desired concentration (Air + Wastewater + Hazardous waste,) as specified/required under Consent/Notifications by GPCB, Gandhinagar for the following:

**C. LIST OF RAW MATERIALS FOR EXISTING PRODUCTS WITH QUANTITY:**  
(Table No. 2)

Sr. No.	Name of the Products	Name of the Raw Materials	Existing Qty per Year (MT)
1	Caustic Soda Lye	Salt	584000
2		Na <sub>2</sub> CO <sub>3</sub>	1825
3		BaCO <sub>3</sub>	5475
4		SBS	365
5		Alfa	804
6		NaOH	9650
7		HCl	18250
8	Poly Aluminium Chloride	Alumina Hydrate	44384
9		HCl	85992
10	Chlorinated Paraffin Wax	Paraffin	31500
11		Chlorine	87500
12	Aluminium Chloride	Aluminium	4964
13		Chlorine	19856
14	Stable Bleaching Powder	Lime	46326
15		Chlorine	24382
16	Phosphoric Acid	Rock Phosphate	79200
17		Hydrochloric Acid (32%)	147600
18		Amyl Alcohol	468
19		Hydrated Lime	9360
20		Sodium Chlorate	68400
21	Aluminium Chloro Hydrate (Super Coagulant)	PAC Liq. (18%)	2016
22		Aluminium Ingot	504
23		Chlorine (99.6% purity)	21600

Sr. No.	Name of the Products	Name of the Raw Materials	Existing Qty per Year (MT)
24	Calcium Hypochlorite (High Strength Bleach Powder-HSBP)	Lime (96% min.)	19200
25		Caustic (100% basis)	12000
<b>Chloromethanes Plant</b>			
26	Methyl Chloride	Liquid Chlorine	57600
27	Methylene Chloride Chloroform Carbon Tetra Chloride	Methanol	21600

### Raw materials for proposed products

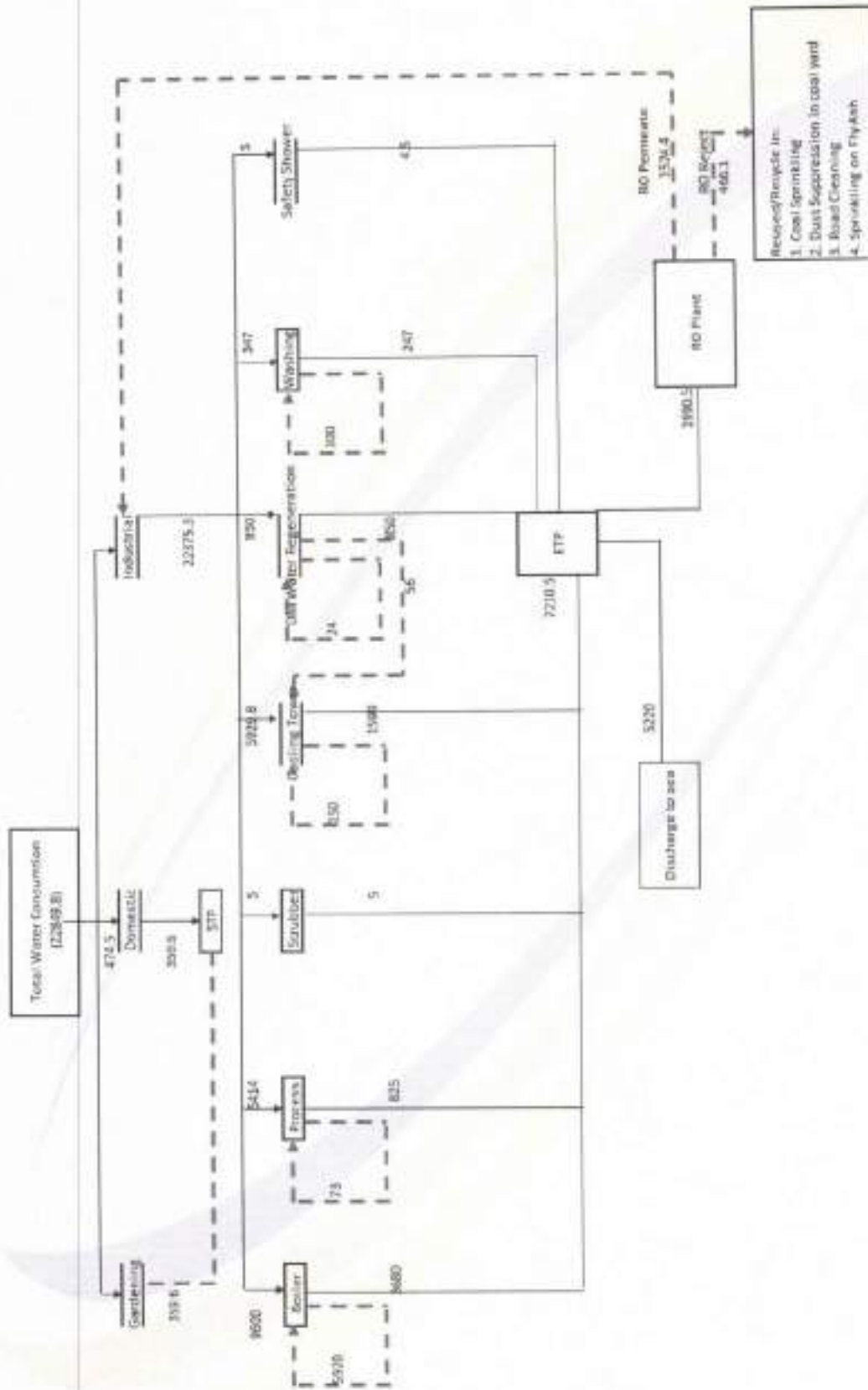
Sr. No	Name of Raw Material	Existing Quantity (MT/Month)	Proposed Extra (MT/Month)	Total proposed for AMENDED CCA (MT/Month)
<b>45 MW Captive Power Plant</b>				
1.	Imported Coal	72000	21000	93000
2.	Lime for desulphurization of coal	1920	560	2480
3.	LDO (for cold start-up) (KL)	17	8	25
<b>Sodium Sulphate</b>				
4.	Lean Brine	0	32704	32704
5.	HCl	0	5.05	5.05



### Details of Water Consumption and Wastewater(effluent) generation:

- ❖ Source of water: GIDC Water
- ❖ Water Consumption: (Table No. 3)

Sr. No.	Particulars	Water Consumption (KLD)		
		Existing as per LATEST CCA issued with no. AWH- 118058 dated: 18/06/2022	Proposed Extra	Total Proposed for AMENDED CC&A
1	Domestic	471	3.5	474.5
2	Gardening	-	-	-
3	Industrial (sum of a to h)	18598.5	3776.8	22375.3
a	Boiler	6500	3100	9600
b	Process	5289	125	5414
c	Scrubber	5	0	5
d	Cooling – makeup	5925	4.8	5929.8
e	DM water regeneration	430	500	930
f	Washing	300	47	347
g	Safety shower	5	0	5
h	Coal Sprinkling system	144.5	0	144.5
4	Total (1+3)	19069.5	3780.3	22849.8
5	Reuse/Recycle	664.5	1729	2393.5
6	Fresh Water Requirement (4-5)	18405	2051.3	20456.3



### Wastewater Generation (Table No. 4)

Sr. No.	Particulars	Wastewater Generation (KLD)		
		Existing as per LATEST CCA issued with no. AWH- 118058 dated: 18/06/2022	Proposed Extra	Total Proposed for AMENDED CC&A
1	Domestic	356.8	2.8	359.6
2	Industrial (sum of a to g)	5884.5	1729	7613.5
a	Boiler	2500	1180	3680
b	Process	898	0	898
c	Scrubber	5	0	5
d	Cooling – makeup	1747	2	1749
e	DM water regeneration	430	500	930
f	Washing	300	47	347
g	Safety shower	4.5	0	4.5
3	Total (1+2)	6241.3	1731.8	7973.1
4	Reuse/Recycle/Reduce	664.5	1729	2393.5
5	Discharge to sea (2-4)	5220	ZLD	5220

### ❖ Probable characteristics of extra wastewater: (Table No. 5)

Parameter	Wastewater Characteristics	
	Before Treatment	After treatment
Ph	7.5	7.5-8.5
BOD	15-40 mg/l	<10 mg/l
COD	30-80 mg/l	<50 mg/l
Oil & Grease	10-20 mg/l	<5 mg/l
Colour	Colourless	Colourless
TSS	30-60 mg/l	<5 mg/l
TDS	3600 mg/l	40-200 mg/l
Temperature	30-35 degree C	30-35 degree C
Metals	Nil	Nil

## METHOD OF DISPOSAL:

**Domestic Wastewater:** Additional domestic wastewater to the tune of **2.8 KLD** would be generated from the proposed expansion. The said wastewater will be treated in the existing Sewage Treatment Plant and will be utilized for gardening purposes within the premises.

**Industrial Wastewater:** Proposed additional industrial wastewater to the tune of **1729 KLD** will be emanating from the proposed expansion. The same will be given primary treatment in the existing ETP and will be reused in cooling water makeup, DM water and washing purposes. Hence, the proposed expansion would be **ZERO LIQUID DISCHARGE**.

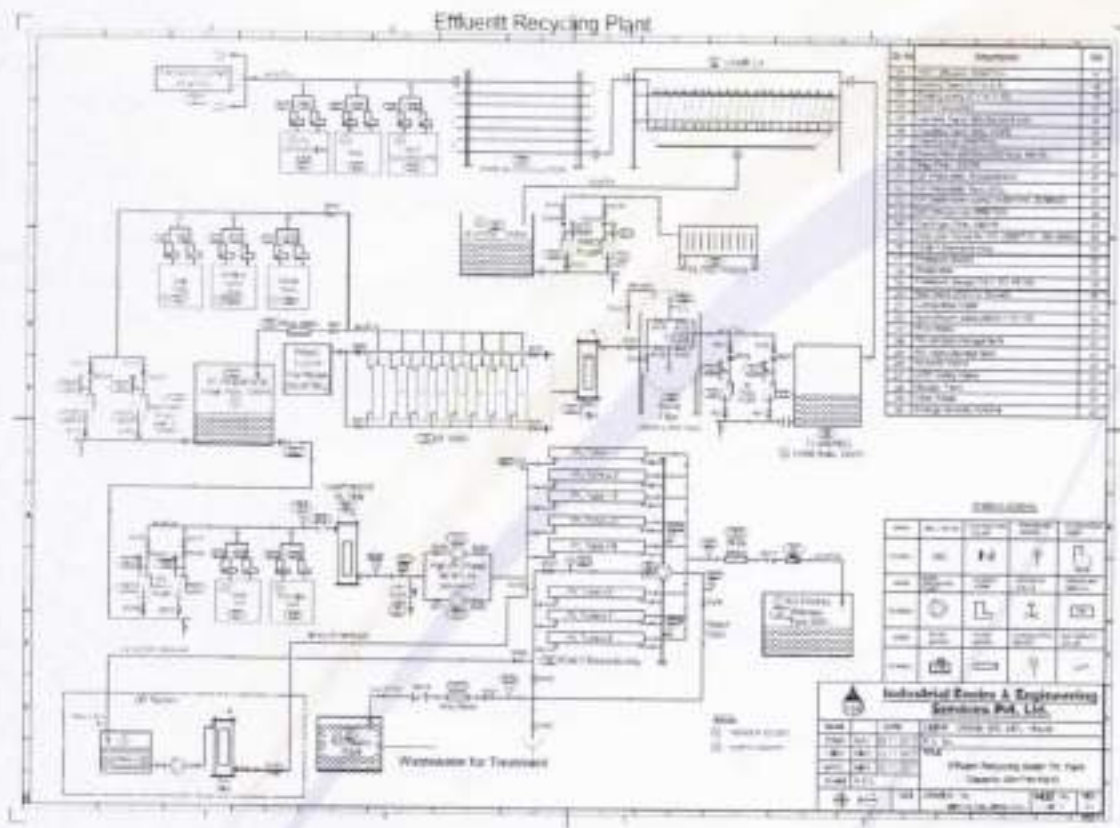
### ❖ Details of ETP (Effluent Treatment Plant) :(Table No. 6)

#### ETP Capacity: 40,000 KLD

Unit has provided primary, secondary and tertiary units in ETP for normal effluent stream and primary ETP for concentrated effluent stream. Details are as under,

Sr. No.	Unit Name	Equipment Details	Remarks
<b>1</b>	<b>Sump Zone (Zinc) Clarifier</b>		
A	No. of Units	3	Adequate
B	Dimension of each Clarifier	16.8 m (D) x 2.4 m (SWD)	Adequate
C	Hold up Volume	531 m <sup>3</sup> (each)	Adequate
<b>2</b>	<b>Flash Mixer</b>		
A	No. of Units	3	Adequate
B	Dimension of each Clarifier	5.0 m (D) x 3.0 m (SWD)	Adequate
C	Hold up Volume	60 m <sup>3</sup> (each)	Adequate
<b>3</b>	<b>Lime Slurry Preparation System</b>	<b>1</b>	
	Blower & Bag filter for lime preon. Tanks	1 Set	Adequate
<b>4</b>	<b>Grit Chamber with mechanical cleaning arrangement</b>		
A	No. of Units	2	Adequate
B	Size No. 1 & No. 2	50m(L), 9m(W) & 5m(D)	Adequate
C	Hold up Volume	2250 m <sup>3</sup> (each)	Adequate
<b>5</b>	<b>Automatic Bar Screens</b>		
A	No. of Units	2	Adequate
<b>6</b>	<b>Neutralization/Equalization Tanks</b>		
A	No. of Units	1	Adequate
B	Tak Size	12.0m(D) x 3.0m(SWD)	Adequate
C	Hold up Volume	339 m <sup>3</sup>	Adequate
<b>7</b>	<b>Lift Sump Pit</b>		
A	No. of Units	1	Adequate
B	Tank Size	9.0m(D) x 4.0m(SWD)	Adequate
C	Hold up Volume	254 m <sup>3</sup>	Adequate
<b>8</b>	<b>Primary Clarifier</b>		
A	No. of Units	2	Adequate
B	Dimension of each clarifier	40m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	3768 m <sup>3</sup> (Each)	Adequate
<b>9</b>	<b>Biological reactor/Aeration system</b>		
A	No. of Units	4	Adequate

Sr. No.	Unit Name	Equipment Details	Remarks
B	Dimension of each clarifier	73m (L) x 15m (W) x 5.5m (D)	Adequate
C	Hold up Volume	6022 m <sup>3</sup> (Each)	Adequate
D	Aerators	Diffused Aeration system	Adequate
<b>10</b>	<b>Secondary Clarifier</b>		
A	No. of Units	2	Adequate
B	Dimension of each clarifier	45.0m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	4770 m <sup>3</sup> (Each)	Adequate
<b>11</b>	<b>Chemical Sludge Thickener</b>		
A	No. of Units	2	Adequate
B	Dimension of each thickener	14.0m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	940 m <sup>3</sup> (Each)	Adequate
<b>12</b>	<b>Bio Sludge Thickener</b>		
A	No. of Units	2	Adequate
B	Dimension of each thickener	20.0m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	940 m <sup>3</sup> (Each)	Adequate
<b>13</b>	<b>Belt Press for Chemical Sludge</b>		
A	No. of Units	2	Adequate
B	Capacity	9 TPD on dry basis	Adequate
<b>14</b>	<b>Belt press for Bio Sludge</b>		
A	No. of Units	2	Adequate
B	Capacity	9 TPD on dry basis	Adequate
<b>15</b>	<b>Biological Reactor / Aeration System</b>		
A	No. of Units	3	Adequate
B	Tank Size	73m (L) x 15m (W) x 5.5m (D)	Adequate
C	Hold up Volume	6022 m <sup>3</sup>	Adequate
D	Aerators	Diffused Aeration system	Adequate
E	Total Capacity of Aeration system	6022 x 7 = 42,000 m <sup>3</sup>	Adequate
<b>16</b>	<b>Filter Press for Chemical Sludge</b>		
A	No. of Units	3	Adequate
B	Capacity	25 TPD on dry basis	Adequate
<b>17</b>	<b>Automated Lime Slurry Preparation &amp; dosing system</b>		
A	No. of lime storage silo	3	Adequate
B	Capacity	25 TPD on dry basis	Adequate
C	Automatic pH controllers	1 Set	Adequate
<b>18</b>	<b>Cooling Towers</b>		
A	No. of units	1	Adequate
B	Type	Mist	Adequate
C	Capacity	1500 m <sup>3</sup> /Hr	Adequate
D	Purpose	Cooling of BR inlet effluent for better efficiency of Biological reactor	Adequate
<b>19</b>	<b>RO Plant capacity</b>	<b>40 m<sup>3</sup>/hr</b>	
A	Cartridge filter housing	40 m <sup>3</sup> /hr	Adequate
B	Sea water membranes	Dia. 8" x 40" long - 40 nos.	Adequate
C	RO Rejected Tank Capacity	250 KL x 3 Nos.	Adequate
D	RO Permeate Tank Capacity	120 KL x 2 Nos.	Adequate



### ETP Design Consideration (Table no. 6A)

Parameter	ETP Design Characteristics	
	Inlet	Outlet
pH	4-12	6-9
BOD	<300 mg/l	<100 mg/l
COD	<1000 mg/l	<250 mg/l
TSS	<100 mg/l	<50 mg/l

## DETAILS OF AIR EMISSION:

### ❖ Flue Gas Emission:(Table No. 7)

There is change in existing flue gas emission scenario. The details are as under:

### Existing Flue Gas Stacks

S r. No.	Description Stack Attached To	Air Pollution Control Measures	Fuel Consumption rate	Stack Height (m)	Parameters with permissible limits
1)	Boiler 1 & 2	ESP and Low NOx burner	Imported Coal 100 MT/hr	125	PM <150 mg/Nm <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>2</sub> < 50 ppm
2)	Boiler 3 & 4	ESP and Low NOx burner		125	
3)	D.G. Set (1875 kVA x 4 Nos.)	Not Applicable	HSD 400 Lit./hr each	36	
4)	D.G. Set (750 kVA x 3 Nos.)	Not Applicable	HSD 200 Lit/hr each	11	
5)	Stack attached to primary coal crusher-1	Bag Filter	--	22.4	PM <150 mg/Nm <sup>3</sup>
6)	Stack attached to primary coal crusher-1	Bag Filter	--	30.3	PM <150 mg/Nm <sup>3</sup>
7)	D.G. Set (750 kVA x 1 Nos.)	Not Applicable	HSD 200 Lit/hr	10	PM <150 mg/Nm <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>2</sub> < 50 ppm
8)	Volatile Reduction Chamber (VRC)	Water and Caustic Scrubber	Hydrogen 200 Nm <sup>3</sup> /Hr	35	NOx < 50 ppm HCl < 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> < 9 mg/Nm <sup>3</sup>

### Proposed Flue Gas Stacks

Sr. No.	Description Stack Attached To	Air Pollution Control Measures	Fuel Consumption rate	Stack Height (m)	Parameters with permissible limits
1)	Boiler-5 (175 TPH)	ESP and Low NOx burner	Coal (29.16 MT/Hour)	125	PM <150 mg/Nm <sup>3</sup> SO <sub>2</sub> < 100 ppm NO <sub>2</sub> < 50 ppm

❖ Details of Fuel Consumption: (Table No. 8)

Sr. No	Name of Raw Material	Existing Quantity (MT/Month)	Proposed Extra (MT/Month)	Total proposed for AMENDED CCA (MT/Month)
1.	Imported Coal	72000	21000	93000
2.	HSD	2400 Lit/Hr	0	2400 Lit/Hr
3.	Hydrogen	200 Nm <sup>3</sup> /Hr	0	200 Nm <sup>3</sup> /Hr
4.	Lime for desulphurization of coal	1920	560	2480
5.	LDO (for cold start- up) (KL)	17	8	25



## Process Gas Emission:(Table No. 9)

Sr. No.	Description Stack Attached To	Air Pollution Control Measures	Stack Height (m)	Parameters with permissible limits
1.	Sodium Hypo Stack -1 (Caustic Plant)	Alkali Scrubber	35	Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
2.	HCl stack 1 (Caustic Plant)	Water scrubber having bubble cap tray absorption system.	35	HCl - 35 mg/Nm <sup>3</sup>
3.	HCl stack 2 (Caustic Plant)	Water scrubber having bubble cap tray absorption system.	35	
4.	HCl stack 3 (Caustic Plant)	Water scrubber having bubble cap tray absorption system.	35	
5.	HCl stack 4 (Caustic Plant)	Water scrubber having bubble cap tray absorption system.	35	
6.	Poly Aluminum Chloride Liquid - 1	Water scrubber system	35	
7.	Poly Aluminum Chloride Liquid - 2	Water scrubber system	35	
8.	Poly Aluminum Chloride Powder-1	3 stage water scrubber	35	
9.	Poly Aluminum Chloride Powder-2	3 stage water scrubber	35	
10.	Chlorinated Paraffin Plant	Alkali scrubbing system	35	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
11.	Aluminum Chloride -1	Alkali scrubbing system	35	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
12.	Aluminum Chloride -2	Alkali scrubbing system	35	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
13.	Stable Bleaching Powder -1	Alkali scrubbing system	35	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
14.	Stable Bleaching Powder -2	Alkali scrubbing system	35	
15.	Phosphoric Acid Plant	Water scrubber	35	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
16.	Calcium Chloride	Water scrubber	35	HCl - 20 mg/Nm <sup>3</sup>
17.	Sodium Hypo stack-2 (Caustic plant)	Alkali scrubber	35	Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
18.	Vent attached to reactor	--	35	H <sub>2</sub> gas *
19.	Vent attached to dryer-1 (HSBP)	Bag filter	21	PM< 150 mg/Nm <sup>3</sup>
20.	Vent attached to dryer-2 (HSBP)	Bag filter	21	PM< 150 mg/Nm <sup>3</sup>
21.	Vent attached to reaction vessel -1 (HSBP)	Water/caustic scrubber	21	Cl <sub>2</sub> < 5 mg/m <sup>3</sup>
22.	Vent attached to reaction vessel -2 (HSBP)	Water/caustic scrubber	21	Cl <sub>2</sub> < 5 mg/m <sup>3</sup>
23.	Hydro Chlorinator - CMS plant	Alkali Scrubber	35	HCl<20 mg/Nm <sup>3</sup>

24.	Crude CMS Distillation - CMS Plant	Condenser and guard condenser with cooling water circulation & chilled circulation	35	VOC < 1µg/m <sup>3</sup>
25.	Heavies CMS Distillation - CMS Plant	Condenser and guard condenser with cooling water circulation & chilled circulation	35	VOC < 1µg/m <sup>3</sup>

**No new process gas stacks are proposed**

**D. DETAILS OF HAZARDOUS WASTE MANAGEMENT SYSTEM:(Table No. 10)**

Sr. No.	Name of Waste	Schedule/ Category	Quantity per Annum			Mode of Storage & Disposal
			Existing as per LATEST CCA issued with no. AWH- 118058 dated: 18/06/2022	Proposed Extra	Total Proposed for AMENDED CC&A	
1.	Chemical Sludge from wastewater treatment	35.3	10,000 MT  (40215 MT Chemical Sludge from wastewater treatment (existing as per CCA))  30,215 MT (Phosphogypsum Sludge from PA Plant added in Non-Haz. Waste list)	5 MT  (Chemical Sludge from wastewater treatment)	10,005 MT  (10,000 MT  +  5 MT)	Collection, storage, transportation & disposal at TSDF site of BEIL. OR disposal by selling to end users under Rule-9.
2.	Spent Catalyst	17.2	25 MT	0	25 MT	Collection, storage, transportation & disposal at TSDF site of BEIL.
3.	Spent carbon (from filters)	36.2	40.33 MT	0	40.33 MT	Collection, storage, transportation & disposal at TSDF site of BEIL. OR disposal by selling to end users under Rule-9.
4.	Used Spent Oil	5.1	101 KL	29KL	130 KL	Collection, storage, transportation & disposal by selling to registered re-refiners.
5.	Spent ion exchange resin	35.2	1 MT	4	5 MT	Collection, storage, transportation & disposal at TSDF site of BEIL.
6.	Discarded Containers	33.1	2,000 Nos.	500 Nos.	2,500 Nos.	Collection, storage, transportation reuse or disposal by selling to vendors under Rule 9.
	Bags/ Liners		25 MT	525 MT	550 MT	
7.	Incinerable Waste	36.1	142 MT	0	142 MT	Collection, storage, transportation & disposal at CHWIF site.
8.	Spent Acid (HCl)	B-15	1,42,500 MT	0	1,42,500 MT	Collection, storage, transportation through pipeline and disposal by consuming in-house in manufacturing process of Poly Aluminium Chloride and Phosphoric Acid and selling to end user.
9.	Spent Acid (Dilute Sulphuric Acid)	B-15	15,500 MT	0	15,500 MT	Collection, storage, transportation and disposal by selling to end user under Rule-9.

Sr. No.	Name of Waste	Schedule/ Category	Quantity per Annum			Mode of Storage & Disposal
			Existing as per LATEST CCA issued with no. AWH- 118058 dated: 18/06/2022	Proposed Extra	Total Proposed for AMENDED CC&A	
10.	Bleaching Liquid (Consists of 3% Hypo, 10% CaCl <sub>2</sub> , 65% to 75% water)	--	60,000 MT	0	60,000 MT	Collection, storage, transportation and disposal by selling to end user.
11.	Sodium Chloride (consists of 90% NaCl)	--	6,000 MT	0	6,000 MT	Collection, storage, transportation and disposal by selling to end user or TSDF site OR disposal by selling to end users under Rule-9.
12.	Brine Sludge	16.3	6,066 MT	0	6,066 MT	Collection, storage, transportation & disposal at TSDF site of BEIL or Selling to end user under Rule 9
13.	Aluminium Waste	Dross	50 MT	0	50 MT	Collection, storage, transportation and disposal at TSDF site or selling to actual end user under Rule 9.
14.	Batteries	--	100 Nos.	0	100 Nos.	Collection, storage, disposal as per the Batteries Management and Handling Rules, 2010
15.	E-Waste	--	1 MT	0	1 MT	Collection, storage, disposal as per the E-Waste Management Rules 2016
16.	Insulating Material	--	25 MT	25 MT	50 MT	Collection, storage, disposal by selling to authorized recycler.
17.	Residue or sludges and filter cakes	16.2	0	1500 MT	1500 MT	Collection, storage, transportation and disposal at TSDF site.

## E. DETAIL OF NON-HAZARDOUS WASTE MANAGEMENT SYSTEM.

Sr. No	Name of Waste	Schedule / Category	Existing as per LATEST CCA issued with no. AWH- 118058 dated: 18/06/2022	Proposed Extra	Total Proposed for AMENDED CC&A	Mode of Storage & Disposal
1.	Fly Ash	--	86,400 MT	25,200 MT	1,11,600 MT	Collection, storage, transportation & disposal by selling to brick manufacturing as per fly ash notifications/ rules.
2.	Phosphogypsum Sludge from PA Plant *	--	30,215 MT (Part of 40215 MT Chemical Sludge)	--	30,215 MT	Collection, storage, transportation & disposal as per the "Guidelines for Management, Handling, Utilisation and Disposal of PhosphoGypsum Generated from Phosphoric Acid Plants" issued by Central Pollution Control Board in October 2014.

### ❖ CONCLUSION:

Based on the EMS study of **M/s. Grasim Industries Limited, Chemical Division, Plotno.1, GIDC, Vilayat-392012.**, it is concluded that the proposed system under Water Act, Air Act and Hazardous Waste Rule will be adequate and efficient.

### **This EMS certificate is valid subject to following conditions:**

- Unit has to do production of products mentioned in Table No. 1 with its capacity.
- As unit has adequate ETP and STP for treatment of domestic and industrial wastewater, unit has to operate ETP and STP efficiently to achieve the outlet norms.
- Dedicated In-house wastewater testing laboratory should be functioning to monitor the performance of ETP and outlet samples to be observed.
- The inlet quality of the waste water should be as per table no. 6A.
- The quantity of water consumption & wastewater generation should not be more than the quantity mentioned in Table No. 3 and 4.
- The unit shall install adequate APCM & Stack height before operating the Boiler, D. G. Set, as mentioned in Table No.7.
- The type & quantity of a fuel shall not exceed the limit mentioned in Table No. 8.



# Dr. Jivraj Mehta Institute of Technology, Anand, Gujarat.

(Approved by AICTE, New delhi and Affiliated to GTU, Ahmedabad)  
Managed by : Charuttar Education & Navrochana Trust, Anand.

- Unit shall adequately manage the generated Hazardous Waste as mentioned in Table No. 10.
- Unit shall install & operate ETP regularly & efficiently as per prescribed norms and table no.6.

This Certificate is subject to automatic cancellation in case of any change in Product Profile/ Capacity, Quality & Quantity of Effluents (Air + Water + Solid), Manufacturing Process & EMS (Environment Management System).

Place: Anand

Date: 14/10/2022

Signatures of Audit Team – Audit ID: 2301

Dr. Devang A. Shah

Chief Scientist, COE, ETRL,  
COE, ETRL, DJMIT, Mogar

Mansi Patel

Lab Chemist, DJMIT, Mogar



## CCA Compliance Report

**CCA of the board vide order no. AWH-98281 dated 29/12/2018 with 1<sup>st</sup> amendment letter no. GPCB/BRCH-B/CCA-70-A(5)/ID-41279/506831 dated 16/05/2019, 2<sup>nd</sup> amendment vide letter no. GPCB/BRCH-B/CCA-70-A(6)/ID-41279/526734 dated 13/11/2019 and 3<sup>rd</sup> CCA amendment No. AWH-118058 vide letter no. GPCB/BRCH-B/CCA-70(8)A/ID-41279/675546 dated 18/06/2022 valid upto 02/03/2024**

Sr. No.	CCA Conditions	Compliance																																																																																				
1	Consent Order No. AWH-98281 dated 29/12/2018	Noted																																																																																				
2	<p>The Consent under Water Act-1974 shall be valid upto 02/03/2024. The Consent under Air Act-1981, Authorization under Environment (Protection) Act, 1986 shall be valid upto 02/03/2024 to operate industrial plant for manufacture of the following additional products.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Sr. No.</th> <th rowspan="2">Name of Product</th> <th colspan="3">Quantity (MT/Annum)</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Caustic Soda Lye</td> <td style="text-align: center;">365000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">365000</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Hydrogen</td> <td style="text-align: center;">102200000 (Nm3)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">102200000 (Nm3)</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Liq Cl2/Sodium Hypochlorite/HCl</td> <td style="text-align: center;">328500</td> <td style="text-align: center;">-</td> <td style="text-align: center;">328500</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Poly Alluminium Chloride</td> <td style="text-align: center;">250000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">250000</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Chlorinated Paraffin Wax</td> <td style="text-align: center;">70000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">70000</td> </tr> <tr> <td style="text-align: center;">6</td> <td>Alluminium Chloride</td> <td style="text-align: center;">25000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">25000</td> </tr> <tr> <td style="text-align: center;">7</td> <td>Stable Bleaching Chloride</td> <td style="text-align: center;">61000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">61000</td> </tr> <tr> <td style="text-align: center;">8</td> <td>Phosphoric Acid</td> <td style="text-align: center;">35000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">35000</td> </tr> <tr> <td style="text-align: center;">9</td> <td>Calcium Chloride</td> <td style="text-align: center;">87600</td> <td style="text-align: center;">-</td> <td style="text-align: center;">87600</td> </tr> <tr> <td style="text-align: center;">10</td> <td>Captive Power Plant</td> <td style="text-align: center;">96 MW</td> <td style="text-align: center;">-</td> <td style="text-align: center;">96 MW</td> </tr> <tr> <td style="text-align: center;">11</td> <td>Alluminium Chlorohydrate (Super Coagulant)</td> <td style="text-align: center;">5000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">5000</td> </tr> <tr> <td style="text-align: center;">12</td> <td>Calcium Hypochlorite</td> <td style="text-align: center;">24000</td> <td style="text-align: center;">-</td> <td style="text-align: center;">24000</td> </tr> <tr> <td colspan="5" style="text-align: center;"><b>Proposed</b></td> </tr> <tr> <td style="text-align: center;">13</td> <td>Methyl Chloride</td> <td rowspan="4" style="text-align: center;">-</td> <td rowspan="4" style="text-align: center;">54000</td> <td rowspan="4" style="text-align: center;">54000</td> </tr> <tr> <td style="text-align: center;">14</td> <td>Methylene Chloride (50-80% of total Production)</td> </tr> <tr> <td style="text-align: center;">15</td> <td>Chloroform (15-40% of total production)</td> </tr> <tr> <td style="text-align: center;">16</td> <td>Carbon Tetra Chloride (5-10% of total Production)</td> </tr> </tbody> </table>	Sr. No.	Name of Product	Quantity (MT/Annum)			Existing	Proposed	Total	1	Caustic Soda Lye	365000	-	365000	2	Hydrogen	102200000 (Nm3)	-	102200000 (Nm3)	3	Liq Cl2/Sodium Hypochlorite/HCl	328500	-	328500	4	Poly Alluminium Chloride	250000	-	250000	5	Chlorinated Paraffin Wax	70000	-	70000	6	Alluminium Chloride	25000	-	25000	7	Stable Bleaching Chloride	61000	-	61000	8	Phosphoric Acid	35000	-	35000	9	Calcium Chloride	87600	-	87600	10	Captive Power Plant	96 MW	-	96 MW	11	Alluminium Chlorohydrate (Super Coagulant)	5000	-	5000	12	Calcium Hypochlorite	24000	-	24000	<b>Proposed</b>					13	Methyl Chloride	-	54000	54000	14	Methylene Chloride (50-80% of total Production)	15	Chloroform (15-40% of total production)	16	Carbon Tetra Chloride (5-10% of total Production)	<p>Complied</p> <p>We are manufacturing products as per granted CCA by Board.</p> <p>Production data from April, 22 to September, 22 is given in below table.</p>
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	5	Chlorinated Paraffin Wax	3691	3786	3473	3810	3474	3677
	6	Alluminium Chloride	1600	1642	1584	1643	1640	1567
	7	Stable Bleaching Chloride	2091	1916	2190	2021	2024	1947
	8	Phosphoric Acid	1032	970	1015	1101	1050	776
	9	Calcium Chloride	1733	1409	1625	1450	1464	1513
	10	Captive Power Plant	76	81	78	77	73	77
	11	Alluminium Chlorohydrate (Super Coagulant)	186	224	100	223	354	190
	12	Calcium Hypochlorite	92	364	195	106	323	343
	13	Methylene Chloride	0	0	1850	1999	2276	2520
	14	Chloroform	0	0	1023	1024	1117	1205
	15	Carbon Tetra Chloride	0	0	124	146	147	135
<b>3 SPECIFIC CONDITIONS</b>								
3.1	The applicant shall not produce and products as well as not carry out any activities for products/process listed in the EIA Notification dated 14/09/2006 as amended from time to time, requiring prior EC from competent authority.					Noted We are producing or carrying out activities for products/process as per EIA Notification dated 14/09/2006 as amended from time to time and we have obtained prior EC from the SEIAA.		
3.2	Applicant shall strictly comply/fulfill all the conditions stipulated by competent authority in the order of EC issued vide no. SEIAA/GUJ/EC/F(f)/96/2014, dated 01/08/2014 & SEIAA/GUJ/EC/5(f)&4(d)/64/2016 dated 29/10/2016					Complied We are complying with all the conditions stipulated by competent authority in the order of EC and also submitting half yearly compliance reports to authorities.		
3.3	Unit shall not carry out any construction activities and production which attracts provisions of Environment Clearance without obtaining EC from competent authority under EIA notification dated 14/09/2006 and amended thereafter.					Noted We are producing or carrying out activities for products/process as per EIA Notification dated 14/09/2006 as amended from time to time and we have obtained prior EC from the SEIAA.		
3.4	Unit shall use fresh Raw materials only.					Noted & Complied		
3.5	Unit shall sell out their hazardous waste to authorized end-users who is having authorization with valid CCA and rule 9 permission to receive this waste. Unit shall make MOU with such authorized end-users and submit MOU.					Complied We are selling our hazardous waste to authorized end users only which has valid CCA and Rule 9 permission. Also we made a MOU with such end-users.		
3.6	All the efforts shall be made to send hazardous waste to cement industry for co-processing first & there after it shall be disposed through other option.					Noted		
3.7	Unit shall follow spent solvent management guidelines framed by board and shall make MoU with outside					Not Applicable		



	distillation units, if any. Also submit the prescribed forms as per guideline.	As in our unit, no spent solvent are used or generate.																																											
3.8	Unit shall strictly follow the Solid Fuel guideline framed by Board and shall install APCM as per guideline.	Complied We are strictly following Coal Handling guideline and also provided lime dosing system and ESP as an APCM.																																											
3.9	Unit shall follow coal handling guideline framed by Board and provide close ash handling facility.	Complied We are strictly following Coal Handling guideline framed by Board and provided 2 nos. of Close Ash handling Silos.																																											
3.10	Unit shall strictly follow the Fly Ash Notification for disposal of generated Ash.	Complied We are strictly following Fly Ash Notification for disposal of Ash. There is 100% utilization of Ash.																																											
3.11	Unit shall install online Continuous Emission Monitoring Systems (CEMS) and link it with the server of GPCB for real time data transfer for boiler more than 8 TPH capacity or equivalent capacity of TFH.	Complied We have provided CEMS for Boiler 1 & 2 (175 TPH) and Boiler 3&4 (175 TPH) and also connected with Server of CPCB for real time data transfer.																																											
<b>4</b>	<b>CONDITIONS UNDER WATER ACT</b>																																												
4.1	The quantity of the Total Water consumption shall not exceed 19069.5 KL/Day (Existing 18525 KLD + Proposed 544.5 KLD). (Break up as below) (a) Domestic: 471 KLD (Existing 466 KLD + Proposed 5 KLD) (b) Industrial: 18598 KLD (Existing 18525 KLD + Proposed 544.5 KLD)	Complied The quantity of total water consumption is as per prescribed limit. <table border="1"> <thead> <tr> <th rowspan="2">Month</th> <th colspan="3">Water Consumption (KL)</th> </tr> <tr> <th>Industrial</th> <th>Domestic</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Apr,22</td> <td>483336</td> <td>6325</td> <td>489661</td> </tr> <tr> <td>May,22</td> <td>521930</td> <td>6330</td> <td>528260</td> </tr> <tr> <td>June,22</td> <td>492324</td> <td>6328</td> <td>498652</td> </tr> <tr> <td>Jul,22</td> <td>498513</td> <td>6325</td> <td>504838</td> </tr> <tr> <td>Aug,22</td> <td>465180</td> <td>6333</td> <td>471513</td> </tr> <tr> <td>Sept,22</td> <td>479133</td> <td>6258</td> <td>485391</td> </tr> <tr> <td><b>Min</b></td> <td><b>465180</b></td> <td><b>6258</b></td> <td><b>471513</b></td> </tr> <tr> <td><b>Max</b></td> <td><b>521930</b></td> <td><b>6333</b></td> <td><b>528260</b></td> </tr> <tr> <td><b>Avg</b></td> <td><b>490069</b></td> <td><b>6317</b></td> <td><b>496386</b></td> </tr> </tbody> </table>	Month	Water Consumption (KL)			Industrial	Domestic	Total	Apr,22	483336	6325	489661	May,22	521930	6330	528260	June,22	492324	6328	498652	Jul,22	498513	6325	504838	Aug,22	465180	6333	471513	Sept,22	479133	6258	485391	<b>Min</b>	<b>465180</b>	<b>6258</b>	<b>471513</b>	<b>Max</b>	<b>521930</b>	<b>6333</b>	<b>528260</b>	<b>Avg</b>	<b>490069</b>	<b>6317</b>	<b>496386</b>
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4.2	The quantity of total wastewater generation shall not exceed 6241.3 KL/day (Existing 5975.8 KLD + Proposed 265.5 KLD) (Break up as below) a) Domestic: 356.8 KLD (Existing 352.8 KLD + Proposed 4 KLD)	Complied The quantity of total wastewater generation is as per prescribed limit.																																											

	<p>b) Industrial: 5884.5 KLD (Existing 5623 KLD + Proposed 261.5 KLD)  * Total quantity of wastewater discharge of the group companies (i.e. Chemical division + Cellulosic division + Epoxy Division) shall not exceeds 19.4 MLD at any time.</p>	<table border="1"> <thead> <tr> <th rowspan="2">Month</th> <th colspan="3">Wastewater Generation (KL)</th> </tr> <tr> <th>Industrial</th> <th>Domestic</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Apr,22</td> <td>37314</td> <td>6325</td> <td>43639</td> </tr> <tr> <td>May,22</td> <td>38492</td> <td>6330</td> <td>44822</td> </tr> <tr> <td>June,22</td> <td>40926</td> <td>6328</td> <td>47254</td> </tr> <tr> <td>Jul,22</td> <td>42248</td> <td>6325</td> <td>48573</td> </tr> <tr> <td>Aug,22</td> <td>35608</td> <td>6333</td> <td>41941</td> </tr> <tr> <td>Sept,22</td> <td>40329</td> <td>6258</td> <td>46587</td> </tr> <tr> <td><b>Min</b></td> <td><b>35608</b></td> <td><b>6258</b></td> <td><b>41941</b></td> </tr> <tr> <td><b>Max</b></td> <td><b>42248</b></td> <td><b>6333</b></td> <td><b>48573</b></td> </tr> <tr> <td><b>Avg</b></td> <td><b>39153</b></td> <td><b>6317</b></td> <td><b>45469</b></td> </tr> </tbody> </table>	Month	Wastewater Generation (KL)			Industrial	Domestic	Total	Apr,22	37314	6325	43639	May,22	38492	6330	44822	June,22	40926	6328	47254	Jul,22	42248	6325	48573	Aug,22	35608	6333	41941	Sept,22	40329	6258	46587	<b>Min</b>	<b>35608</b>	<b>6258</b>	<b>41941</b>	<b>Max</b>	<b>42248</b>	<b>6333</b>	<b>48573</b>	<b>Avg</b>	<b>39153</b>	<b>6317</b>	<b>45469</b>
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4.3	<p>The quantity of the industrial effluent from the manufacturing process and other ancillary industrial operations shall not exceed 5884.5 KLD and the quantity of domestic wastewater (sewage) shall not exceed 356.8 KLD.</p>	<p>Complied  The quantity of total wastewater generation is as per prescribed limit.  The quantity of domestic wastewater (sewage) is as per prescribed limit.</p> <table border="1"> <thead> <tr> <th rowspan="2">Month</th> <th colspan="3">Wastewater Generation (KL)</th> </tr> <tr> <th>Industrial</th> <th>Domestic</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Apr,22</td> <td>37314</td> <td>6325</td> <td>43639</td> </tr> <tr> <td>May,22</td> <td>38492</td> <td>6330</td> <td>44822</td> </tr> <tr> <td>June,22</td> <td>40926</td> <td>6328</td> <td>47254</td> </tr> <tr> <td>Jul,22</td> <td>42248</td> <td>6325</td> <td>48573</td> </tr> <tr> <td>Aug,22</td> <td>35608</td> <td>6333</td> <td>41941</td> </tr> <tr> <td>Sept,22</td> <td>40329</td> <td>6258</td> <td>46587</td> </tr> <tr> <td><b>Min</b></td> <td><b>35608</b></td> <td><b>6258</b></td> <td><b>41941</b></td> </tr> <tr> <td><b>Max</b></td> <td><b>42248</b></td> <td><b>6333</b></td> <td><b>48573</b></td> </tr> <tr> <td><b>Avg</b></td> <td><b>39153</b></td> <td><b>6317</b></td> <td><b>45469</b></td> </tr> </tbody> </table>	Month	Wastewater Generation (KL)			Industrial	Domestic	Total	Apr,22	37314	6325	43639	May,22	38492	6330	44822	June,22	40926	6328	47254	Jul,22	42248	6325	48573	Aug,22	35608	6333	41941	Sept,22	40329	6258	46587	<b>Min</b>	<b>35608</b>	<b>6258</b>	<b>41941</b>	<b>Max</b>	<b>42248</b>	<b>6333</b>	<b>48573</b>	<b>Avg</b>	<b>39153</b>	<b>6317</b>	<b>45469</b>
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4.4	<p>5620 KLD of biodegradable industrial effluent shall be sent to ETP for primary, secondary &amp; tertiary treatment. After treatment 5520 KLD of the treated effluent shall be sent for disposal into GIDC underground drainage- Dahej Vilayat pipeline /common disposal system up to the sea and 400 KLD of the treated effluent shall be reused/recycled/reduced.</p>	<p>Complied  After primary treatment, our industrial effluent is sent for secondary &amp; tertiary treatment to Fiber division and then sent for final disposal into GIDC underground drainage-Dahej Vilayat pipeline / common disposal system upto the sea.</p>																																											

		<p>Treated effluent is reused/recycled/reduced in different plant operations.</p> <table border="1"> <thead> <tr> <th>Month</th> <th>Reuse/Recycled Qty. (KL)</th> </tr> </thead> <tbody> <tr> <td>Apr,22</td> <td>5540</td> </tr> <tr> <td>May,22</td> <td>4530</td> </tr> <tr> <td>June,22</td> <td>7860</td> </tr> <tr> <td>Jul,22</td> <td>7654</td> </tr> <tr> <td>Aug,22</td> <td>5430</td> </tr> <tr> <td>Sept,22</td> <td>6754</td> </tr> <tr> <td><b>Total</b></td> <td><b>37768</b></td> </tr> </tbody> </table>	Month	Reuse/Recycled Qty. (KL)	Apr,22	5540	May,22	4530	June,22	7860	Jul,22	7654	Aug,22	5430	Sept,22	6754	<b>Total</b>	<b>37768</b>						
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4.5	@ 3 KLD additional wastewater generated from the process shall be taken to PAC (Poly Aluminum Chloride) plant for reuse.	Complied @ 3 KLD of wastewater generated from the Aluminum Chloro Hydrate process is reused into PAC (Poly Aluminum Chloride) plant for reuse.																						
4.6	After proposed expansion, addition wastewater generation shall be 261.50 KLPD, out of which from cooling (147 KLD) and from process (20 KLD) shall be taken to RO Plant. RO Permeate of 117 KLD shall be reused in process and RO reject (50 KLD) shall be used for coal sprinkling.	Complied After proposed expansion, additional wastewater generation not exceeded from 261.5 KLPD. Out of which cooling wastewater and process wastewater taken to RO plant and RO Permeate is reused and RO reject used for Coal sprinkling.																						
4.7	<p>Total 356.8 KLD Domestic wastewater sewage shall be treated in STP and treated waste water shall be used for gardening purpose after conforming following prescribed norms.</p> <table border="1"> <thead> <tr> <th>Parameters</th> <th>GPCB Norms</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>6.5 to 9</td> </tr> <tr> <td>TSS</td> <td>&lt;100 mg/l</td> </tr> <tr> <td>Fecal Coliform (Most Probable Number per 100 milliliter, MPN/100ml)</td> <td>&lt;1000 MPN/100 ml</td> </tr> <tr> <td>BOD (3 days 27° degree C)</td> <td>30 mg/l</td> </tr> </tbody> </table>	Parameters	GPCB Norms	pH	6.5 to 9	TSS	<100 mg/l	Fecal Coliform (Most Probable Number per 100 milliliter, MPN/100ml)	<1000 MPN/100 ml	BOD (3 days 27° degree C)	30 mg/l	Complied Domestic wastewater sewage treated in existing STP and treated wastewater used for gardening purpose after confirming norms. STP Treated wastewater reports are attached.												
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4.6	<p>The quality of treated effluent shall conform to the following standards prior to disposal GIDC Sewer line Dahej-Vilayat Pipeline / Common disposal system upto the sea for final disposal at NIO designated point.</p> <table border="1"> <thead> <tr> <th>Parameters</th> <th>Permissible Limit</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>6 to 9</td> </tr> <tr> <td>Temperature</td> <td>Shall not exceed more than 5°C above ambient water temperature</td> </tr> <tr> <td>Total Suspended Solids</td> <td>100 mg/l</td> </tr> <tr> <td>Oil &amp; Grease</td> <td>10 mg/l</td> </tr> <tr> <td>Phenolic Compounds</td> <td>5 mg/l</td> </tr> <tr> <td>Cyanides</td> <td>0.2 mg/l</td> </tr> <tr> <td>Fluoride</td> <td>15 mg/l</td> </tr> <tr> <td>Sulphides</td> <td>5 mg/l</td> </tr> <tr> <td>Ammonical Nitrogen</td> <td>50 mg/l</td> </tr> <tr> <td>Total Kjeldahl nitrogen (TKN)</td> <td>50 mg/l</td> </tr> </tbody> </table>	Parameters	Permissible Limit	pH	6 to 9	Temperature	Shall not exceed more than 5°C above ambient water temperature	Total Suspended Solids	100 mg/l	Oil & Grease	10 mg/l	Phenolic Compounds	5 mg/l	Cyanides	0.2 mg/l	Fluoride	15 mg/l	Sulphides	5 mg/l	Ammonical Nitrogen	50 mg/l	Total Kjeldahl nitrogen (TKN)	50 mg/l	Complied We are confirming the GPCB prescribed standards for treated effluent prior to disposal. Treated effluent quality reports are attached.
Parameters	Permissible Limit																							
pH	6 to 9																							
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	Nitrate Nitrogen	50 mg/l	
	Total Res. Chlorine	1 mg/l	
	Arsenic	0.2 mg/l	
	Trivalent Chromium	2 mg/l	
	Hexavalent Chromium	0.1 mg/l	
	Copper	3 mg/l	
	Lead	0.1 mg/l	
	Mercury	0.01 mg/l	
	Nickel	3 mg/l	
	Zinc	15 mg/l	
	Cadmium	0.05 mg/l	
	BOD (3 Days at 27°C)	100 mg/l	
	COD	250 mg/l	
	Selenium	0.05 mg/l	
	Vanadium	0.2 mg/l	
	Manganese	2 mg/l	
	Iron	3 mg/l	
	Bio-Assey Test	90% survival of fish after 96 hrs in 100% effluent	
4.7	The unit shall affix of water meters as per Section 4 (I) of the Water (Prevention and Control of Pollution Cess Act) - 1974 for the purpose of measuring and recording the quantity of water consumed at such places as may be required, within 15 days and it shall be presumed that the quantity indicated by the meter has been consumed by the industry until the contrary is proved.		Complied We have installed Water Meter at the inlet. Logbook is maintained to record the water consumption.
<b>4.8</b>	<b>SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS UNDER WATER ACT:</b>		
4.8.1	Applicant shall be a member of Dahej CETP as & when come up and sent its industrial waste water, if required.		Noted We shall become a member of Dahej CETP as & when required.
4.8.2	The effluent shall be stripped off, of VOC's in a closed system before further treatment into ETP.		Noted We shall strip off VOC's if required. Our effluent does not contain VOC's.
4.8.3	Unit shall provide treated effluent holding facility for at least 48 hrs, having vertical tank design preferably.		Complied We have provided treated effluent holding facility for 48 hrs.
4.8.4	Applicant shall carry out Bio Assay Toxicity test for the treated waste water and same shall be submitted to the GPCB.		Complied Bio Assay Toxicity test for the treated waste water is being carried out by NABL accredited laboratory and submitted regularly. Reports area attached.
4.8.5	Unit shall install continuous monitoring as well as alarm system for parameters of treated effluent, such as pH meter, TOC analyser, magnetic flow meter along with totalizer and recorder at the final outlet of factory drain/ pipe of ETP. Records of the same shall be maintained invariably by the unit and shall be submitted to GPCB every month.		Complied Online Monitoring System for parameters of treated effluent, such as pH meter, TSS Meter and flow meter along with totalizer and recorder at the final outlet are installed and records of the same are maintained regularly.
4.8.6	Applicant shall ensure & undertake on Rs. 100 stamp paper that it has one & only one outlet in GIDC U/G drain.		Complied We have taken undertaking for one & only one outlet in GIDC U/G drain.

4.8.7	Name of the unit & technical relevant details shall be prominently written/ printed on mouth of pipeline into GIDC U/G drain & shall be made visible to inspecting officials.	Complied We have displayed the unit & technical relevant details on mouth of pipeline into GIDC U/G drain.
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**5. CONDITIONS UNDER AIR ACT:**

5.1	The following shall be used as fuel in Boiler/ D. G. Set respectively.	Complied Fuel consumption is as per prescribed limit.
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Sr. No.	Fuel	Quantity		
		Existing	Proposed	Total
1	Coal	72000 MT/Month	-	72000 MT/Month
2	HSD	2200 Lit/Hr	200 Lit/Hr	2400 Lit/Hr
3	Hydrogen	-	200 NM3/hr	200 NM3/hr

Month	Coal	Diesel
	MT/Month	Liters/Month
Apr-22	46821	0
May-22	57524	0
Jun-22	55110	0
Jul-22	60152	0
Aug-22	48972	0
Sep-22	46594	0
<b>Min</b>	<b>46594</b>	<b>0</b>
<b>Max</b>	<b>60152</b>	<b>0</b>
<b>Avg</b>	<b>52529</b>	<b>0</b>

5.2	The flue gas emission through stack attached to Boiler/ D. G. Set shall conform to the following standards.	<ul style="list-style-type: none"> <li>Complied</li> <li>We are conforming the GPCB prescribed standards for flue gas emission.</li> <li>Flue gas emission reports are attached.</li> <li>Also please note that Online Monitoring facility has been provided for Boiler 1 &amp; 2 and 3&amp;4 which are also connected with GPCB &amp; CPCB server.</li> </ul>
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Sr. No.	Stack attached to	Stack height in meters	APCM	Air emission
				Parameter & Permissible limit
<b>Existing</b>				
1.	Boiler 1 & 2	125	ESP & Low NO <sub>x</sub> burner	PM - 150 mg/Nm <sup>3</sup> SO <sub>x</sub> - 100 ppm NO <sub>x</sub> - 50 ppm
2.	Boiler 3 & 4	125		
3.	D. G. Sets (1875 KVA - 4 Nos.)	36	--	
4.	D. G. Sets (750 KVA - 3 Nos.)	11	--	
5.	Stack attached to primary coal crusher-1	22.4	Bag Filter	PM < 150 mg/Nm <sup>3</sup>
6.	Stack attached to primary coal crusher-2	30.3	Bag Filter	PM < 150 mg/Nm <sup>3</sup>
<b>Proposed</b>				
7.	DG Set (750 KVA - 1 Nos.)	11	-	PM- 150 mg/Nm <sup>3</sup> SO <sub>x</sub> - 100 ppm NO <sub>x</sub> - 50 ppm
8.	Volatile Reduction Chamber (VRC)	35	Water & Caustic Scrubber	NO <sub>x</sub> - 50 ppm HCl- 20 mg/m <sup>3</sup> Cl <sub>2</sub> - 9 mg/m <sup>3</sup>

5.3

The process emission through various stacks/ vent of reactors, process, vessel shall conform to the following standards.

Sr. No.	Stack attached to	Stack height in meters	Air Pollution Control System	Air emission
				Pollutant & Concentration
<b>Existing</b>				
1	Sodium Hypo stack 1 (Caustic Plant)	35	Alkali Scrubber	Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
2	HCl stack 1 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system.	HCl - 35 mg/Nm <sup>3</sup>
3	HCl stack 2 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system.	
4	Poly Aluminium Chloride liquid	35	Water scrubbing system	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
5	Chlorinated Paraffin Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
6	Aluminium Chloride	35	Alkali scrubbing system	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
7	Stable Bleaching Powder Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
8	Phosphoric Acid	35	Water Scrubber	HCl - 20 mg/Nm <sup>3</sup> HF - 6 mg/Nm <sup>3</sup>
9	Calcium Chloride	35	Water Scrubber	HCl - 20 mg/Nm <sup>3</sup>
10	Sodium Hypo stack 2 (Caustic Plant)	35	Alkali Scrubber	Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
11	HCl stack 3 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system.	HCl - 35 mg/Nm <sup>3</sup>
12	HCl stack 4 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system.	
13	Poly Aluminium Chloride liquid	35	Water Scrubber System	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
14	Poly Aluminium Chloride powder	35	3 stage Water Scrubber	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
15	Chlorinated Paraffin Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
16	Aluminium Chloride	35	Alkali scrubbing system	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>
17	Stable Bleaching Powder Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm <sup>3</sup> Cl <sub>2</sub> - 9 mg/Nm <sup>3</sup>

- Complied
- We are conforming the GPCB prescribed standards for process emission.
- Online Monitoring facility has been provided for Sodium Hypo stack 1 & 2 and HCl stack 1, 2, 3 and 4 which are also connected with GPCB & CPCB server.
- Process Emission reports are attached.


	18	Vent attached to reactor	35	--	H2 gas *																							
	19	Vent attached to dryer-1 (HSBP)	21	Bag Filter	PM < 150 mg/Nm3																							
	20	Vent attached to dryer-2 (HSBP)	21	Bag Filter	PM < 150 mg/Nm3																							
	21	Vent attached to reaction vessel-1 (HSBP)	21	Water/ Caustic Scrubber	Cl2 < 5 mg/Nm3																							
	22	Vent attached to reaction vessel-2 (HSBP)	21	Water/ Caustic Scrubber	Cl2 < 5 mg/Nm3																							
	<b>Proposed</b>																											
	23	Hydro Chlorinator – CMS Plant	35	Alkali Scrubber	HCl-20mg/Nm3																							
	24	Crude CMS Distillation CMS Plant	35	Condenser and guard condenser with cooling water circulation & chilled circulation	VOC-1µg/m3																							
	25	Heavies CMS Distillation CMS Plant	35																									
	* Industry shall take all precautions so that there shall be no escape of H <sub>2</sub> gas.																											
5.4	The applicant shall install and operate a comprehensive adequate air pollution control measures in order to achieve prescribed below.					<ul style="list-style-type: none"> <li>Complied</li> <li>Adequate Air Pollution Control Equipment are installed to achieve prescribed standards.</li> <li>Air Pollution Control Equipment are installed as per CC&amp;A.</li> </ul>																						
5.5	Stack monitoring facilities like port-hole, platform/ ladder etc. shall be provided with stacks/ vents chimney in order to facilitate sampling gases being emitted into the atmosphere.					Complied stack monitoring facilities like Port-hole, platform/ ladder etc. have been provided to facilitate sampling.																						
5.6	Ambient air quality within and outside the premises of the unit shall conform National Ambient Air Quality standards notified by MoEF vide notification dated 16/11/2009 and mainly to the following standards:- <table border="1" style="margin-left: 20px;"> <thead> <tr> <th rowspan="2">Sr. no.</th> <th rowspan="2">Parameter</th> <th colspan="2">Permissible Limit (microgram/m<sup>3</sup>)</th> </tr> <tr> <th>Annual</th> <th>24 Hours Aaverage</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Particulate matter (PM10)</td> <td>60</td> <td>100</td> </tr> <tr> <td>2</td> <td>Particulate matter (PM2.5)</td> <td>40</td> <td>60</td> </tr> <tr> <td>1</td> <td>Oxides of Sulphur (SOx)</td> <td>50</td> <td>80</td> </tr> <tr> <td>2</td> <td>Oxides of Nitrogen (NOx)</td> <td>40</td> <td>80</td> </tr> </tbody> </table>					Sr. no.	Parameter	Permissible Limit (microgram/m <sup>3</sup> )		Annual	24 Hours Aaverage	1	Particulate matter (PM10)	60	100	2	Particulate matter (PM2.5)	40	60	1	Oxides of Sulphur (SOx)	50	80	2	Oxides of Nitrogen (NOx)	40	80	Complied There are 4 nos. of ambient air quality monitoring stations covering all directions in nearby villages (Derol, Sarnar, Argama & Vilayat). Also there are 4 nos. of ambient air quality monitoring stations inside the premises. Ambient air monitoring reports are attached.
Sr. no.	Parameter	Permissible Limit (microgram/m <sup>3</sup> )																										
		Annual	24 Hours Aaverage																									
1	Particulate matter (PM10)	60	100																									
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2	Oxides of Nitrogen (NOx)	40	80																									
	*Annual arithmetic mean of minimum of 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals. ** 24 hourly or 8 hourly or 1 hourly monitored values as applicable, shall be complied with 98% of the tome in a																											

	<p>year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.</p> <p>Note:- Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.</p>	
5.7	The applicant shall operate industrial plant/ air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the given standards.	Complied All the Air Pollution Control equipments and industrial plant is operated very efficiently and continuously and conforming the given standards.
5.8	The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified in the conditions.	Noted
5.9	The applicant shall provide portholes, ladder, platform etc. at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/ and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2 etc. and these shall be painted/ displayed to facilitate identification.	Complied Port-hole, platform/ ladder etc. as stack monitoring facilities have been provided to facilitate sampling.
5.10	All measures for the control of environmental pollution shall be provided before commencing production.	Complied Before the plant operation we have taken all measures for the control of environmental pollution.
<b>5.1</b>	<b>SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS UNDER AIR ACT:</b>	
<b>1</b>		
5.11 .1	Total control of odour nuisance from the plant premises, shall be achieved & maintained by the applicant continuously.	Complied We have provided Chlorine and HCl sensors at different plant locations to control the odour nuisance.
5.11 .2	The applicant shall install continuous/ online monitoring system on the stacks for the parameters such as SO <sub>2</sub> , NO <sub>x</sub> , PM, HCl, Cl <sub>2</sub> etc. and the same shall be connected to GPCB server.	Complied Online Monitoring system has been installed for 2 nos. Boiler Stacks of Power Plant, 2 nos. of Sodium Hypo Stack of Caustic Soda Plant and 4 nos. HCl Stacks of Caustic Soda plant and all the stacks are connected to GPCB & CPCB server.
<b>6.</b>	<b>AUTHORISATION FOR THE MANAGEMENT &amp; HANDLING OF HAZARDOUS WASTES Form-2 (see rule 6(2))</b>	
6.1	Number of Authorization: AWH-98281, Date of Issue- 29/12/2018	Noted
6.2	Unit shall comply with provisions of Hazardous & Other wastes (Management & Transboundary Movement) Rules- 2016.	Noted & Complied
6.2	M/s. GRASIM INDUSTRIES LIMITED- CHEMICAL DIVISION) is hereby granted an authorization to operate facility for following hazardous wastes on the premises situated at Plot No. 1, GIDC, Vilayat-392140, Tal: Vagra, Dist: Bharuch.	Complied Collection, Storage, Transportation and disposal



Sr. No.	Type of Waste	Category	Qty. MT/Year			Disposal
			E	P	T	
1	Chemical sludge from Waste water treatment	35.3	40160	55	40215	Collection, storage, transportation & disposal at approved TSDF Site.
2	Spent Carbon	36.2	0.33	40	40.33	Collection, storage, transportation & disposal at approved TSDF Site.
3	Used Spent Oil	5.1	100.5 KL	0.5 KL	101 KL	Collection, storage, transportation & disposal by selling to registered re-refiners
4	Spent ion exchange resin	35.2	0.33	0.67	1	Collection, storage, transportation & disposal at approved TSDF Site.
5	Discarded container /	33.1	1700 nos.	300 Nos	2000 Nos	Collection storage, Decontamination/Detoxification, reuse, transportation and disposal by sending to authorised recyclers/refiners
	Bags / Liners		25	0	25	
6	Incinerable Waste	36.1	37	105	142	Collection, storage, transportation, disposal at CHWIF site
7	Spent Acid* (HCl)	B15	115500	27000	142500	Collection, storage, transportation through pipeline and disposal by consuming (60000 MT/Year) in-house in manufacturing of Poly Aluminium Chloride. Collection, storage, and disposal by sending (82500 MT/Annum) to Actual users/end-users having rule-9 permission & valid CCA after making MOU.
8	Spent Acid** (Dilute Sulphuric Acid)	B15	7500	8000	15500	Collection, storage, transportation and disposal by sending to authorised actual users/end user having rule-9 Permission & valid CCA after making MOU.
9	Bleaching Liquid (consists of 3% Hypo, 10% CaCl <sub>2</sub> , 65% to 75% water)	--	60000	-	60000	Collection, storage, transportation and disposal by sending to authorised actual users/end user having rule-9 Permission & valid CCA after making MOU.
10	Sodium Chloride (consist of 90% NaCl)	--	6000	-	6000	Collection, storage, transportation & disposal at approved TSDF Site.
11	Residue/sludge & filter cake	16.2	6066	-	6066	Collection, storage, transportation & disposal at approved TSDF Site.
<b>Proposed</b>						
12	Spent Catalyst	17.2	0	25	25	Collection, storage, transportation & disposal at approved TSDF Site.
13	Alluminium Dross Waste	-	0	50	50	Collection, storage, transportation & disposal at approved TSDF Site.

of wastes is being carried out as per granted CC&A.

	14	Batteries	-	0	100 Nos.	100 Nos.	Collection, storage, transportation & disposal as per the batteries Management and Handling Rules, 2010.	
	15	E-Waste	-	0	1	1	Collection, storage, transportation & disposal as per the E-Waste management Rules-2016	
	16	Insulating Material	-	0	25	25	Collection, storage, reuse, transportation and disposal at approved TSDF.	
	<b>Non-Hazardous Waste</b>							
	17	Fly Ash	--	86400	-	86400	Collection, storage, transportation, disposal by selling to brick manufacturing as per fly ash notifications/rules.	
6.3	The authorization is granted to operate a facility for collection, storage, within the factory premises transportation and ultimate disposal of Hazardous wastes as mentioned in above condition no. 6.2.							Complied We are complying the condition.
6.4	The authorization shall be in force for a period up to date 02/03/2024.							Noted. We shall apply for the renewal of authorization before due date.
6.5	The authorization is subject to the conditions stated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986.							Noted
6.6	Unit shall provide separate, adequate storage areas for raw materials, products, each type of hazardous wastes, including for containers containing fresh / used / waste etc.							Complied Separate storage area for raw materials, products, each type of hazardous wastes has been provided.
								
6.7	Unit shall cover the open portion on both sides of the hazardous waste storage area by providing GI sheets from the top to the bottom as well as provide slanted sheets in the front portion to prevent ingress of water from outside.							Complied We have covered open portion of hazardous waste storage area from the top to the bottom to prevent ingress of water from outside.



5.	Unit shall abide all the conditions of CTE Amendment issued vide letter no: GPCB/BRCH-B-CCA-70A(4)/ID-41279/478307 dated 10/12/2018 and subsequent amendments under the provisions under the provisions of various Environmental Act/ Rules.	Noted & Complied We abide all the conditions of CTE Amendment issued vide letter no: GPCB/BRCH-B-CCA-70A(4)/ID-41279/478307 dated 10/12/2018 and subsequent amendments under the provisions under the provisions of various Environmental Act/ Rules.
6.	All other conditions of CCA order AWH-98281 issued vide letter no. GPCB/BRCH-B-CCA-70A(5)/ID-41279/492673 dated 29/12/2018 and subsequent amendments under the provisions of various Environmental act/ rules shall remain unchanged.	Noted.
<b>7. TERMS AND CONDITIONS OF AUTHORISATION:</b>		
7.1	The authorized person shall comply with the provisions of the Environment (Protection) Act - 1986 and the rules made there under.	Noted & complied We are complying the condition.
7.2	The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.	Noted
7.3	The persons authorized shall not rent, lend, sell, transfer of otherwise transport the hazardous and other wastes except what is permitted through authorization.	Noted
7.4	Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization is being granted constitute a breach of this authorization.	Noted
7.5	The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible	Complied We have developed Onsite Emergency Plan and implemented mitigation measures accordingly.

	impacts also carry out mock drill in this regard at regular interval of time.	
7.6	The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environment Damages due to Handling and Disposal of Hazardous Waste and Penalty".	Noted & Complied
7.7	It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.	Noted
7.8	The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.	Not Applicable
7.9	The record of consumption and fate of the imported hazardous and other wastes shall be maintained.	Not Applicable
7.10	The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other waste shall be treated and disposed of as per specific conditions of authorization.	Not Applicable
7.11	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.	Not Applicable
7.12	An application for the renewal of an authorization shall be made as laid down under these rules.	Noted
7.13	Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.	Noted
7.14	Annual Return shall be filed by June 30th for the period ensuring 31st March of the year.	Complied Annual return is filled by June 30th every year.
<b>8.</b>	<b>GENERAL CONDITIONS:</b>	
8.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/ order should immediately be intimated to this Board.	Noted
8.2	Applicant shall also comply with the general conditions given in Annexure-I attached herewith (No. 1 to 38).	Noted & Complied The general conditions given in Annexure-I will be complied.
8.3	The applicant shall not carry out any activities for which required clearances are not obtained.	Noted
8.4	If it is established by any competent authority that the damages caused due to their industrial activities to any person or his property, in that case they are obliged to pay the compensation as determined by competent authority.	Noted
8.5	Regular maintenance of the pipeline shall be carried out to avoid any spillage or leakage during conveyance of the effluent.	Complied Preventive maintenance schedule is being followed.
8.6	Unit shall keep accurate records of their water consumption and wastewater generation, discharge, quantity of each product manufactured and consumption of electricity on day-to-day basis and shall be required to submit the compiled record of each month of GPCB on or before seventh day of the succeeding month. Separate logbooks shall be maintained for recording all the necessary data.	Complied We are maintaining & submitting (Monthly patrak on xgn site) the water consumption and wastewater generation, discharge, quantity of each product manufactured and consumption of electricity on day-to-day basis.

8.7	Magnetic flow meters shall be installed at the various stages of inlet & outlet of pipeline to measure the quantity of effluent at each stage of conveyance.	Complied We have provided flow meters installed at the various stages of inlet & outlet of pipeline.
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We have carried out following CSR Activities in nearby villages:

1. Procured Mobile medical van and started the periodic medical check-up in nearby villages.
2. Exhibition @ Hotel Lord Plaza Bharuch
3. Artificial Insemination -231
4. Blood Donation Camp organized at Grasim Plant - 84 Employees Donated Blood
5. Diwali Craft Exhibition with Co-ordination with Kalrav School – (Day Care School for Especially Abled Children)
6. Specialized Orthopaedic Health Camp arranged @ Vilayat Village– Total Patients - 328
7. Rs. 3000 Scholarship given to 197 girl children for students going for Higher Education Post Primary School
8. 50 Mal Nutrition Kit given to Pregnant Women of Vilayat village and Vorasamni Village.
9. Shed Work Done at Derol High School
10. Dermatologist Specialized Health Camp at Vilayat Village on 12-12-2021 – Total Beneficiaries – 101
11. Vilayat School Building Renovation in Progress.

#### **Glimpse of Diwali Craft Exhibitions**



#### **Glimpse of Specialized Orthopaedic Camp**



**Glimpse of Shed Work Done at Derol High School**



**Glimpse of Dermatologist Specialized Health Camp at Vilayat**





Media Coverage







**GUJARAT POLLUTION CONTROL BOARD**  
**PARYAVARAN BHAVAN**

Sector-10 A, Gandhinagar 382010

Phone (079) 23222425

(079) 23222152

Fax (079) 23232156

Website : www.gpcb.gov.in

**Consent to Establish After Environment Clearance**

File No : GPCB/ (PCB ID. - 41279)

To :

M/s. Grasim Industries Limited Chemical Division,

Plot No.1, G.I.D.C., Vilayat Estate,

City : VILAYAT,

Dist : Bharuch,

Taluka : Vagra

Sub: Consent to Establish (After obtaining Environment Clearance) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981

Ref: (1) Your online application No. 154194 dated 29/03/2019

(1) Environment Clearance issued by State Authority vide their letter no. SEIAA/GUJ/EC/1(d)/287/2019 Dated 04/02/2019

Sir,

Without prejudice to the powers of this Board under the Water (Prevention and Control of Pollution) Act-1974, the Air Act-1981 and the Environment (Protection) Act-1986 and without reducing your responsibilities under the said Acts in any way, this is to inform you that this Board grants Consent to Establish (After obtaining Environment Clearance) under Section 25 of Water Act 1974 and Section 21 of Air Act 1981 for manufacturing of products as mentioned into the Environment Clearance (EC) granted vide letter under reference no (2) above

**Consent To Establish Is Granted Subject To The Following Conditions: -**

- 1) The validity period of this CTE shall be Seven Years from the issue of this order
- 2) Applicant shall strictly comply with all conditions stipulated by competent authority in the order of Environment Clearance issued vide letter under reference No. 2 above
- 3) The applicant shall however, not without the prior concern of the Board, bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed industrial plant. The applicant is required to make applications to this Board for this purpose in the prescribed forms under the provisions of the water Act - 1974, the Air - 1981 and the Environment (Protection) Act - 1985.

For and on behalf of  
 Gujarat Pollution Control Board

A.V. Shah  
 Unit Head - Bharuch

This order is issued in Plot No.1, G.I.D.C., Vilayat Estate, City : VILAYAT, Dist : Bharuch, Taluka : Vagra (41279) for CTE and amendment after obtaining EC.



# CERTIFICATE

Management System as per  
**ISO 50001 : 2018**

The Certification Body TÜV NORD CERT GmbH hereby confirms as a result of the audit, assessment and certification decision according to ISO/IEC 17021-1:2015, that the organization

## GRASIM INDUSTRIES LIMITED CHEMICAL DIVISION

Plot No. 1, GIDC Vilayat Industries Estate,  
 PO-Vilayat, Taluka-Vagra, Dist. Bharuch,  
 Gujarat - 392 012,  
 India

operates a management system in accordance with the requirements of ISO 50001 : 2018 and will be assessed for conformity within the 3 year term of validity of the certificate.

Scope -

**Manufacture of Caustic Soda Lye & Flakes, Liquid Chlorine, Hydrochloric Acid, Sodium Hypochlorite, Compressed Hydrogen Gas, Aluminium Chloride, Poly Aluminium Chloride (Liquid & Powder), Chlorinated Paraffins, Stable Bleaching Powder, Phosphoric Acid, High Strength Bleaching Powder, Aluminium Chloro Hydrate & Calcium Chloride (Liquid & Granules) and Associated Utilities.**

Certificate Registration No. **44 764 22393460**  
 Audit Report No. **2.5-10656/2021**

Valid from **11.03.2021**  
 Valid until **10.03.2024**  
 Initial certification **11.03.2018**

Certification Body  
 at TÜV NORD CERT GmbH

Mumbai, **08.01.2022**

TÜV NORD CERT GmbH

Langemarckstrasse 20

45141 Essen

[www.tuev-nord-cert.com](http://www.tuev-nord-cert.com)

TUV India Pvt. Ltd.,

801, Raheja Plaza – 1, L.B.S. Marg, Ghatkopar (W),

Mumbai - 400 086, India

[www.tuv-nord.com/in](http://www.tuv-nord.com/in)



Deutsche  
 Akkreditierungsstelle  
 D-ZM-12007-01-00

Photograph of Captive Power Plant Project Construction Work

