ADITYA BIRLA

GRASIM

Date: 29/11/2023
Ref: GRCD/GPCB/2023-24/08

To,

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

Subject: Compliance Report of Environment Clearances (EC) for the period April 2023 to September 2023

Dear Sir,

We, hereby submit the Compliance Report of following Environment Clearances (ECs) along with necessary annexures.

(1) Environment Clearance received vide letter No. SEIAA/GUJ/EC/1(d),4(d)&5(f)/96/2011 dated 30th May 2011 and its amendment vide Letter No. SEIAA/GUJ/EC/1(d),4(d)&5(f)/ 98 /2012 dated 22nd March 2012,
(2) Environment Clearance vide letter No. SEIAA/GUJ/EC/5(f)/90/2014 dated 1st August 2014,
(3) Environment Clearance vide letter No. SEIAA/GUJ/EC/5(f)&4(d)/642/2016 dated 29th October 2016
(4) Environment Clearance vide letter No. SEIAA/GUJ/EC/1(d)/287/2019 dated 4th Feb 2019
(5) Environment Clearance vide Letter No.: SEIAA/GUJ/EC/1(d)&4(d)/764/2021 dated 10th Jun 2021

We hope you will find the same in order.

Thanking You
Yours Faithfully,
For, **M/s. Grasim Industries Limited (Chemical Division)**

Authorized Signatory

Grasim Industries Limited
Unit : Chemical Division

Correspondence Plant & Address :
Plant : Plot No. 1, G.I.D.C. Estate,
Village : Vilayat, Tahsil : Vagra,
Dist. Bharuch 392 012 (Gujarat), India.

Ph. No. : 83470 08059
E-mail : grasimchem.vilayat@adityabirla.com
Website : www.grasimchem.com
CIN : L17124MP1947PLC000410

H.O. : Birla Aurora, 10th floor,
Dr. Annie Besant Road,
Worli, Mumbai - 400 030
Maharashtra, India.

Regd. Office : P.O. Birlagram, Nagda - 456 331 (M.P.)

Six Monthly Compliance Report of Environmental Clearance

For

Grasim Industries Ltd. (Chemical Division)

Submitted to:	Submitted By:
State Level Environment Impact Assessment Authority Gujarat Pollution Control Board, Paryavaran Bhavan, Sector – 10 A, Gandhinagar – 382 010	Grasim Industries Limited (Chemical Division) Plot No. 1 GIDC Vilayat Industrial Estate, PO-Vilayat, Taluka-Vagra, Dist: Bharuch-392012, Gujarat, India
Period: April 2023 to September 2023	

Compliance Status Report for "Environmental Clearance" Accorded by the SEIAA

For

Grasim Industries Ltd. (Chemical Division)

Contents

List of Annexure

Sr. no.	Title	Annexure no.
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
2	Copy of PESO Licenses	Annexure-2
4	BEIL – TSDF & CHWIF Membership Certificate	Annexure-3
6	Copy of GIDC Water Agreement Letter	Annexure-4
10	Copy of PLI Policy	Annexure-5
11	Occupational Health Surveillance Report	Annexure-6
12	Adequacy of ETP, STP & Air Pollution Control System by third Party Evaluation	Annexure-7
13	CCA Compliance Report	Annexure-8
14	Details of CSR Activities	Annexure-9
16	ISO 50001:2011 Certificate	Annexure-10

Compliance status of Environmental Clearance

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

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

Sr. No.	EC Conditions	Compliance status
	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, CS2, 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.	• **Noted** • Copy of Environment Clearance dated 30/05/2011 & name change letter dated 22/03/2012 are attached as **Annexure-1.**

Products	Caustic Soda Lye	Liquid chlorine / Hydrochloric Acid	Hydrogen	Chlorosulphonic Acid	Sulphuric Acid	Carbon Disulphide
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 2023 to Sept 2023	Nil	Nil	Nil	Nil	Nil	Nil

Products	Liquid Poly Aluminum Chloride	Stable Bleaching Powder	Chlorinated Paraffin	Aluminum Chloride	Power Generation
SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/96/2011 dated 30th May 2011 and amendment to	146000 TPA (400 TPD)	36500 TPA (100 TPD)	36500 TPA (100 TPD)	14600 TPA (40 TPD)	96 MW

Sr. No.	EC Conditions	Compliance status

EC vide letter No. SEIAA/GUJ/EC/1(d), 4(d) & 5(f)/98/2012 dated 22nd March 2012						
Total Production (Tons) - Apr 2023 to Sept 2023	Nil	Nil	Nil	Nil	336508.4 MW	
Average Production (Tons) - Apr 2023 to Sept 2023	Nil	Nil	Nil	Nil	56084.7 MW	

* Note: Production data for the period April 2023 to September 2023 is provided on Page no. 1-2 in EC compliance of EC vide no. SEIAA/GUJ/EC/5(f)&4(d)/642/2016 dated 29th Oct 2016.

A **Specific Conditions**

1 The Unit shall obtain requisite permission from PESO, Nagpur for storage of Chlorine, Hydrogen etc. before commissioning of the project.

- **Complied**
- We have obtained licenses from Petroleum & Explosives Safety Organization (PESO) for Chlorine, Hydrogen and Class B chemicals before commissioning of the project. Licenses are attached as **Annexure-2.**

PESO License No.	Description	Date of Issue/ Renewal/ Amendment	Validity
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	18-10-2023	30-09-2032
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	06-10-2023	31-12-2033
G/WC/GJ/06/1803 (G34271)	License to Store Compressed Gas in Cylinders-ALCP Plant	27-07-2022	30-09-2033

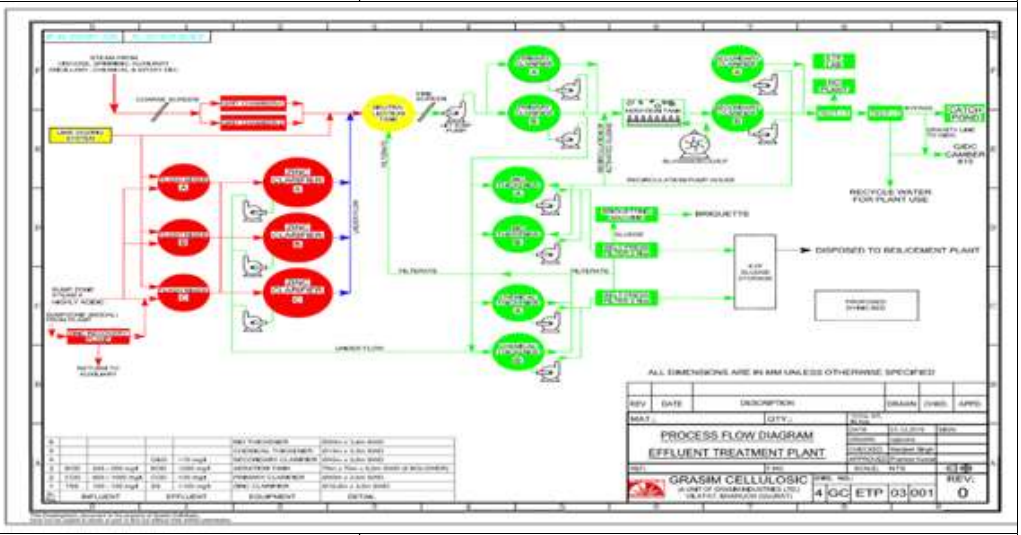
A.1 **Water:**

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.

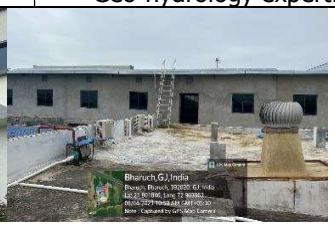
- **Complied**
- No ground water is used for the project and entire water requirement is met through GIDC supply.
- We have obtained approval for using 35000 KLD of Gujarat Industrial Development Corporation (GIDC) Water through water supply pipeline. Following are the GIDC offer cum allotment letter details:

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/M)
April-2023	499713
May-2023	515578
June-2023	464740
July-2023	435841
August-2023	474991
September-2023	444718
Total	**2835580**

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td>3</td><td>The Industrial effluent generation from the project shall not exceed 25600 KLD after the proposed expansion.</td><td>• Complied
• The Industrial effluent generation does not exceed 25600 KLD.
<table><tr><th>Month</th><th>Industrial effluent (KL/M)</th></tr><tr><td>April-2023</td><td>65415</td></tr><tr><td>May-2023</td><td>74178</td></tr><tr><td>June-2023</td><td>78329</td></tr><tr><td>July-2023</td><td>88743</td></tr><tr><td>August-2023</td><td>108575</td></tr><tr><td>September-2023</td><td>97772</td></tr><tr><td>Total</td><td>513014</td></tr></table></td></tr>
<tr><td>4</td><td>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.</td><td>• Complied
• 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.).
• ETP is operated regularly and efficiently to achieve the prescribed GPCB norms at the ETP outlet.</td></tr>
<tr><td></td><td colspan="2"> 
</td></tr>
<tr><td>5</td><td>The treated waste water conforming to the GPCB norms shall be discharged into the GIDC underground drain for its final disposal into deep sea.</td><td>• Complied
• The treated waste water confirming to the GPCB norms are discharging into GIDC underground pipeline for final disposal to deep sea through GIDC.</td></tr>
<tr><td>6</td><td>A Guard or polishing pond shall be provided before discharge of treated effluent in to GIDC drain. The Unit shall provide on line pH meter, TDS meter & TOC meter for online monitoring of the treated effluent.</td><td>• Complied
• 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.
• As per CCA condition, we have installed Online pH meter, flow meter & TOC meter are provided for monitoring of the treated effluent.
Photograph of Guard Pond:</td></tr>
</table>

Sr. No.	EC Conditions	Compliance status
		
7	The domestic waste water generation shall not exceed 800 KLD after the proposed expansion.	• **Complied** • The domestic waste water generation does not exceed 800 KLD.
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.	• **Complied** • STP is operated regularly and efficiently to achieve the GPCB norms at the STP outlet. • We have installed Sewage Treatment Plant for treatment of domestic wastewater on the following specification: • Design Capacity of STP: 1080 m3/day. Design Basis: Flow: 1080 m3/day. BOD: 250-270 mg/l. COD: 400-600 mg/l TSS: 400 mg/l pH : 6 - 9
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.	• **Complied** • Treated domestic wastewater from STP is utilized for gardening/ plantation within premises after conforming to GPCB prescribed standards. • In rainy season, treated domestic water is transferred to the ETP for its discharge into the GIDC underground drain.
10	The Unit shall provide metering facility at the inlet and outlet of the ETP & STP and maintain the record of the same.	• **Complied** • We have provided metering facility at inlet & outlet of the ETP & STP and maintain the records of the same regularly.
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.	• **Complied** • Proper logbooks of ETP & STP operation is maintained, quantity of effluent generated & discharge into GIDC drain and utilization in plantation/ gardening is maintained. • Readings are maintained and submitted in the Monthly Patrak on GPCB XGN regularly.
12	Regular performance evaluation of the ETP & STP 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.	• **Complied** • Regular performance evaluation of ETP & STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor and its record is maintained.
13	Rain water harvesting of	• **Complied**

Sr. No.	EC Conditions	Compliance status
	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.	• Rainwater is recovered from roof tops and stored in a rain water harvesting well. • We have already installed 10 nos. of Rain water harvesting station at nearby villages like, Sachan Village, Saran Village, Saykha Vilalge, Derol, Asmita Vikas Kendra, Rahad Primary school, Ankot Primary school, Smt. M.M.M. Patel vidhyalaya, Pisad primary school, Saladra Primary school. • We are exploring more possibilities for rainwater harvesting in nearby area in consultation with a Geo-hydrology expert.
	         	
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.	• **Complied** • 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. • We have also invested a special amount for a training & development of education program that has been initiated jointly by Paryavaran Vikas Kendra-Rajkot and Paryavaran Mitra Ahmedabad.
A.2	**AIR:**	
15	Process emission shall be controlled with the air pollution control equipment (APCE) as mentioned below. a. Poly Aluminum Chloride Plant - Water scrubber for absorption of HCl vapor. b. Caustic Soda Plant- Water scrubber having bubble cap tray system for absorption	**Complied** a. We have provided water scrubber for absorption of HCl vapor. b. We have provided Water scrubber having bubble cap tray system for absorption of HCl vapors & three tower systems with alkali scrubber in Sodium Hypo Stack. Online monitoring system is also provided and it is connected to CPCB & GPCB server. c. We have provided Alkali Scrubber for the absorption of Cl2 emission in Bleaching Powder Plant,

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td></td><td>of HCl vapors & three tower systems with alkali scrubber for absorption of unreacted chlorine to produce sodium Hypo Chlorite.
c. Bleaching Powder Plant, Aluminum Chloride Plant and Chlorinated Paraffin Plant -Alkali scrubbers of absorption of Cl2 emission.
d. Sulphuric Acid Plant- DCDA system in manufacturing and scrubbing system.
e. Chlorosulphonic Acid Plant- Acid scrubber for absorption of SO3 emissions.</td><td>Aluminum Chloride Plant & Chlorinated Paraffin Plant.
d. Double Contact Double Absorption (DCDA) system is installed in Sulphuric Acid manufacturing. We have provided with 2-stage scrubber system for scrubbing SO2 using alkali. With this scrubbing system, we are meeting the emission norms prescribed for sulphuric acid plant.
e. Chlorosulphonic Acid project is not implemented in chlor-alkali unit yet.</td></tr>
<tr><td>16</td><td>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.</td><td>• Complied
• The Air Pollution Control Equipment (APCE) attached with different stacks are operated efficiently and effectively to achieve the GPCB prescribed norms.
• We have provided adequate stack height as per prevailing norms for the process emissions.</td></tr>
<tr><td>17</td><td>Natural gas shall be used as a raw material in the CS2 Plant. Thus, there shall be no CS2 & H2S emission from the CS2 Plant.</td><td>• Complied
• We have upgraded Sulphur recovery system by installation of an additional scrubber so as to ensure that no CS_2 & H_2S get emitted from CS_2 Plant.</td></tr>
<tr><td>18</td><td>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.</td><td>• Complied
• Coal consumption for the period Apr’ 23 to Sept’ 23 is provided below:
<table>
<tr><th>Month</th><th>Coal (MT/ Month)</th></tr>
<tr><td>April, 23</td><td>56975</td></tr>
<tr><td>May, 23</td><td>61864</td></tr>
<tr><td>June, 23</td><td>54520</td></tr>
<tr><td>July, 23</td><td>54206</td></tr>
<tr><td>August, 23</td><td>63881</td></tr>
<tr><td>September, 23</td><td>61063</td></tr>
</table>
• Two stacks of 125 m Ht are installed for 96 MW Power plant.</td></tr>
<tr><td>19</td><td>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</td><td>• Complied
• High Efficiency Electro Static Precipitators (ESP) > 99.9 % efficiency installed for control of flue gas emission from power plant.
• 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).
• Online monitoring system is also provided at power plant stack and it is connected to CPCB & GPCB server.
• 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.</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td></td><td>boiler shut down totally.</td><td></td></tr>
<tr><td></td><td colspan="2">• Monthly Analysis Report from Unistar Environment & Research Lab Pvt. Ltd.
<table>
<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>
<tr><td>Apr, 23</td><td>28</td><td>35</td><td>33</td><td>24</td><td>38</td><td>34</td></tr>
<tr><td>May, 23</td><td>33</td><td>39</td><td>35</td><td>29</td><td>35</td><td>34</td></tr>
<tr><td>June, 23</td><td>21</td><td>32</td><td>38</td><td>15</td><td>28</td><td>36</td></tr>
<tr><td>July, 23</td><td>18</td><td>36</td><td>34</td><td>18</td><td>33</td><td>36</td></tr>
<tr><td>Aug, 23</td><td>21</td><td>31</td><td>37</td><td>14</td><td>36</td><td>32</td></tr>
<tr><td>Sept, 23</td><td>24</td><td>33</td><td>35</td><td>17</td><td>28</td><td>35</td></tr>
<tr><td>Min</td><td>18</td><td>31</td><td>33</td><td>14</td><td>28</td><td>32</td></tr>
<tr><td>Max</td><td>33</td><td>39</td><td>38</td><td>29</td><td>38</td><td>36</td></tr>
<tr><td>Avg.</td><td>24</td><td>34</td><td>35</td><td>19</td><td>33</td><td>34</td></tr>
</table></td></tr>
<tr><td>20</td><td>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.</td><td>• Complied
• 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.
• In case failure of two or more fields of the ESP, we will immediately shut down the Power Plant.</td></tr>
<tr><td>21</td><td>On line 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.</td><td>• Complied
• Online monitoring system installed at DCS/ Control room of Power plant, displaying the values of SOX & PM.
• Also same has been displayed at the board available at plant main gate.</td></tr>
<tr><td>22</td><td>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.</td><td>• Complied
• 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.</td></tr>
<tr><td>23</td><td>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.</td><td>• Complied
• Water sprinkler (14 nos.) system has been provided to control the fugitive emission at coal storage, coal transfer points and truck unloading area.
• We have provided dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc.
• Fly ash is stored in silo and transferred in close trucks to avoid any dust emission.</td></tr>
<tr><td>24</td><td>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 & Health).</td><td>• Complied
• Fugitive emissions in work zone environment & storage area are monitored by third party on monthly basis and are well within GPCB stipulated norms.</td></tr>
<tr><td>25</td><td>Regular performance 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</td><td>• Complied
• Regular performance evaluation of ETP & STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor and its record is maintained.</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td></td><td>shall be maintained.</td><td></td></tr>
<tr><td>26</td><td>Regular monitoring of ground level concentration of CS2, SO2, NOX, Cl2, HCl, PM10 and PM2.5 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.</td><td>• Complied
• Regular monitoring of ground level concentration of CS2, SO2, NOX, Cl2, HCl, PM10 and PM2.5 is done by third party in the impact zone and its records are maintained.
• If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures will be provided immediately.
• 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 & Vilayat).</td></tr>
<tr><td>A. 3</td><td colspan="2">HAZARDOUS/ SOLID WASTE:</td></tr>
<tr><td>27</td><td>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.</td><td>• Complied
• We are member of TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd and M/s. Safe Enviro, Jambusar
• Copy of the membership certificates are attached as Annexure-3.</td></tr>
<tr><td>28</td><td>The Hazardous wastes shall be stored in separate designated hazardous waste storage facility with pucca bottom and leachate location facility, before its disposal.</td><td>• Complied
• We have provided impervious layer with pucca bottom and leachate location facility in the separate hazardous waste storage area for storing before disposal.</td></tr>
<tr><td>29</td><td>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 waste.</td><td>• Complied
• We are member of TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd and M/s. Safe Enviro, Jambusar
Copy of the membership certificates are attached as Annexure-3.</td></tr>
<tr><td>30</td><td>Discarded containers/ barrels/ bags/ liners shall be either reused or sold only to the authorized recyclers after decontamination</td><td>• Complied
• We are disposing Discarded containers/ barrels/ bags/ liners to GPCB approved registered recyclers only.</td></tr>
<tr><td>31</td><td>Used Oils can be sold only to the registered recyclers.</td><td>• Complied
• Used Oil is sold to Registered recyclers only.</td></tr>
<tr><td>32</td><td>Fly ash to be handled in dry site and handling of the fly ash shall be done through a closed pneumatic system.</td><td>• Complied
• Fly ash is handled in dry site and handled through closed pneumatic system.
<table>
<tr><th>Month</th><th>Fly ash Generation (MT/M)</th></tr>
<tr><td>April, 23</td><td>6651</td></tr>
<tr><td>May, 23</td><td>6354</td></tr>
<tr><td>June, 23</td><td>5374</td></tr>
<tr><td>July, 23</td><td>6003</td></tr>
</table></td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><td>August, 23</td><td>9193</td></tr>
<tr><td>September, 23</td><td>8187</td></tr>
<tr><td>Min.</td><td>5374</td></tr>
<tr><td>Max.</td><td>9193</td></tr>
<tr><td>Average</td><td>6960</td></tr>
</table>
</td></tr>
<tr><td>33</td><td>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.</td><td>• Complied
• We have provided 2 nos. Silo (350 MT each) for storage of fly ash at the site for 7 days.
• No ash pond is constructed for storage of fly ash.</td></tr>
<tr><td>34</td><td>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.</td><td>• Complied
• The fly ash is supplied to the manufacturer of ash based products (Manufacturer of Cement/ Bricks). 100 % fly ash is being utilized.
<table>
<tr><th>Month</th><th>Fly ash Disposal (MT/M)</th></tr>
<tr><td>April, 23</td><td>5637</td></tr>
<tr><td>May, 23</td><td>6516</td></tr>
<tr><td>June, 23</td><td>5398</td></tr>
<tr><td>July, 23</td><td>6144</td></tr>
<tr><td>August, 23</td><td>8122</td></tr>
<tr><td>September, 23</td><td>8187</td></tr>
<tr><td>Min.</td><td>5398</td></tr>
<tr><td>Max.</td><td>8187</td></tr>
<tr><td>Average</td><td>6668</td></tr>
</table>
</td></tr>
<tr><td>A. 4</td><td>SAFETY:</td><td></td></tr>
<tr><td>35</td><td>Provisions of the Manufacturing, Storage & Import of Hazardous Chemicals Rules, 1986 & Factory act 1948 shall be compiled with.</td><td>• Complied
• We are following MSIHC Rules, 1989 and Factories Act, 1948.
• All the chemicals/ materials are stored in the storage tanks with required material of Construction.
• Sufficient dykes are provided at Tank storages as per chemical handling and storage guidelines.
• Fire Hydrant system is provided nearby storage and handling area for emergency purpose.
• Safety trainings are provided to all the operators and workers working in such areas.
• Hazard Identification and Risk Assessment (JSA) of all activities carried out and SOPs are prepared accordingly.
• Safety showers are provided nearby storage areas.</td></tr>
<tr><td>36</td><td>A well designed fire hydrant system shall be installed as per the prevailing standards.</td><td>• Complied
• Fire hydrant system installed as per TAC (Tariff Advisory Committee) guidelines.
• CA Plant
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</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td></td><td></td><td>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</td></tr>
<tr><td>37</td><td>All the risk mitigation measures, general & specific recommendations mentioned in Chapter 6 of the EIA Report shall be implemented.</td><td>• Complied
• As per Chapter 6 of the EIA, we have identified the risks and take mitigation measures accordingly.</td></tr>
<tr><td></td><td colspan="2">
<table>
<tr><th>Sr. No.</th><th>Risk Mitigation Measure - Recommendations</th><th>Compliance Status</th></tr>
<tr><td>1</td><td>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>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>2</td><td>Critical switches and alarm should be always kept in line.</td><td>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>3</td><td>Fire detectors should be installed near those units which handle large amount of flammable material and operate under high temperature and pressure.</td><td>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>4</td><td>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>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>5</td><td>Shut off and isolation valves should be easily approachable in emergencies.</td><td>All shut off and isolation valves are located as such that it can be easily approachable in emergencies.</td></tr>
<tr><td>6</td><td>Material Safety Data Sheet and Toxicological Data should be displayed at the facility.</td><td>Material Safety Data Sheet and Toxicological Data are displayed in Hindi and English languages at the facility.</td></tr>
</table>
</td></tr>
<tr><td>38</td><td>All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic/ hazardous chemicals, especially chlorine, hydrogen, CS2, HCl etc.</td><td>• Complied
• We have developed job safety analysis procedure and trainings have been provided to all employees. Proper controls are provided to mitigate any emergency.</td></tr>
<tr><td>39</td><td>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.</td><td>• Complied
• 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.</td></tr>
<tr><td>40</td><td>During material transfer, spillage shall be avoided and garland</td><td>• Complied
• For material transfer, we have provided pipelines of</td></tr>
</table>

Sr. No.	EC Conditions	Compliance status
	drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.	required MOC in the plant. • We have block the storm water drain connection point in the plant areas.
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.	• **Complied** • 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.
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.	• **Complied** • OHC with availability of para-medical staff & ambulance is available round the clock. • We have also tied up with M/s. Apex Multispecialty Hospital at Bharuch. • Periodic health checkup of all workers is also carried out regularly as per Factory act requirement.
43	Personal protective equipment shall be provided to workers and its usage shall be ensured and supervised.	• **Complied** • We have provided proper job specific PPEs to all the workers and its usage is ensured and supervised regularly.
44	First aid box and required antidote for the chemicals used in the unit shall be made readily available in adequate quantity.	• **Complied** • We have 60 Nos. of first aid boxes at different locations of our plant containing required antidote for the chemicals used in the plant.
45	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	• **Complied** • Training is imparted to all the workers at regular intervals for safety and health during chemical handling, Emergency Preparedness, etc. • We have engaged DuPont Safety for implementation of Work place safety & Process Safety management system and to provide training & Awareness of employees in the site. • 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.
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.	• **Complied** • Occupational health surveillance of the workers is done and its records are maintained. • Six monthly pre-employment and periodical examination for all the workers is being carried out.
47	Handling and charging of the chemicals shall be done in such a manner that minimal human exposure occurs.	• **Complied** • We have DCS operated plan which requires minimum Human intervention though we have provided suitable means of PPEs to avoid exposure.
48	Transportation of Hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	• **Complied** • We are following Central Motor Vehicles Rule - 9 for Hazardous chemical transportation.
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	• **Complied** • We have procured and installed standardize

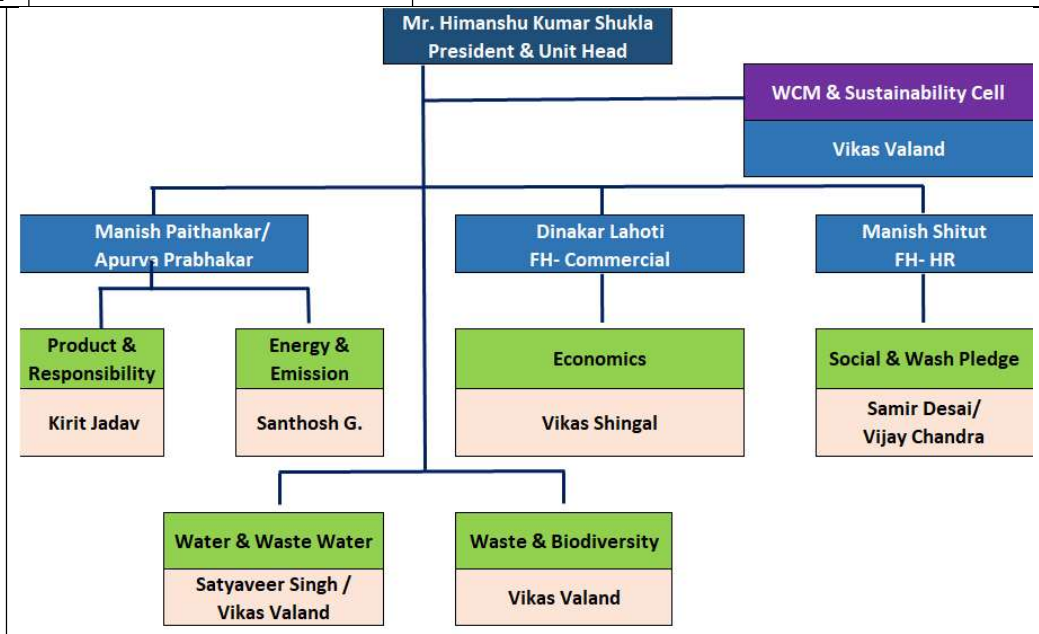
Sr. No.	EC Conditions	Compliance status
	specification of low noise levels	equipment in our plant. We are regularly monitoring noise level of the plant area.
-	Manufacturers/ suppliers of major noise generating machines/ equipments like air compressors, feeder pumps, turbine generators, etc. shall be 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.	• **Complied** • 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. • We are regularly monitoring noise level of the plant area as per schedule.
-	Regular maintenance of machinery and vehicles shall be undertaken to reduce the noise impact.	• **Complied** • 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.
-	Noise suppression measures such as enclosures, buffers and/ or protective measures shall be provided.	• **Complied** • Noise suppression measures have been provided at D. G. Sets with acoustic enclosures, utility compressors in well-ventilated area with noise protection.
-	Employees shall be provided with ear protection measures like earplugs or earmuffs.	• **Complied** • 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.
-	Proper oiling, lubrication and preventive maintenance shall be carried out of the machineries and equipments to reduce noise generation.	• **Complied** • Proper oiling, lubrication and preventive maintenance is carried out of the machineries and equipment to reduce noise generation. • We are following different maintenance practices such 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.	• **Complied** • 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, Tritech etc.
-	Ear plug and muffs shall be made compulsory for the construction workers working near the noise generating activities/ machines/ equipment.	• **Complied** • 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
-	Vehicles and construction equipment with internal combustion engines without proper silencer shall not be allowed to operate.	• **Complied** • Vehicles and construction equipment with internal combustion engines without proper silencer are not allowed to operate at our site.
-	Construction equipment meeting the norms specified by EP Act.1986 shall only be used.	• **Complied** • Construction equipment meeting the norms specified by EP Act 1986 are used.
-	Noise control equipment and baffling shall be employed on	• **Complied** • Noise control equipment such as Silencers are

Sr. No.	EC Conditions	Compliance status
	generators especially when they are operated near the residential and sensitive areas	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.
-	Noise levels shall be reduced by the use of adequate mufflers on all motorized equipment.	• **Complied** • We have provided silencers/ mufflers on such noise generator equipment to reduce the noise levels.
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.	• **Complied** • 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. • The ambient noise levels are conforming to the standards prescribed under the Environment (Protection) 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.	• **Complied** • We have installed energy efficient devices and appliances as per 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.	• **Complied** • Energy Audit of Chlor-alkali & Value Added Products plant is carried out on regular basis by central technical 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.	• **Complied** • Solar landscaping lights are installed for Admin Building and also in other plant areas.   
54	The transformers and motors shall have minimum efficiency of 85%.	• **Complied** • All transformers are of higher efficiency > 98 %
55	Variable frequency drives shall be installed.	• **Complied** • 80 nos. of Variable frequency drives are installed for

Sr. No.	EC Conditions	Compliance status
		energy saving.
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.	• **Complied** • All lights are energy efficient MH lamps and we are replacing the same with LED lights. (50 % replacement is already done).
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	• **Complied** • Energy saving practices and initiatives are in place. • Solar landscaping lights are installed for Admin Building and also in other plant areas. • We are using Solar power & wind power from third party as a green fuel to reduce the power consumption • We have installed VFD on Intermediate Caustic Transfer Pump, on Chilled Water Pump, on PAC Reactors etc. • We have change tap position of Lighting transformers (both normal & emergency) installed in CA. • Cooling water pump of capacity 3200 m3/hr (550kw) replaced with lower capacity pump of 2000 m3/hr (350kw) which reduced power consumption up to 3264 unit (reduced from 11184 unit to 7920 unit) • Aerodynamic FRP fan assembly installed in cooling tower ID fans by replacing cast iron fans which increases the air flow average. Frequency of cooling tower fan reduced from 50HZ to 42HZ saves the energy of 540 units. • Replacement of MH lamps with LED lamps • Installation of LT motor with VFD in place of HT motor for Chlorine compressor reduces the power consumption of Cl2 compressor. Motor frequency set to 42HZ for achieving the required output. Earlier it was working with full load even when the plant running with partial load. 1000 units saving achieved by replacing HT motor with LT motor • Coating of impeller of Cooling water pump (B)to reduce frictional losses • Installation of LT motor with VFD in Cl2 gas compressor  

Sr. No.	EC Conditions	Compliance status
		
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.	• **Complied** • We have carried out Cleaner Production Assessment studies by Gujarat Cleaner Production Centre (Established by Industries & Mines Department, Government of Gujarat).
59	The company shall undertake following waste minimization measures:	
a)	Metering and control of quantities of active ingredients to minimize waste.	• **Complied** • We have provided flow meters for wastewater generation. • We have installed RO system for reducing the effluent. Recycle steam and vapor condensate used in process & cooling tower. • We use super washed salt to reduce chemical consumption in turn to reduce solid waste generation.
b)	Reuse of by-products from the process as raw materials or raw material substitute in other process.	• **Complied** • We are using Hydrogen as a clean fuel for producing Caustic Soda flakes & Poly Aluminum Chloride. • Use of waste chlorine gas for producing 32% HCl. Vapor condensate from flaking plant treated by polishing unit and finally used as DM water. • By-product HCl from CPW Plant is used in PAC plant as raw material.
c)	Use of automated and enclosed filling to minimize spillages.	• **Complied** • We are using automated and closed filling to minimize spillages.
d)	Use of close feed system into batch reactors.	• **Complied** • We are using close feed system into batch reactors.
e)	Dry cleaning/ mopping of floor instead of floor washing.	• **Complied** • Floors are cleaned through mopping.
f)	Use of light pressure hoses for cleaning to reduce waste water generation.	• **Complied** • Light pressure hoses are used for cleaning and reduce the wastewater.
g)	Regular preventive maintenance for avoiding leakage, spillage etc.	• **Complied** • Preventive maintenance schedule is strictly complied to ensure the health of the equipment & pipelines. • Chlorine liquid & gas pipelines thickness is being measured & monitored regularly.
A. 7	**GREEN BELT AND OTHER PLANTATION**	
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	• **Complied** • We have appointed a Horticulture Expert to develop & maintain the greenbelt properly. • We have already started plantation and about 5000 saplings have been planted in & around the

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td></td><td>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.</td><td>boundary of plant during this monsoon.</td></tr>
<tr><td>61</td><td>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.</td><td>• Complied
• We have planted 30,000 nos. of trees as a green belt development in the premises & nearby villages and separate budget is earmarked for the green belt development project.
• 5 Years rolling plan with the budget of Rs. 120 Lakh is prepared for green development.
• 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.
• In nearby villages we have plan to develop ~20000 nos. trees as listed below in FY 23-24.
<table>
<tr><th>Sr. No.</th><th>Village Name</th><th>Total Acre</th><th>Number of Tree Plantation</th></tr>
<tr><td>1</td><td>Argama</td><td>2</td><td>1500</td></tr>
<tr><td>2</td><td>Aankot</td><td>1</td><td>1500</td></tr>
<tr><td>3</td><td>Saran</td><td>3</td><td>5000</td></tr>
<tr><td>4</td><td>Sarnar</td><td>2</td><td>2000</td></tr>
<tr><td>5</td><td>Derol</td><td>2.5</td><td>5000</td></tr>
<tr><td>6</td><td>Bhersam</td><td>3</td><td>5000</td></tr>
<tr><td colspan="2">Total</td><td>13.5</td><td>20,000</td></tr>
</table></td></tr>
<tr><td>62</td><td>Drip irrigation / low-volume, low angle sprinkler shall be used for the green belt development.</td><td>• Complied
• Drip irrigation / low-volume, low angle sprinklers are used for green belt development.
• Total 22,000 m^2 area is covered under drip irrigation & low angle sprinkler system.</td></tr>
<tr><td>B.</td><td colspan="2">GENERAL CONDITIONS:</td></tr>
<tr><td>63</td><td>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.</td><td>• Complied
• 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.</td></tr>
<tr><td>64</td><td>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.</td><td>• Complied
• As per Charter Corporate Responsibility for Environment Protection (CREP) published by the CPCB, Tree plantation & Tree guard provided to protect Trees.
• Energy Program: Low smoke wood stoves & Solar Street Light etc.</td></tr>
<tr><td>65</td><td>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 allotted for this purpose.</td><td>• Complied
• A separate environment management cell equipped with full-fledged laboratory facilities and qualified personnel set up to carry out the Environment Management and Monitoring functions and a separate budget is allotted for this purpose.</td></tr>
</table>

Sr. No.	EC Conditions	Compliance status
		
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.	• **Complied** • 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. • Yearly expenses with respect to environmental safeguards are also reported on an annual basis.
67	Pucca flooring/ impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	• **Complied** • We have provided RCC and /acid brick line flooring in the required areas.
68	Leakages from the pipes, pumps, shall be minimal and if occurs shall be arrested promptly.	• **Complied** • We have provided pipelines of suitable MOC in the plant which ensures no leakages from the pipes/ pumps.
69	All the recommendations made in the EIA/ EMP submitted by the project proponent shall be strictly implemented.	• **Complied** • Recommendations made in the EIA/ EMP were submitted & 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.	• **Complied** • We have not received any additional condition that may be imposed by the SEAC till date. • 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.
71	No future 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	• **Noted** • All future expansion or modifications in the plant will be carried out with 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 will be made to the SEIAA/ SEAC to assess the adequacy of conditions imposed and to add additional

Sr. No.	EC Conditions	Compliance status
	the SEIAA/ SEAC to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	environmental protection measures required.
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.	• **Complied** • Separate fund / budget is identified / sanctioned on annual basis for Environmental management. • A year wise expenditure on environmental safeguards is also reported.
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.	• **Complied** • 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. Name of Paper: Times of India Date of Issue: 08.06.2011 In: English language Name of Paper: Gujarati Lok Satta Date of Issue: 07.06.2011 In: Gujarati language
	 ADITYA BIRLA GRASIM 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)&5(f)96/2011, dated 30.05.2011, which was received on 02.06.2011 , 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 197100 TPA, Hydrogen 61320000 Nm3/Year, Chlorosulphonic Acid 73000 TPA, Sulphuric Acid 36500 TPA, Carbon Disulphide 31025 TPA, Liquid Poly Aluminium Chloride 146000 TPA, Staple Bleaching Powder 36500 TPA, Chlorinated Paraffin 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: Birlagram, Nagda - 456 331, Dist. Ujjain (M.P)	 ADITYA BIRLA GRASIM Grasim Cellulosic પ્લોટ નં. ૧, જી.આઈ.ડી.સી., વિલાયત, જી.ભરૂચ (ગુજરાત) રાજ્ય સ્તરીય પર્યાવરણ પ્રભાવ આકારણ પ્રાધિકરણ દ્વારા પર્યાવરણીય પરવાનગી, ગુજરાત પત્ર ક્રમાંક : SEIAA/GUJ/EC/1(d), 4(d) & 5(f) 96/2011 તારીખ ૩૦/૦૫/૨૦૧૧ અમારે તારીખ : ૦૨/૦૬/૨૦૧૧ રાજ્ય સ્તરીય પર્યાવરણ પ્રભાવ આકારણ પ્રાધિકરણ, ગુજરાત સરકાર વિલાયતમાં ક્લોર આલ્કલી પ્લાન્ટ અને કોસ્ટિક સોડા પ્લાન્ટ ૨૧૯૦૦૦ ટન પ્રતિ વર્ષ તથા અન્ય ઉત્પાદન ક્લોરીન / હાઈડ્રોક્લોરીક એસિડ ૧૯૭૧૦૦ ટન પ્રતિ વર્ષ, હાઈડ્રોજન ૬૧૩૨૦૦૦૦ Nm3 પ્રતિ વર્ષ, ક્લોરો સલ્ફોનીક એસિડ ૭૩૦૦૦ ટન પ્રતિ વર્ષ, સલ્ફયુરિક એસિડ ૩૬૫૦૦ ટન પ્રતિ વર્ષ, કાર્બન ડાયસલ્ફાઈડ ૩૧૦૨૫ ટન પ્રતિ વર્ષ, લિક્વિડ (લીકવીડ) પોલી એલ્યુમિનિયમ ક્લોરાઈડ ૧૪૬૦૦૦ ટન પ્રતિ વર્ષ, સ્ટેપલ બ્લીચીંગ પાઉડર ૩૬૫૦૦ ટન પ્રતિ વર્ષ, ક્લોરિનેટેડ પેરાફીન ૩૬૫૦૦ ટન પ્રતિ વર્ષ, એલ્યુમિનિયમ ક્લોરાઈડ ૧૪૬૦૦ ટન પ્રતિ વર્ષ તથા પાવર પ્લાન્ટ ૬૦ MW ના વિસ્તારમા આવેલ છે. પરવાનગી પત્રની નકલ GPCB વેબ સાઈટ SEAA/SEAC/GPCB પર પ્રાપ્યમાનમે. ગ્રાસીમ ઈન્ડસ્ટ્રીઝ લિમિટેડ રજી.ઓફિસ: પી.ઓ.બિરલાગ્રામ, નાગદા – ૪૫૬ ૩૩૧, જી.ઉજ્જૈન (મધ્યપ્રદેશ)
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	• **Noted & Complied** • 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.

Sr. No.	EC Conditions	Compliance status
	authorities concerned on first 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.	• **Noted & Complied** • We are complying all the conditions stipulated by the Gujarat Pollution Control Board.
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.	• **Complied** • The date of financial closure and final approval of the project by the concerned authorities and the date of starting the project are: o Date of financial closure: 31st March 2014 o Date of final approval of the project by the concerned authorities: 26th June 2013
77	The SEIAA may revoke or suspend the clearance, if implementation of the above conditions is not found satisfactory.	• **Noted** • We have been complying the conditions issued by the SEIAA. • No suspension order issued by the SEIAA till date.
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.	• **Noted & Complied** • We are complying Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & 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.
79	The Environmental Clearance is valid for five Years.	• **Noted** • The EC has already being converted into CCA.

Compliance status of Environmental Clearance

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

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr>
<td></td>
<td>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:
<table>
<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>
<tr><td colspan="4">Chloromethanes</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">4500</td><td>--</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>--</td><td>2250</td></tr>
<tr><td colspan="4">FATTY ALCOHOLS</td></tr>
<tr><td colspan="4">A) FATTY ALCOHOL MANUFACTURING PLANT</td></tr>
<tr><td>1</td><td>Fatty Alcohol</td><td>2700</td><td>--</td></tr>
<tr><td>2</td><td>Crude Alcohol Refining (Light)</td><td>--</td><td>25</td></tr>
<tr><td>3</td><td>Crude Alcohol Refining (Heavies)</td><td>--</td><td>144</td></tr>
<tr><td colspan="4">B) FATTY ALCOHOL FRACTIONATION PLANT</td></tr>
<tr><td>1</td><td>Fractionated Fatty Alcohol – Middle Cut Alcohol</td><td>541</td><td rowspan="2">5</td></tr>
<tr><td>2</td><td>Fractionated Fatty Alcohol – Light Cut Alcohol</td><td>199</td></tr>
</table>
</td>
<td>

Noted
Copy of Environment Clearance & CCA are attached as Annexure-1.
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.
Actual Production Details are as below:

<table>
<tr><th rowspan="2">Name of Product</th><th colspan="4">Actual Quantity (MT/M)</th></tr>
<tr><th>Methylene Chloride</th><th>Chloroform</th><th>Carbon Tetra Chloride</th><th>Total</th></tr>
<tr><td>Apr, 23</td><td>2097</td><td>1187</td><td>124</td><td>3408</td></tr>
<tr><td>May, 23</td><td>2216</td><td>1179</td><td>144</td><td>3539</td></tr>
<tr><td>June, 23</td><td>2454</td><td>1212</td><td>137</td><td>3803</td></tr>
<tr><td>July, 23</td><td>1786</td><td>967</td><td>107</td><td>2860</td></tr>
<tr><td>Aug, 23</td><td>2929</td><td>1359</td><td>177</td><td>4465</td></tr>
<tr><td>Sept, 23</td><td>2804</td><td>1378</td><td>169</td><td>4351</td></tr>
<tr><td>Min</td><td>1786</td><td>967</td><td>107</td><td>2860</td></tr>
<tr><td>Max</td><td>2929</td><td>1378</td><td>177</td><td>4465</td></tr>
<tr><td>Avg</td><td>2381</td><td>1214</td><td>143</td><td>3738</td></tr>
</table>
</td>
</tr>
</table>

Sr. No.	EC Conditions	Compliance status
	3 | Fractionated Fatty Alcohol – Light | 13	
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.	• **Complied** • Fresh Water requirement for Chloromethanes is being met through GIDC Water supply only. • Average water consumption for April 2023 to Sept 2023 is 200.5 KLD, sourced from GIDC water supply for the Chloromethanes Plant. • We have installed Meters and maintaining the record of the same on regular basis. • We are not using ground water for the Chloromethanes project. • 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.
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.	• **Complied** • Cooling Tower blow down, Wastewater from VRC Unit & heavy recovery unit treated in RO system. RO Permeate reused in Process and RO reject further treat in ETP.
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.	• **Complied** • Industrial Effluent generated from Chloromethanes plant, VRC Unit & Heat recovery unit, RO reject, Safety Showers are treated in ETP. • 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.
4	Domestic wastewater generation shall be 12.5 KL/Day and it shall be treated in the ETP along with the industrial wastewater.	• **Complied** • Domestic Wastewater generation is not exceeded from 12.5 KLD and is being treated in ETP along with Industrial Wastewater.
5	The ETP shall be operated regularly and efficiently so as to achieve the GPCB norms at the ETP outlet.	• **Complied** • The ETP is being operated regularly and efficiently to achieve GPCB norms at the ETP Outlet. • 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. • Also the monthly monitoring of the same is being carried out by NABL & MoEFCC approved Laboratory.
6	The treated wastewater conforming to the GPCB norms shall be discharged into the GIDC underground drain for its final disposal in deep sea.	• **Not Applicable** • As per CCA received from GPCB, unit need to follow ZLD system. • 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.

Sr. No.	EC Conditions	Compliance status
		• No Wastewater discharged into the GIDC underground drain for disposal in deep sea.
7	A Guard/ Polishing Pond shall be provided before discharge of treated effluent into GIDC underground drain.	• **Not Applicable** • As described in condition No. 6.
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.	• **Complied** • We have already installed online monitoring system at final outlet of ETP for pH & TOC parameters for existing ETP and the same can be accessed by the GPCB on real time basis. • Meters are also installed at the inlets and outlets of the existing ETP and records are maintained on regular basis.
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.	• **Complied** • Logbooks are maintained for the existing ETP and data are furnished to the GPCB from time to time.
10	Regular performance evaluation of the ETP shall be undertaken through credible institute and its records shall be maintained.	• **Complied** • Regular performance evaluation of the existing ETP is undertaken through credible institute and its records are being 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.	• **Complied** • 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. • We have also invested a special amount for a training & development of education program that has been initiated jointly by Paryavaran Vikas Kendra-Rajkot and Paryavaran Mitra Ahmedabad.
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.	• **Noted & Complied** • Hydrogen gas is being used as a fuel in Volatile Reduction Chamber (VRC). • HSD is being used as a fuel in DG Set of 750 KVA. • Till date there is no fuel consumption as VRC system yet not started and DG Set is for standby.
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.	• **Complied** • Condenser and Guard Condenser are provided with cooling water circulation for control of VOC in Hydro Chlorinator of Chloromethanes Plant.
	Crude CMS distillation column of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.	• **Complied** • Condenser and Guard Condenser are provided with cooling water circulation for control of VOC in Crude CMS distillation column of Chloromethanes Plant.
	Heavies CMS Distillation Column of Chloromethanes Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.	• **Complied** • Condenser and Guard Condenser are provided with cooling water circulation for control of VOC in Heavies CMS Distillation Column of Chloromethanes Plant.
	Volatile Reduction Chamber (VRC) of Chloromethanes Plant - Water and	• **Complied**

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td></td><td>Caustic Scrubber for control of NOX, HCl & Cl2.</td><td>• Water and Caustic Scrubber are provided with Volatile Reduction Chamber (VRC) of Chloromethanes Plant for control of NOX, HCl & Cl2.</td></tr>
<tr><td></td><td>Methanol column DT 111 of Fatty Alcohol Plant - Condenser and Guard Condenser with cooling water circulation for control of VOC.</td><td>• Not Applicable
• 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.</td></tr>
<tr><td></td><td>Crude Alcohol Let Down Drum S1301 of Fatty Alcohol Plant - Water Seal and Flame Arrester for control of VOC.
Product Alcohol Let Down Drum S1301 of Fatty Alcohol Plant - Water Seal and Flame Arrester for control of VOC.</td><td>• Not Applicable
• 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.</td></tr>
<tr><td>14</td><td>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.</td><td>• Complied
• In Chloromethanes plant, all vents after guard condenser has been directed to Volatile Reduction Chamber (VRC) Unit, where gases have been inserted.
• Water Scrubber followed by Caustic scrubber has been provided for control of emission from VRC.
• Also please note that OCEMS is provided with VRC and connected with CPCB Server.</td></tr>
<tr><td>15</td><td>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.</td><td>• Complied
• The Air Pollution Control Equipment (APCE) attached with different stacks are operated efficiently and effectively to achieve the GPCB/ CPCB / MoEF&CC prescribed norms.
• We have provided adequate stack height of as per prevailing norms for the process emissions.
<table>
<tr><th>S. N.</th><th>Stack Attached to</th><th>Stack Height Provided</th></tr>
<tr><td>1</td><td>DG Set (750 KVA – 1 No.)</td><td>11 m</td></tr>
<tr><td>2</td><td>Volatile Reduction Chamber (VRC)</td><td>35 m</td></tr>
<tr><td>3</td><td>Hydro Chlorinator</td><td>35 m</td></tr>
<tr><td>4</td><td>Crude CMS Distillation</td><td>35 m</td></tr>
<tr><td>5</td><td>Heavies CMS Distillation</td><td>35 m</td></tr>
</table></td></tr>
<tr><td>16</td><td>Online monitoring system shall be installed on VRC stack to monitor HCl, Cl2 & NOX 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.</td><td>• Complied
• Online Monitoring system has been installed on VRC stack to monitor HCl, Cl2 & NOx concentration and also it is connected with GPCB/CPCB Server.</td></tr>
<tr><td>17</td><td>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).</td><td>• Complied
• Workplace monitoring is being carried out on monthly basis to monitor fugitive emissions in CMS plant through NABL & MoEFCC approved Laboratory (M/s. Eco Earth Consultant, Vilayat)
• All the parameters are well within the permissible limit.</td></tr>
<tr><td>18</td><td>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.</td><td>• Complied
• Regular performance evaluation of ETP & STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor and its record is maintained.</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance status</th></tr>
<tr><td>19</td><td>Regular monitoring of ground level concentration of CS2, H2S, SO2, NOX, Cl2, PM10 and PM2.5 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.</td><td>• Complied
• 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.
• If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures will be provided immediately.
• 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 & Vilayat).</td></tr>
<tr><td>A.1.3</td><td colspan="2">HAZARDOUS/ SOLID WASTE:</td></tr>
<tr><td>20</td><td>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.</td><td>• Complied
• We have obtained authorization of the GPCB for collection / treatment / storage / disposal of hazardous wastes.
<table><tr><td>Authorization No.</td><td>AWH-98281 & Amendment No. AWH-118058</td></tr><tr><td>Validity</td><td>02/03/2024</td></tr></table>• We have provided separate covered storage area for different types of wastes.
• We are member CHWIF & TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd. And M/s. Safe Enviro, Jambusar.
• Copy of the membership certificate is attached as Annexure 3.
• Also please note that for HCl, DSA and other haz waste selling under Rule 9 only with GPS AIS 140 Mounted & colour coded vehicles through Manifest system.</td></tr>
<tr><td>21</td><td>The Hazardous wastes shall be stored in separate designated hazardous waste storage facility with pucca bottom and leachate collection facility, before its disposal.</td><td>• Complied
• We have provided impervious layer with pucca bottom and leachate location facility in the separate hazardous waste storage area for storing before disposal.</td></tr>
<tr><td>22</td><td>The unit shall dispose ETP Sludge and Spent Carbon from Chloromethanes and Fatty Alcohol Plants at the nearest common TSDF.</td><td>• Complied
• We are member of TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd. And M/s. Safe Enviro, Jambusar.</td></tr>
<tr><td>23</td><td>Exhausted Resin and Spent Catalyst shall be sent back for regeneration or reactivation.</td><td>• Complied
• Exhausted Resin & Spent Catalyst are being sent back for Regeneration or reactivation.</td></tr>
<tr><td>24</td><td>Used oil shall be sold only to the registered recyclers.</td><td>• Complied
• Used Oil is being sold to Registered recycler under Rule 9.</td></tr>
<tr><td>25</td><td>Discarded Containers / barrels / bags / liners shall be either reused or sold only to the authorized recyclers after decontamination.</td><td>• Complied
• Discarded Containers / barrels / bags / liners are being sold to authorized recyclers under Rule 9.</td></tr>
<tr><td>26</td><td>Exhausted Batteries of UPS shall be managed as per the provisions of the Batteries (Management & Handling) Rules, 2001 as amended in 2010</td><td>• Complied
• Exhausted Batteries of UPS handled as per the provisions of the Batteries (Management & Handling) Rules, 2001 as amended in 2010.</td></tr>
<tr><td>27</td><td>E-waste from Plant Electronic system shall be managed as per the provisions of the E-waste</td><td>• Complied
• E-waste from Plant Electronic system managed as per the provisions of the E-waste management and handling Rules 2011.</td></tr>
</table>

Sr. No.	EC Conditions	Compliance status
	management and handling Rules 2011.	
28	Exhausted insulating materials shall be sold to authorized recyclers.	• **Complied** • Exhausted insulating materials are sold to authorized recyclers under Rule 9.
A.1.4	**SAFETY:**	
29	Provisions of the Manufacture, Storage & Import of Hazardous Chemicals Rules, 1986 & Factories Act, 1948 shall be strictly complied with.	• **Complied** • We are following MSHIC Rules, 1989 and Factories Act, 1948. • All the chemicals/ materials are stored in the storage tanks with required material of Construction. • Sufficient dykes are provided at Tank storages as per chemical handling and storage guidelines. • Fire Hydrant system is provided nearby storage and handling area for emergency purpose. • Safety trainings are provided to all the operators and workers working in such areas. • Hazard Identification and Risk Assessment (JSA) of all activities carried out and SOPs are prepared accordingly. • Safety showers are provided nearby storage areas.
30	A well designated fire hydrant system shall be installed as per the prevailing standards.	• **Complied** • We have installed designated fire hydrant system for the Chloromethanes plant. • 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.
31	All the risk mitigation measures, general & specific recommendations mentioned in Chapter 6 of the EIA Report shall be implemented.	• **Complied** • All the risk mitigation measures, general & specific recommendations mentioned in Chapter 6 of the EIA Report are 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.	• **Complied** • We have developed job safety analysis procedure and trainings have been provided to all employees. • Proper controls are provided to mitigate any emergency.
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.	• **Complied** • Storage of hazardous chemicals is minimized and stored in multiple small capacity tanks / containers instead of one single large capacity tank / containers. • All the storage tanks fitted with appropriate controls to avoid any leakages. Bund/ dyke walls are provided, for storage tanks for Hazardous Chemicals.
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	• **Complied** • 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.
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.	• **Complied** • All the storage tanks fitted with appropriate controls to avoid any leakages. Bund/ dyke walls are provided, for storage tanks for Hazardous Chemicals.

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.	• **Complied** • OHC with availability of para-medical staff & ambulance is already available round the clock. • We have also tied up with M/s. Apex Multispecialty Hospital at Bharuch.
37	Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.	• **Complied** • We have provided proper job specific PPEs to all the workers and its usage is ensured and supervised regularly.
38	First Aid Box and required antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	• **Complied** • We have 60 Nos. of first aid boxes at different locations of our plant containing required antidote for the chemicals used in the plant.
39	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	• **Complied** • Training is imparted to all the workers at regular intervals for safety and health during chemical handling, Emergency Preparedness, etc. • We have engaged DuPont Safety for implementation of Work place safety & Process Safety management system and to provide training & Awareness of employees in the site. • 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.
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.	• **Complied** • Occupational health surveillance of the workers is done and its records are maintained. • Six monthly pre-employment and periodical examination for all the workers is being carried out. • 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 **Annexure 6.**
41	Handling and charging of the chemicals shall be done in such a manner that minimal human exposure occurs.	• **Complied** • Handling and charging of the chemicals are in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
42	Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	• **Complied** • We are following Central Motor Vehicles Rule - 9 for Hazardous chemical transportation.
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 confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	• **Complied** • 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. • 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.
A.1.6	**CLEANER PRODUCTION AND WASTE MINIMIZATION:**	
44	The unit shall undertake the Cleaner Production Assessment study through a reputed institute / organization and shall form a CP	• **Complied** • We have carried out Cleaner Production Assessment studies by Gujarat Cleaner Production Centre (Established by Industries & Mines Department, Government of Gujarat).

Sr. No.	EC Conditions	Compliance status
	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.	• **Complied** • We have provided flow meters for wastewater generation. • We have installed RO system for reducing the effluent. • Recycle steam and vapor condensate is used in process & cooling tower. • We use super washed salt to reduce chemical consumption in turn to reduce solid waste generation.
	b) Reuse of by-products from the process as raw materials substitutes in other process.	• **Complied** • Use of waste chlorine gas for producing CMS Products. • Vapor condensate from flaking plant treated by polishing unit and finally used as DM water.
	c) Use of automated and enclosed filling to minimize spillages.	• **Complied** • We are using automated and closed filling to minimize spillages.
	d) Use of close feed system into batch reactors.	• **Complied** • We are using close feed system into batch reactors.
	e) Dry cleaning / mopping of floor instead of floor washing.	• **Complied** • Floors are cleaned through mopping.
	f) Use of high pressure hoses for cleaning to reduce wastewater generation.	• **Complied** • High pressure hoses are used for cleaning and reduce the wastewater.
	g) Regular preventive maintenance for avoiding leakage, spillage etc.	• **Complied** • Regular preventive maintenance has been carried out to avoid leakages, spillages etc.
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 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.	• **Complied** • We have developed greenbelt along with boundary wall & planted different plant species in campus area. • Plant species were selected as per the directives of CPCB & DFO.
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.	• **Complied** • Already 30,000 No. of trees have been planted within the premises and in nearby villages.
48	Drip irrigation system shall be used for the green belt development.	• **Complied** • Drip irrigation/ low-volume, low angle sprinklers are used for green belt development. • Total 22,000 m^2 area is covered under drip irrigation & low angle sprinkler system.
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	• **Noted & Complied** • All pollution control systems installed in our plant are directly connected with process safety inter locks from DCS. • For ensure, all the safe requirements meet before any start up.

Sr. No.	EC Conditions	Compliance status
	of the control equipment has been achieved.	• We are also following pre-start up safety review before restart of the system.
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.	• **Noted & Complied** • All the recommendations mentioned in the Charter on Corporate Responsibility for Environment Protection (CREP) has been followed.
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.	• **Complied** • A separate Environment Management Cell has been equipped with 2 Environment Officers under One Environment Head. • Also there is a separate budget allocated for Environment related activities.
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.	• **Complied** • Separate fund / budget is identified / sanctioned on annual basis for Environmental management.
53	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	• **Complied** • We have provided RCC and / acid brick line flooring in the required areas.
54	Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.	• **Complied** • We have provided pipelines of suitable MOC in the plant which ensures no leakages from the pipes / pumps.
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.	• **Complied** • All the environmental protection measures, risk mitigation measures and safeguards recommended in the EIA/ EMP report as well as other proposals are being complied.
56	The company shall undertake socio-economic developmental / community welfare activities in consultation with the District Development Officer / District Collector.	• **Complied** • Socio-economic developmental / community welfare activities are being carried out 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.	• **Noted & Complied** • We have not received any additional condition that may be imposed by the SEAC till date. • 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.
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.	• **Noted** • 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

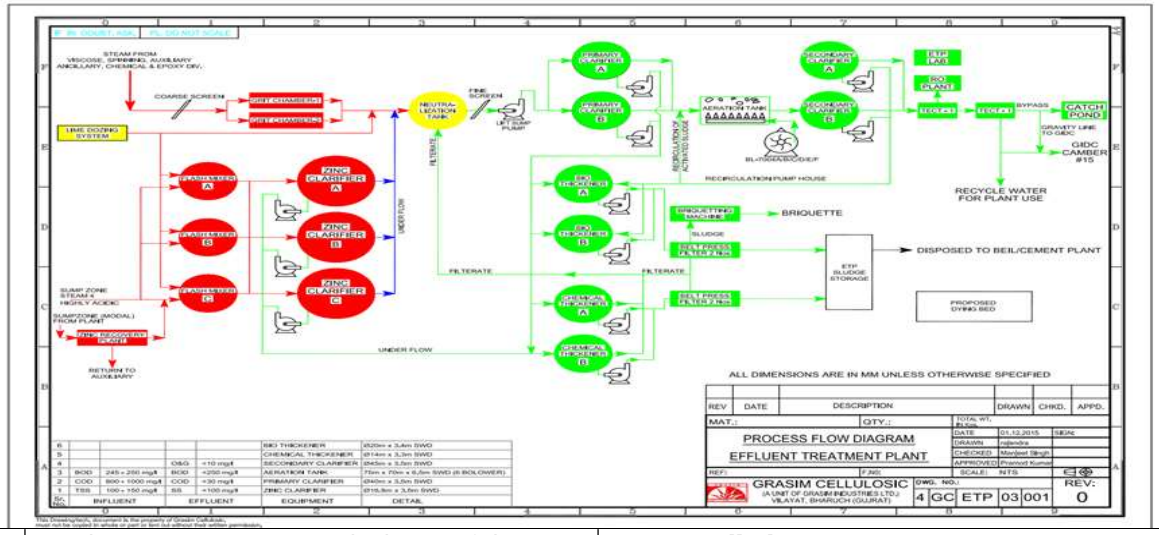
Sr. No.	EC Conditions	Compliance status
59	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	• **Complied** • Separate fund / budget is identified / sanctioned on annual basis for Environmental management.
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.	• **Complied** • 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. 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
	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)/90/2014dated 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, Guajarat	જાહેર નિવેદન પર્યાવરણ મંજૂરી આ સાથે જણાવવામાં આવે છે કે 'સ્ટેટ લેવલ એન્વિરોમેન્ટ ઇમ્પેકટ ઓથોરીટી' પર્યાવરણ ભવન સેકટર૧૦-અ ગાંધીનગર- ૩૮૨ ૦૧૦, ગુજરાત દ્વારા તેઓના પત્ર ક્રમાંક SEIAA/ GUJ/EC/5(f)/૯૦/૨૦૧૪ તારીખ ૦૧/૦૮/૨૦૧૪ ના રોજ મેસર્સ ગ્રાસીમ સેલ્યુલોઝિક (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. ઉપરોકત અનુમતિની નકલ ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડની કચેરીમાં ઉપલબ્ધ છે. અને સદર અનુમતિને SEIAA/SEAC/GPCB ની વેબસાઈટ પર પણ મુકવામા આવેલ છે. સહી/- મેસર્સ ગ્રાસીમ ઇન્ડસ્ટ્રીઝ લિમિટેડ પ્લોટ નં.૧, જી.આઇ.ડી.સી., ઇન્ડસ્ટ્રીઅલ એસ્ટેટ, વિલાયત, જી.ભરુચ, ગુજરાત	
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.	• **Complied** • 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.
62	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	• **Noted** • We shall comply with 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.	• **Noted & Complied** • The date of financial closure and final approval of the project by the concerned authorities and the date of starting the project are: • Date of financial closure: 31st March 2014 • Date of final approval of the project by the concerned authorities: 26th June 2013
64	The SEIAA may revoke or suspend the clearance, if implementation of	• **Noted**

Sr. No.	EC Conditions	Compliance status
	any of the above conditions is not found satisfactory.	• We have been complying the conditions issued by the SEIAA. No suspension order issued by the SEIAA till date.
65	The company in a time bound manner shall implement these conditions. The SEIAA reserves the tight 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.	• **Complied** • We are complying Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & 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.
66	This environmental clearance is valid for five years from the date of issue.	• **Noted** • The EC has already being converted into CCA..
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.	• **Not Applicable** • There is no appeal against this environmental clearance lie with the National Green Tribunal.

Compliance status of Environmental Clearance vide Letter No.: SEIAA/GUJ/EC/5(f) & 4(d)/642/2016 dated 29th Oct 2016

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td>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) & 4(d) of the schedule of the EIA Notification-2006.
<table>
<tr><th rowspan="2">S. no.</th><th rowspan="2">Name of Product</th><th colspan="3">Production capacity (MT/ Annum)</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>1</td><td>Chlorinated Paraffin wax</td><td>36500</td><td>33500</td><td>70000</td></tr>
<tr><td>2</td><td>Caustic Soda Lye</td><td>219000</td><td>146000</td><td>365000</td></tr>
<tr><td>3</td><td>Poly Aluminum Chloride</td><td>146000</td><td>104000</td><td>250000</td></tr>
<tr><td>4</td><td>Aluminum Chloride</td><td>14600</td><td>10400</td><td>25000</td></tr>
<tr><td>5</td><td>Stable Bleaching Powder</td><td>36500</td><td>24500</td><td>61000</td></tr>
<tr><td>6</td><td>Hydrogen</td><td>61320000 (Nm3)</td><td>40880000 (Nm3)</td><td>102200000 (Nm3)</td></tr>
<tr><td>7</td><td>Liquid chlorine/ Sodium Hypochlorite / Hydrochloric Acid</td><td>197100</td><td>131400</td><td>328500</td></tr>
</table></td><td>• Noted
• Latitude: 21°46’8” and 21°47’11” North
• Longitude: 72°53’18” and 72°54’49” East
• Copy of Environment Clearance is attached as Annexure-1.</td></tr>
<tr><td></td><td colspan="2">
<table>
<tr><th rowspan="2">Sr. no.</th><th rowspan="2">Name of Product</th><th colspan="6">Production qty. (MT/M)</th></tr>
<tr><th>Apr 23</th><th>May 23</th><th>Jun 23</th><th>Jul 23</th><th>Aug 23</th><th>Sept 23</th></tr>
<tr><td>1</td><td>Chlorinated Paraffin wax</td><td>3366</td><td>2791</td><td>3352</td><td>2904</td><td>3541</td><td>3369</td></tr>
<tr><td>2</td><td>Caustic Soda Lye</td><td>28502</td><td>29906</td><td>28309</td><td>28285</td><td>31699</td><td>28966</td></tr>
<tr><td>3</td><td>Poly Aluminum Chloride</td><td>15889</td><td>16791</td><td>15938</td><td>17017</td><td>18630</td><td>17998</td></tr>
<tr><td>4</td><td>Aluminum Chloride</td><td>1354</td><td>1745</td><td>1695</td><td>1805</td><td>1818</td><td>1681</td></tr>
<tr><td>5</td><td>Stable Bleaching Powder</td><td>2355</td><td>2163</td><td>2329</td><td>2063</td><td>2381</td><td>1928</td></tr>
<tr><td>6</td><td>Hydrogen</td><td>1327767</td><td>1390929</td><td>1296016</td><td>1327621</td><td>1411371</td><td>1288194</td></tr>
<tr><td>7</td><td>Liquid chlorine/ Sodium Hypochlorite/ HCl</td><td>26216</td><td>27494</td><td>26047</td><td>26063</td><td>29188</td><td>26596</td></tr>
</table>
</td><td></td></tr>
<tr><td>A.</td><td colspan="2">CONDITIONS:</td></tr>
<tr><td>A.1</td><td colspan="2">SPECIFIC CONDITION:</td></tr>
<tr><td>1</td><td>The Unit shall obtain requisite permission from PESO, Nagpur for storage of Chlorine, Hydrogen etc. before commissioning of the project.</td><td>• Complied
• We have obtained requisite permission from Petroleum & Explosives Safety Organization (PESO), Nagpur before commissioning of the project. Copy of PESO License are attached as Annexure-2.</td></tr>
<tr><td>A.2</td><td colspan="2">WATER:</td></tr>
<tr><td>2</td><td>Total water requirement after proposed</td><td>• Complied</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td>expansion shall not 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.</td><td>
• Average water consumption for Apr 2023 to Sept 2023 is 1264 KLD, sourced from GIDC water supply for the Synthetic Organic Chemicals and Caustic Soda Lye plant.
<table>
<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>
<tr><td>Apr 23</td><td>153387</td><td>24145</td></tr>
<tr><td>May 23</td><td>162301</td><td>23685</td></tr>
<tr><td>Jun 23</td><td>150107</td><td>27113</td></tr>
<tr><td>Jul 23</td><td>136647</td><td>29775</td></tr>
<tr><td>Aug 23</td><td>162504</td><td>42977</td></tr>
<tr><td>Sept 23</td><td>144805</td><td>40751</td></tr>
<tr><td>Min</td><td>136647</td><td>23685</td></tr>
<tr><td>Max</td><td>162504</td><td>42977</td></tr>
<tr><td>Avg</td><td>151625</td><td>31407</td></tr>
</table>
• We are recycling/reuse ~1047 KL/Day of waste water within Synthetic Organic Chemicals and Caustic Soda Lye plants.
• Following are the GIDC offer cum allotment letter details:
<table>
<tr><th>Sr. no.</th><th>Letter no.</th><th>Water supply</th><th>Effluent discharge</th></tr>
<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>
</table>
Copy of agreement letter is attached as Annexure-4.
</td></tr>
<tr><td>3</td><td>The water meter shall be installed and records of daily and monthly water consumption shall be maintained.</td><td>
• Complied
• We have installed Water Meter at the inlet. Logbook is maintained to record the water consumption.
</td></tr>
<tr><td>4</td><td>Total industrial waste water generation from Synthetic Organic Chemicals and Caustic Lye plant shall not exceed 600 KL/day.</td><td>
• Complied
• Average industrial waste water generation from synthetic organic chemicals and caustic lye plant for Apr 2023 to Sept 2023 is 1184 KL/Day as in our current CCA we have permission of 5220 KLD waste water discharge.
<table>
<tr><th rowspan="2">Month</th><th>Waste water generation</th></tr>
<tr><th>KL/Month</th></tr>
<tr><td>Apr 23</td><td>24262</td></tr>
<tr><td>May 23</td><td>32292</td></tr>
<tr><td>Jun 23</td><td>31454</td></tr>
<tr><td>Jul 23</td><td>42081</td></tr>
<tr><td>Aug 23</td><td>44918</td></tr>
<tr><td>Sept 23</td><td>38165</td></tr>
<tr><td>Min</td><td>24262</td></tr>
<tr><td>Max</td><td>44918</td></tr>
<tr><td>Average</td><td>35529</td></tr>
</table>
• Note: Water Consumption and Wastewater generation is as per our existing CCA vide
</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
		Order No. AWH-98281 dated 29/12/2018 & amendment thereof, which is under prescribed limit.
5	Unit shall treat the additional effluent in their existing ETP having capacity 35 MLD comprises of primary & secondary treatment plants.	• **Complied** • After primary treatment, neutralized effluent is sent to SFD plant ETP comprising of primary & secondary treatment facility. • 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.). • ETP is operated regularly and efficiently to achieve the prescribed GPCB norms at the ETP outlet.
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. 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.	• **Complied** • Total quantity waste water discharge of the group companies (i.e. Chemical division + Cellulosic division + Epoxy division) does not exceed 19.4 MLD. • The treated waste water confirming to the GPCB/ CPCB/ MoEF&CC norms are discharged into GIDC underground pipeline for final disposal to deep sea through GIDC.
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.	• **Complied** • 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. • As per CCA condition, we have installed Online pH meter, flow meter & TOC meter are provided for monitoring of the treated

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td></td><td>effluent.
  </td></tr>
<tr><td>8</td><td>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.</td><td>• Complied
• Additional domestic wastewater is treated in STP and average domestic wastewater generation for April 2023 to Sept 2023 is 328 KL/Day.
<table>
<tr><th rowspan="2">Month</th><th>Domestic</th></tr>
<tr><th>KL/Month</th></tr>
<tr><td>Apr 23</td><td>9978</td></tr>
<tr><td>May 23</td><td>10516</td></tr>
<tr><td>Jun 23</td><td>9940</td></tr>
<tr><td>July 23</td><td>9625</td></tr>
<tr><td>Aug 23</td><td>9340</td></tr>
<tr><td>Sept 23</td><td>9644</td></tr>
<tr><td>Min</td><td>9340</td></tr>
<tr><td>Max</td><td>10516</td></tr>
<tr><td>Avg</td><td>9840</td></tr>
</table>
• Note: Water Consumption and Wastewater generation is as per our existing CCA vide Order No. AWH-98281 dated 29/12/2018 & its amendment vide letter no. GPCB/BRCH-B/CCA-70(6)/ID-41279/526734 dtd. 13-11-2019, which is under prescribed limit.</td></tr>
<tr><td>9</td><td>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.</td><td>• Complied
• During monsoon season, the treated sewage is stored in existing guard pond / polishing pond.</td></tr>
<tr><td>10</td><td>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.</td><td>• Complied
• We have provided primary treatment facility (neutralization pit) in our unit and then neutralized effluent is sent to SFD plant ETP comprising of primary & secondary treatment facility. We have installed STP as per following specification:
Design Capacity of STP: 1080 m3/day.
Design Basis:
Flow: 1080 m3/day.
BOD: 250-270 mg/l.
COD: 400-600 mg/l
TSS: 400 mg/l
pH: 6 - 9
• We are operating our ETP & STP regularly</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
		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.	• **Complied** • We have provided metering facility at inlet & outlet of the ETP & STP and maintain the records of the same regularly. • 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.
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.	• **Complied** • Regular performance evaluation of ETP & STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor and its record is maintained. Copy of is attached as **Annexure-7.**
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.	**Complied** • Rainwater is recovered from roof tops and stored in a rain water harvesting well. • We have already installed 10 nos. of Rain water harvesting station at nearby villages like, Sachan Village, Saran Village, Saykha Vilalge, Derol, Asmita Vikas Kendra, Rahad Primary school, Ankot Primary school, Smt. M.M.M. Patel vidhyalaya, Pisad primary school, Saladra Primary school. • We are exploring more possibilities for rainwater harvesting in nearby area in consultation with a Geo-hydrology expert.

Sr. No.	EC Conditions	Compliance Status
	   	
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.	• **Complied** • 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. • We have also invested a special amount for a training & development of education program that has been initiated jointly by Paryavaran Vikas Kendra-Rajkot and Paryavaran Mitra Ahmedabad.
A.3	**AIR:**	
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.	• **Complied** • 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. • 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.
16	Process emission shall be controlled with the air pollution control equipment's (APCE) as mentioned below.	
	Sodium Hypo stack of Caustic Plant - Alkali scrubber for control of Cl2.	• **Complied** • We have provided Alkali scrubber for control of Cl2 in Sodium Hypo Stack. • Online monitoring system is also provided and it is connected to CPCB & GPCB server.
	HCl stack-1 of Caustic Plant - Water scrubber having bubble cap tray absorption system for control of HCl.	• **Complied** • We have provided separate Water scrubber having bubble cap tray absorption system for control of HCl in both the stacks. • Online monitoring system is also provided and it is connected to CPCB & GPCB server.
	HCl stack-2 of Caustic Plant - Water scrubber having bubble cap tray absorption system for control of HCl.	• **Complied** • We have provided separate Water scrubber having bubble cap tray absorption system for control of HCl in both the stacks. • Online monitoring system is also provided and it is connected to CPCB & GPCB server.
	Poly Aluminium Chloride Liquid - Water scrubber system for control of HCl & Cl2.	• **Complied** • We have provided water scrubber system for

Sr. No.	EC Conditions	Compliance Status
		control of HCl & Cl2.
	Poly Aluminium Chloride Powder - 3 stage Water scrubber system for control of HCl & Cl2.	• **Complied** • We have provided 3 stage water scrubber system for control of HCl & Cl2.
	Chlorinated paraffin Plant - Alkali Scrubbing system for control of HCl & Cl2.	• **Complied** • We have provided Alkali Scrubbing system for control of HCl & Cl2.
	Aluminium Chloride - Alkali Scrubbing system for control of HCl & Cl2.	• **Complied** • We have provided Alkali Scrubbing system for control of HCl & Cl2.
	Stable Bleaching Powder - Alkali Scrubbing system for control of HCl & Cl2.	• **Complied** • We have provided Alkali Scrubbing system for control of HCl & Cl2.

April, 2023 to September, 2023

Stack	Range	HCl	Cl2
Sodium Hypo Stack 1	Min	-	1.02
	Max	-	1.58
	Avg	-	1.295
Sodium Hypo Stack 1	Min	-	1.2
	Max	-	2.11
	Avg	-	1.655
HCl Stack 1	Min	4.1	-
	Max	7.69	-
	Avg	6.23	-
HCl Stack 2	Min	3.7	-
	Max	5.27	-
	Avg	4.58	-
HCl Stack 3	Min	5.81	-
	Max	8.12	-
	Avg	6.83	-
HCl Stack 4	Min	5.88	-
	Max	8.11	-
	Avg	6.76	-
PAC Liquid Plant	Min	5.07	1.20
	Max	7.62	2.32
	Avg	6.31	1.74
PAC Powder Plant 1	Min	3.11	0.80
	Max	6.86	1.94
	Avg	5.24	1.46
PAC Powder Plant 2	Min	4.90	0.98
	Max	6.97	1.67
	Avg	5.97	1.23
Chlorinated Paraffin Plant	Min	4.93	1.02
	Max	7.00	1.89
	Avg	6.07	1.36
Aluminium Chloride	Min	5.18	1.17
	Max	7.59	2.30
	Avg	6.34	1.72
Stable Bleaching Powder Plant	Min	5.1	0.63
	Max	7.86	1.93
	Avg	6.81	1.30

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.	• **Complied** • The Air Pollution Control Equipment (APCE) attached with different stacks are operated efficiently and effectively to achieve the GPCB/ CPCB / MoEF&CC prescribed norms. • We have provided adequate stack height as per prevailing norms for the process

Sr. No.	EC Conditions	Compliance Status
		emissions.
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.	• **Complied** • We have installed Online monitoring system to monitor SOX, NOX & PM concentrations in both the stacks of power plant. • The results are displayed in the DCS system of power plant.
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.	• **Complied** • We have installed Dust tamers to control coal dust emission. • Water sprinklers are provided to control the fugitive emission at coal storage, coal transfer points and truck unloading area. • We have provided dust suppression along coal storage locations, paddle type dust conditions for wetting the fly ash during unloading etc. • Fly ash is stored in silo and transferred in close trucks to avoid any dust emission.
	  	
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).	• **Complied** • Fugitive emissions in work zone environment & storage area are monitored by third party on monthly basis and are well within GPCB stipulated norms.
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.	• **Complied** • Regular performance evaluation of ETP & STP is undertaken every year and checked for adequacy by GPCB authorized 3rd party Schedule-I Environment Auditor and its record is maintained. Copy of is attached as **Annexure-7.**
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	• **Complied** • 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. • If at any stage these levels are found to exceed the prescribed limits, necessary

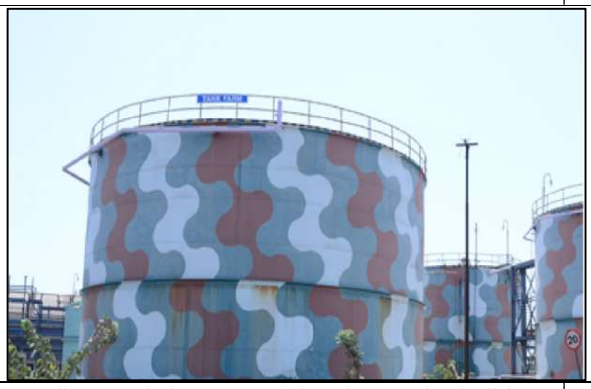
<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td>shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with GPCB.</td><td>additional control measures will be provided immediately.
• 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 & Vilayat).</td></tr>
<tr><td>23</td><td>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.</td><td>• Complied
• The air pollution control systems are operated efficiently and effectively to achieve the norms prescribed by the GPCB/ CPCB/ MoEF&CC at vent/ stack outlets.</td></tr>
<tr><td>24</td><td>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.</td><td>• Not Applicable
• Volatile Organic Compounds are not used in our plant hence we are not monitoring VOC’s.</td></tr>
<tr><td>25</td><td>All the vessels used in the manufacturing process shall be closed to reduce the fugitive emission.</td><td>• Complied
• All the vessels used in the manufacturing process are closed to reduce the fugitive emission.</td></tr>
<tr><td>A.4</td><td colspan="2">SOLID / HAZARDOUS WASTE:</td></tr>
<tr><td>26</td><td>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.</td><td>• Complied
• We have obtained authorization of the GPCB for collection / treatment / storage / disposal of hazardous wastes.
<table><tr><td>Authorization No.</td><td>AWH-98281</td></tr><tr><td>Validity</td><td>02/03/2024</td></tr></table>• We have provided separate covered storage area for different types of wastes. Photograph of the waste storage area as per below:
• We are member TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd & M/s. Safe Enviro, Jambusar.
• Copy of the membership certificate is attached as Annexure-3.</td></tr>
<tr><td></td><td colspan="2">Waste Storage Area
  </td></tr>
<tr><td>27</td><td>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.</td><td>• Complied
• We have provided impervious layer with pucca bottom and leachate location facility in the separate hazardous waste storage area for storing before disposal.</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
		• Photograph of sludge storage area: 
28	ETP waste, Brine / process Sludge, Spent Resin & Spent carbon from filters will be disposed off at the nearby common TSDF.	• **Complied** • We are member TSDF site operated by M/s. Bharuch Enviro Infrastructure Ltd & M/s. Safe Enviro, Jambusar. • Copy of the membership certificate is attached as **Annexure-3.**
29	Discarded barrels / containers / bags / liners shall be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination.	• **Complied** • We are disposing Discarded barrels / containers / bags / liners to GPCB approved registered recyclers only.
30	Used oil shall be sold only to the registered recyclers.	• **Complied** • Used Oil is sold to Registered recyclers only.
31	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF.	• **Complied** • We are a member of TSDF & CHWIF site operated by M/s. BEIL Infrastructure Ltd. & M/s. Safe Enviro, Jambusar. • Copy of the membership certificate is attached as **Annexure-3.**
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.	• **Complied** • We are complying with rules under Motor Vehicle Act, 1988 for transportation of hazardous waste. • Photograph of Hazardous Waste disposal Tanker:

Sr. No.	EC Conditions	Compliance Status
		
33	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/ CHWIF.	• **Complied** • 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.
A.5	**SAFETY:**	
34	The company shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended.	• **Complied** • We are following MSHIC Rules, 1989 and Factories Act, 1948. • All the chemicals/ materials are stored in the storage tanks with required material of Construction. • Sufficient dykes are provided at Tank storages as per chemical handling and storage guidelines. • Fire Hydrant system is provided nearby storage and handling area for emergency purpose. • Safety trainings are provided to all the operators and workers working in such areas. • Hazard Identification and Risk Assessment (JSA) of all activities carried out and SOPs are prepared accordingly. • Safety showers are provided nearby storage areas.
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	• **Complied** • 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

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td>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.</td><td>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 Annexure-5.
• Requisite On-site and Off-site Disaster Management Plans prepared and implemented.</td></tr>
<tr><td>36</td><td>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.</td><td>• Complied
• All the recommendations/ commitments made in the revised EIA report of the project prepared by M/s. Anand Consultants, Ahmedabad have been implemented.</td></tr>
<tr><td></td><td colspan="2">
<table>
<tr><th>Descripition</th><th>Type of pollutant / Wastes</th><th>Source</th><th>Pollution control Arrangement / mitigation measures</th><th>Compliance measure</th></tr>
<tr><td rowspan="4">Air Envirnoment</td><td>PM , SO2, Nox</td><td>Boiler</td><td>• ESP and low Nox burner are provided to control the particulate matter and Nox respectively
• Lime stone are be added to reduce SO2 emissions</td><td>• We have installed ESP & Low NOx Burner with our boiler stack to control the particulate matter and Nox respectively.
• We are using lime stone to reduce emission of SO2</td></tr>
<tr><td>CL2, HCL</td><td>Process</td><td>• Alkali scrubber and waste scrubber are provided to control the process gas emission</td><td>• We have installed Alkali Scrubber & Water Scrubber to reduce process gas emission</td></tr>
<tr><td>HCL , CL2</td><td>Fugitive emission from equipment leak valves, flanges, pump seal, compressors, sampling connection, open ended lines</td><td>• Leak proof technology for valve and pumps
• Plugss, caps and blinds for open ended lines .
• Rupture discs and soft seals for pressure valves .
• Dual mechanical seal with Non – VOC barrier fluid / degassing system .
• Closed loop sampling syatem
• Enclosure of seal area double condenser system are provided .
• The vents of the secondary condenser connected with the scrubber .
• Covering of all open surfaces wherever possible .
• Sensors are provided in work place area .</td><td>• We have installed Leak proof technology for valve and pumps
• We have provided Plugs, caps and blinds for open ended lines
• We have provided Rupture discs and soft seals for pressure valves
• We have provided Dual mechanical seal with Non – VOC barrier fluid / degassing system
• Closed loop sampling syatem is provided
• Enclosure of seal area double condenser system are provided
• The vents of the secondary condenser connected with the scrubber
• All open surfaces are covered
• Sensors have been provided in work place area.</td></tr>
<tr><td>CO2 and other gases</td><td>Fugitive emission from sources such as ope surfaces, ETP, sufaces impoundments, retention ponds.</td></tr>
<tr><td>Water Envirnoment</td><td>Low pollution potential</td><td>Domestic waste water</td><td>• Domestic effluent is in Sewage Treatment Plant (STP) and treated wastewater is used for gardening purposes .</td><td>• Domestic effluent is treated in Sewage Treatment Plant (STP) and treated wastewater is used for gardening purposes.</td></tr>
<tr><td>Noise Envirnoment</td><td>Structre - borne noise: the vibration transmitted may activate the building where it mouted without proper installation. Air borne noise due to air turbulence at equipment / structre and etc.</td><td>Vechile , Transporation, Water Cooling Towers, Air - cooled chillers, Fans, Ducts, Others plant equipment & machinery .</td><td>• To reduce the noise generation durning the transportation activites the vechile are kept periodically services and maintained as per the requirement of latest trends in automobile industry .
• Acoustic mat on the water surface is provided to reduce the water splashing noise .
• All the vibrating parts is checked periodically and serviced to reduce the noise generation .
• Complete enclosure with silencers at condenser fan outlets and at air inlents of the enclosure is fabricated .
• Green belt is developed around the plant peripheral which act as a curtain / barrier between the plant and near by buildings.</td><td>• Vehicles are kept periodically services and maintained to reduce the noise generation durning the transportation
• Acoustic mat on the water surface have been provided to reduce the water splashing noise
• All the vibrating parts is checked periodically and serviced to reduce the noise generation
• Complete enclosure with silencers at condenser fan outlets and at air inlents of the enclosure is fabricated
• Green belt is being developed around the plant peripheral.</td></tr>
<tr><td>Biological Envirnoment</td><td>Particulate Emission</td><td>Manufacturing process and other ancillary activites</td><td>• 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.
• Characteristic of plant mainly considered for affecting absorption of pollutant gases and removal of dust particle are as follows</td><td>• Green belt is developed & maintained as per EB expert and CPCB guidelines.</td></tr>
<tr><td>Land Envirnoment</td><td>Gaseous / Paticulate emission</td><td>Manufacturing process Transportation</td><td>• Treated effulent 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 .
• Pollution control devices / measure are installed / implemented properly to treat air & liquid effulent it is periodical checked / maintained. Solid / hazardous waste is collected , stored in a designated storage area with proper flooring before its final disposal</td><td>• Treated effulent 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.
• Online Air & Water Monitoring System is installed for continuous monitoring. Solid / hazardous waste is being collected, stored in a designated storage area with proper flooring before its final disposal.</td></tr>
</table>
</td></tr>
<tr><td>37</td><td>All necessary precautionary shall be taken to avoid any kind of accident during storage and handling of toxic/ hazardous chemicals, especially chlorine, hydrogen, CS2, HCl etc.</td><td>• Complied
• We have developed job safety analysis procedure and trainings have been provided to all employees. Proper controls are provided to mitigate any emergency.</td></tr>
<tr><td>38</td><td>Storage of flammable chemicals shall be sufficiently away from the production area.</td><td>• Complied
• 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.
• Photograph of tank:</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
		
39	Sufficient no. of fire extinguishers shall be provided near the plant and storage area.	• **Complied** • Sufficient nos. of Fire extinguishers are provided.
40	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic/ hazardous chemicals.	• **Complied** • All necessary precautionary measures have been 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.	• **Complied** • All the toxic/ hazardous chemicals stored in optimum quantity and all necessary permissions in this regard 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.	• **Complied** • We have identified the environment protection measures & risks and take mitigate measures accordingly.
43	Only flame proof electrical fittings shall be provided in the plant premises.	• **Complied** • Flame proof electrical fittings are provided in the required plant area.
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.	• **Complied** • Storage of hazardous chemicals is minimized and stored 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.	• **Complied** • 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:

Sr. No.	EC Conditions	Compliance Status
		
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.	• **Complied** • Handling and charging of the chemicals are 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.	• **Complied** • OHC with availability of para-medical staff & ambulance is available round the clock. • We have also tied up with M/s. Apex Multispecialty Hospital at Bharuch.
48	Personal Protective Equipment's shall be provided to workers and its usage shall be ensured and supervised.	• **Complied** • We have provided proper job specific PPEs to all the workers and its usage is ensured and supervised regularly.
49	First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	• **Complied** • We have 60 Nos. of first aid boxes at different locations of our plant containing required antidote for the chemicals used in the plant.
50	Training shall be imparted to all the workers on safety and health aspects of chemicals handling.	• **Complied** • Training is imparted to all the workers at regular intervals for safety and health during chemical handling, Emergency Preparedness, etc. • We have engaged DuPont Safety for implementation of Work place safety & Process Safety management system and to provide training & Awareness of employees in the site. • 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. • Please find below training calendar:

Sr. No.	EC Conditions	Compliance Status
		
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.	• **Complied** • Occupational health surveillance of the workers is done and its records are maintained. • Six monthly pre-employment and periodical examination for all the workers is being carried out. • 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 **Annexure-6.**
52	Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.	• **Complied** • We are following Central Motor Vehicles Rule - 9 for Hazardous chemical transportation.
53	The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.	• **Complied** • The company will 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.	• **Complied** • Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others are obtained prior to commissioning of the project.
A.6	**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 confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	• **Complied** • 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. • 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.

ADITYA BIRLA GRASIM

Monthly Training Calendar

SEPTEMBER 2023

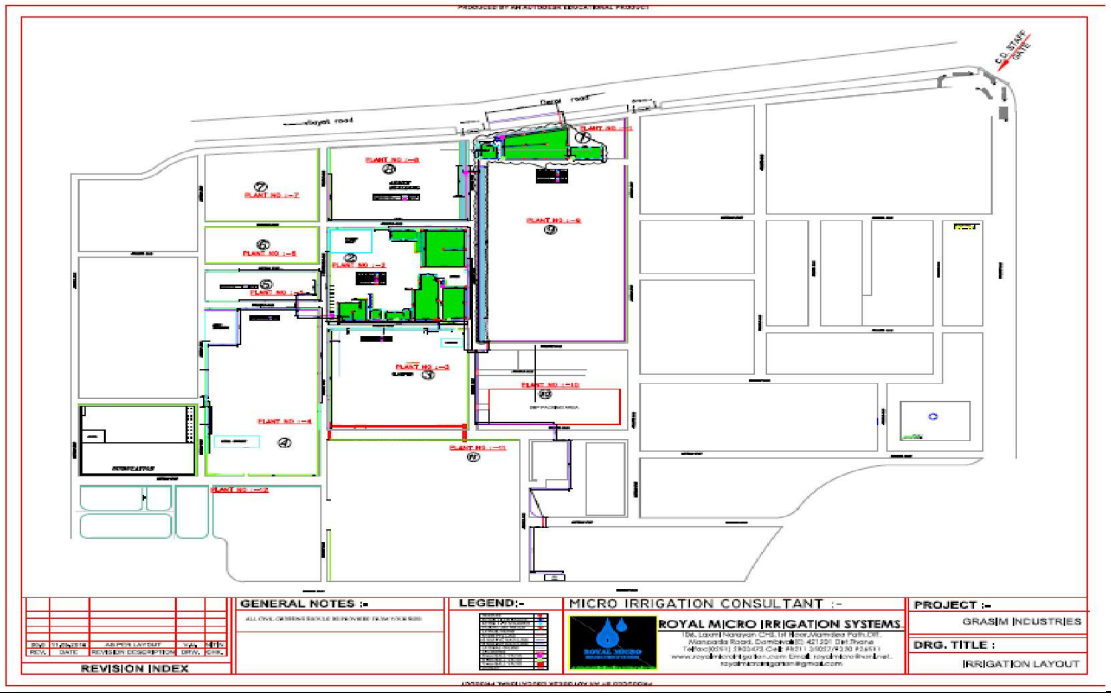
Functional				
Cadre	Faculty Type	Training Topic	Dates	Faculty
JB 10 & 11	Internal	Fundamentals of Pump operation	11-09-2023	Mr. Rajeev Ranjan
JB 10 & 11 and Staff	Internal	Overview of PAC chemistry and its applications in water treatment	23-09-2023	Mr. Amit Kumar Boora
S4 to JB 9	BHR	Power BI	12, 16, 19, 22 Sep'23	YTD
JB 9 & 11	Internal	DCS Operation	26-09-2023	Mr. Ranjit Naik
JB 9 & 11	Internal	Preventive & Predictive Mintenance	20-09-2023	Mr. Pallab Das and Mr. Abhijit Shukla
Behavioral				
Cadre	Faculty Type	Training Topic	Dates	Faculty
JB 9 to JB 11 and Staff	Internal	Behavior Base Safety Training	09-09-2023	Mr. Harsh Bhagat
DH & SH	BHR	Fit for Future	YTD	Mr. Samir Desai & Mr. Ranjit Naik
JB 11 to JB 10	BHR	Career Ability	YTD	Mr. Samir Desai & Mr. Ranjit Naik
JB 9 to JB 11 and Staff	Internal	Communication & influence	25-09-2023	Mr. Rajeev Ranjan
DH	BHR	Managerial Effectiveness	11th & 12 th Sep'23	
DH	BHR	Team work and Collaboration	YTD	
Safety				
Cadre	Faculty Type	Training Topic	Dates	Faculty
Applicable to All	Internal	Safety Refresher training	07-09-2023	Mr. Jay Patel & Mr. Hardik Patel
Applicable to All	Internal	Safety Refresher training	14-09-2023	Mr. Jay Patel & Mr. Hardik Patel
Applicable to All	Internal	Safety Refresher training	21-09-2023	Mr. Jay Patel & Mr. Hardik Patel
Applicable to All	Internal	Safety Refresher training	28-09-2023	Mr. Jay Patel & Mr. Hardik Patel
Management Cadre	Internal	Hazard Identification and Risk Analysis	08-09-2023	Mr. Manish Singh
DHs & SHs	Internal	Investigation of incident and procedure	15-09-2023	Mr. Jay Patel & Ms. Smita Ramteke
Management Cadre	Internal	Permit to Work	18-09-2023	Mr. Manish Singh
Compliance				
Cadre	Faculty Type	Training Topic	Dates	Faculty
Applicable to all	External	Integrated Management System	20 to 22nd Sep	Bureau Veritas (India) Pvt. Ltd
Applicable to all	External	Energy Management System	YTD	Bureau Veritas (India) Pvt. Ltd
JB 11 to JB 9	Internal	ISO 50001:2018- Energy Management system	27-09-2023	Mrs. Smita Ramteke
CMS & ALCP	Internal	ISO Documentation	06-05-203	Mrs. Smita Ramteke
E-learning Courses				
Cadre		Training Topic	Training type	
Management Cadre		Team work and Collaboration	Behavioral	
Management Cadre		Cutomer Focus	Behavioral	
Management Cadre		Manufacturing Operations	Fucational	

ATTENTION PLEASE

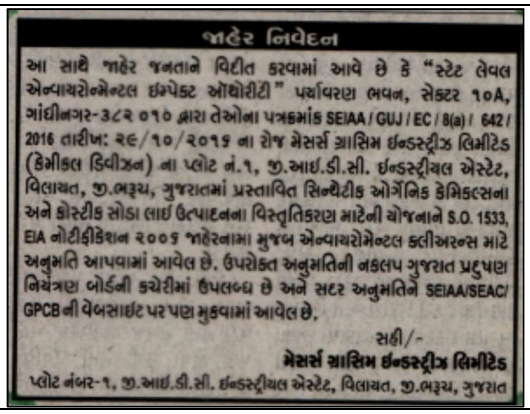
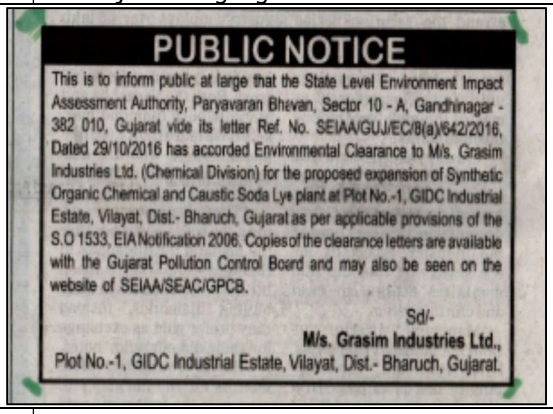
<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td></td><td>
Noise Monitoring Report is summarized as per below table:
<table>
<tr><th colspan="4">Noise Results (Apr, 23 to Sept, 23)</th></tr>
<tr><th colspan="4">Reading dB(A)</th></tr>
<tr><th>Station</th><th>Range</th><th>Day</th><th>Night</th></tr>
<tr><td rowspan="3">Nr. Main Gate</td><td>MIN</td><td>64</td><td>51</td></tr>
<tr><td>MAX</td><td>69</td><td>60</td></tr>
<tr><td>AVG</td><td>67</td><td>56</td></tr>
<tr><td rowspan="3">Nr. ALCP Plant</td><td>MIN</td><td>64</td><td>56</td></tr>
<tr><td>MAX</td><td>73</td><td>63</td></tr>
<tr><td>AVG</td><td>68</td><td>60</td></tr>
<tr><td rowspan="3">Nr. PAC Old Powder Plant</td><td>MIN</td><td>63</td><td>55</td></tr>
<tr><td>MAX</td><td>68</td><td>60</td></tr>
<tr><td>AVG</td><td>65</td><td>58</td></tr>
<tr><td rowspan="3">Nr. Cl2 Liquifaction Area</td><td>MIN</td><td>59</td><td>51</td></tr>
<tr><td>MAX</td><td>65</td><td>61</td></tr>
<tr><td>AVG</td><td>62</td><td>54</td></tr>
<tr><td rowspan="3">Nr. Cl2 Tonner filling Area</td><td>MIN</td><td>63</td><td>50</td></tr>
<tr><td>MAX</td><td>70</td><td>60</td></tr>
<tr><td>AVG</td><td>66</td><td>55</td></tr>
<tr><td rowspan="3">Nr. Cl2 compressor area</td><td>MIN</td><td>63</td><td>58</td></tr>
<tr><td>MAX</td><td>72</td><td>63</td></tr>
<tr><td>AVG</td><td>68</td><td>61</td></tr>
<tr><td rowspan="3">Nr ETP</td><td>MIN</td><td>65</td><td>61</td></tr>
<tr><td>MAX</td><td>69</td><td>64</td></tr>
<tr><td>AVG</td><td>68</td><td>63</td></tr>
<tr><td rowspan="3">Nr Coal Tippler</td><td>MIN</td><td>64</td><td>58</td></tr>
<tr><td>MAX</td><td>70</td><td>63</td></tr>
<tr><td>AVG</td><td>67</td><td>61</td></tr>
<tr><td rowspan="3">Nr VAM Chiller area</td><td>MIN</td><td>63</td><td>56</td></tr>
<tr><td>MAX</td><td>69</td><td>63</td></tr>
<tr><td>AVG</td><td>66</td><td>61</td></tr>
<tr><td rowspan="3">Nr Utility compressor area</td><td>MIN</td><td>67</td><td>58</td></tr>
<tr><td>MAX</td><td>73</td><td>68</td></tr>
<tr><td>AVG</td><td>70</td><td>63</td></tr>
<tr><td rowspan="3">Nr Compressor Area</td><td>MIN</td><td>67</td><td>61</td></tr>
<tr><td>MAX</td><td>71</td><td>66</td></tr>
<tr><td>AVG</td><td>69</td><td>64</td></tr>
<tr><td rowspan="3">Nr HSBP Dryer</td><td>MIN</td><td>60</td><td>53</td></tr>
<tr><td>MAX</td><td>67</td><td>60</td></tr>
<tr><td>AVG</td><td>64</td><td>57</td></tr>
</table>
</td></tr>
<tr><td>A.7</td><td colspan="2">ENERGY CONSERVATION:</td></tr>
<tr><td>56</td><td>The project proponent shall install energy efficient devices and appliances conforming to the Bureau of Energy Efficiency norms.</td><td>
Complied
We have installed energy efficient devices and appliances as per the Bureau of Energy Efficiency norms.
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.
</td></tr>
<tr><td>57</td><td>The energy audit shall be conducted at regular intervals and the recommendations of the audit report shall be implemented.</td><td>
Complied
The energy audit is being conducted as per BEE guidelines.
M&V audit conducted for PAT cycle-2.
We are ISO 50001:2011 certified industry.
Copy of certificate is attached as Annexure-10.
</td></tr>
<tr><td>58</td><td>The project proponent shall implement the</td><td>
Complied
</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
	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.	• Solar landscaping lights are installed for Admin Building and roof mounted solar panels are also installed.
59	The transformers and motors shall have minimum efficiency of 85%.	• **Noted & Complied** • All transformers are of higher efficiency > 98 %
60	Variable frequency drives shall be installed.	• **Complied** • 40 nos. of Variable frequency drivers are installed for energy saving.
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.	• **Complied** • We have only LED light fixtures across the site.
62	Energy saving practices as follows shall be practiced.	
	Constant monitoring of energy consumption and defining targets for energy conservation.	• **Complied** • We have energy meters and energy monitoring system for measuring energy.
	Adjusting the settings and illumination levels to ensure minimum energy used for desired comfort level.	• **Complied** • Light fixtures have been installed as per lux level requirement in the different area.
	Use of solar cells for lighting.	• **Complied** • We have installed solar cells on admin building terrace.
	Use of solar water heater for canteen & washing area.	• We are exploring for the possibilities.
	Proper load factor shall be maintained by the unit.	• We are maintaining the load factor.
	Provision of day light roof to utilize maximum natural light in the production plant instead of electrical lighting.	• We have provided day light roof such as new work shop, PAC plant etc.
	Use of electronic ballast to save energy.	• We have installed LED lights.
	Automatic switching system for lighting & water tank pumping shall be used.	• Timers have been installed for switching on/ off plant lighting.
	To the maximum extent possible and technically feasible, energy efficient equipment like motors, pumps, air-conditioning systems shall be selected.	• We are practicing to use technically feasible, energy efficient equipment like motors, pumps, air-conditioning systems etc.
	Gravity flow shall be preferred wherever possible to save pumping energy.	• We have designed our plant accordingly.
	Promoting awareness on energy conservation.	• We are conducting training and awareness programs to promote energy conservation.
	Training to the staff on methods of energy conservation and to be vigilant for this.	• We are practicing special suggestion scheme for energy conservation/ energy saving and trainings are also conducted at regular intervals.
A.7	**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	• **Complied** • We have carried out Cleaner Production Assessment studies by Gujarat Cleaner

Sr. No.	EC Conditions	Compliance Status
	company. The recommendations thereof along with the compliance shall be furnished to the GPCB.	Production Centre (Established by Industries & Mines Department, Government of Gujarat).
64	The company shall undertake following waste minimization measures:	
(i)	Metering and control of quantities of active ingredients to minimize waste.	• **Complied** • We have provided flow meters for wastewater generation. • We have installed RO system for reducing the effluent. • Recycle steam and vapor condensate is used in process & cooling tower. • We use super washed salt to reduce chemical consumption in turn to reduce solid waste generation.
(ii)	Reuse of by-products from the process as raw materials substitutes in other process.	• **Complied** • We are using Hydrogen as a clean fuel for producing Caustic Soda flakes & Poly Aluminum Chloride. • Use of waste chlorine gas for producing 32% HCl. • Vapor condensate from flaking plant treated by polishing unit and finally used as DM water. • By-product HCl from CPW Plant is used in PAC plant as raw material.
(iii)	Use of automated and enclosed filling to minimize spillages.	• **Complied** • We are using automated and closed filling to minimize spillages.
(iv)	Use of close feed system into batch reactors.	• **Complied** • We are using close feed system into batch reactors.
(v)	Dry cleaning / mopping of floor instead of floor washing.	• **Complied** • Floors are cleaned through mopping.
(vi)	Use of high pressure hoses for cleaning to reduce wastewater generation.	• **Complied** • High pressure hoses are used for cleaning and reduce the wastewater.
A.8	**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 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.	• **Complied** • We have planted 30,000 nos. of trees as a green belt development in the premises & nearby villages and separate budget is earmarked for the green belt development project. • 5 Years rolling plan with the budget of Rs. 120 Lakh is prepared for green development. • 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. • In nearby villages we have plan to develop ~20000 nos. trees as listed below in FY 23-24.

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Sr. No.</th><th>Village Name</th><th>Total Acre</th><th>Number of Tree Plantation</th></tr>
<tr><td>1</td><td>Argama</td><td>2</td><td>1500</td></tr>
<tr><td>2</td><td>Aankot</td><td>1</td><td>1500</td></tr>
<tr><td>3</td><td>Saran</td><td>3</td><td>5000</td></tr>
<tr><td>4</td><td>Sarnar</td><td>2</td><td>2000</td></tr>
<tr><td>5</td><td>Derol</td><td>2.5</td><td>5000</td></tr>
<tr><td>6</td><td>Bhersam</td><td>3</td><td>5000</td></tr>
<tr><td colspan="2">Total</td><td>13.5</td><td>20,000</td></tr>
</table>
</td></tr>
<tr><td>65</td><td>Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development.</td><td>• Complied
• Drip irrigation/ low-volume, low angle sprinklers are used for green belt development.
• Total 22,000 m2 area is covered under drip irrigation & low angle sprinkler system.</td></tr>
<tr><td></td><td colspan="2">Please Refer STP Network
 
</td></tr>
<tr><td>B</td><td colspan="2">OTHER CONDITIONS:</td></tr>
<tr><td>66</td><td>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.</td><td>• Complied
• All pollution control systems installed in our plant are 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.</td></tr>
<tr><td>67</td><td>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.</td><td>• Complied
• Recommendations made in the EIA/ EMP were submitted & implemented.</td></tr>
<tr><td>68</td><td>The project authorities must strictly adhere to</td><td>• Complied</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
	the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.	• We are complying stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority. • CCA Compliance Report is attached as **Annexure-8.**
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.	• **Complied** • 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.
70	Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	• **Complied** • We have provided RCC and / acid brick line flooring in the required areas. • Photograph of RCC flooring: 
71	Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.	• **Complied** • We have provided pipelines of suitable MOC in the plant which ensures no leakages from the pipes / pumps.
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.	• **Complied** • All future expansion or modifications in the plant will be carried out after obtaining prior Environment Clearance from the concerned authority.
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.	• **Complied** • We are complying Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & 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.
74	The company shall undertake socio-economic developmental/ community welfare activities as per the CSR Rules 2014.	• **Complied** • Socio-economic developmental / community welfare activities are being carried out as per CSR Rules 2014. • CSR activities is summarized as per below table and the same is attached as **Annexure-9**
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	• **Complied** • Separate fund / budget is identified / sanctioned on annual basis for Environmental management.

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td>stipulated herein. The funds so provided shall not be diverted for any other purpose.</td><td>• A year wise expenditure on environmental safeguards is also reported.
<table>
<tr><th colspan="3">Fund Utilized for Environment Management</th></tr>
<tr><th>Sr. No.</th><th>Particulars</th><th>Value (in Cr)</th></tr>
<tr><td>1</td><td>CTE / CCA Application</td><td>0.15</td></tr>
<tr><td>2</td><td>GPCB sampling & analysis charges</td><td>0.05</td></tr>
<tr><td>3</td><td>Schedule-I Environment Audit</td><td>0.5</td></tr>
<tr><td>4</td><td>Monthly Monitoring by Third party</td><td>0.5</td></tr>
<tr><td>5</td><td>Waste Management</td><td>12</td></tr>
<tr><td>6</td><td>Green Belt Development</td><td>0.5</td></tr>
</table></td></tr>
<tr><td>76</td><td>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.</td><td>• Complied
• 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.
Name of Paper: Times of India
Date of Issue: 06.11.2016
In: English language
Name of Paper: Gujarati Samachar
Date of Issue: 07.11.2016
In: Gujarati language</td></tr>
<tr><td></td><td colspan="2"> 
જાહેર નિવેદન
આ સાથે જાહેર જનતાને વિદીત કરવામાં આવે છે કે "સ્ટેટ લેવલ એન્વાયરોન્મેન્ટલ ઇમ્પેક્ટ ઓથોરીટી" પર્યાવરણ ભવન, સેક્ટર ૧૦A, ગાંધીનગર-૩૮૨ ૦૧૦ દ્વારા તેઓના પત્રકમાંક SEIAA/GUJ/EC/8(a)/ 642/ 2016 તારીખ: ૨૯/૧૦/૨૦૧૬ ના રોજ મેસર્સ ગ્રાસિમ ઇન્ડસ્ટ્રીઝ લિમીટેડ (કેમીકલ ડિવીઝન) ના પ્લોટ નં.૧, જી.આઇ.ડી.સી. ઇન્ડસ્ટ્રીયલ એસ્ટેટ, વિલાયત, જી.ભરૂચ, ગુજરાતમાં પ્રસ્તાવિત સિન્થેટીક ઓર્ગેનિક કેમિકલ્સના અને કોસ્ટીક સોડા લાઇ ઉત્પાદનના વિસ્તૃતિકરણ માટેની યોજનાને S.O. 1533, EIA નોટીફીકેશન ૨૦૦૬ જાહેરનામા મુજબ એન્વાયરોમેન્ટલ ક્લીઅરન્સ માટે અનુમતિ આપવામાં આવેલ છે. ઉપરોક્ત અનુમતિની નકલ પ્રદુષણ નિયંત્રણ બોર્ડની કચેરીમાં ઉપલબ્ધ છે અને સદર અનુમતિને SEIAA/SEAC/ GPCB ની વેબસાઇટ પર પણ મુકવામાં આવેલ છે.
સહી/-
મેસર્સ ગ્રાસિમ ઇન્ડસ્ટ્રીઝ લિમીટેડ
પ્લોટ નંબર-૧, જી.આઇ.ડી.સી. ઇન્ડસ્ટ્રીયલ એસ્ટેટ, વિલાયત, જી.ભરૂચ, ગુજરાત
 
PUBLIC NOTICE
This is to inform public at large that the State Level Environment Impact Assessment Authority, Paryavaran Bhavan, Sector 10 - A, Gandhinagar - 382 010, Gujarat vide its letter Ref. No. SEIAA/GUJ/EC/8(a)/642/2016, Dated 29/10/2016 has accorded Environmental Clearance to M/s. Grasim Industries Ltd. (Chemical Division) for the proposed expansion of Synthetic Organic Chemical and Caustic Soda Lye plant 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 the 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.</td></tr>
<tr><td>77</td><td>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.</td><td>• Noted & Complied
• We have not received any additional condition that may be imposed by the SEAC till date.
• 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.</td></tr>
<tr><td>78</td><td>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</td><td>• Noted & Complied
• 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.</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
	each calendar year.	
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.	• **Noted** • The data submitting herewith are factual and are not false / fabricated.
80	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	• **Noted & Complied** • We are complying all the conditions stipulated by the Gujarat Pollution Control Board.
81	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	• **Noted** • We have been complying the conditions issued by the SEIAA. • No suspension order issued by the SEIAA till date.
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.	• **Noted** • We are implementing conditions stipulated by the board in a time bound manner.
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.	• **Noted & Complied** • The date of financial closure and final approval of the project by the concerned authorities and the date of starting the project are: • Date of financial closure: 31st March 2018 • Date of final approval of the project by the concerned authorities: 3rd April 2017
84	This environmental clearance is valid for seven years from the date of issue.	• **Noted** • 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. • Before due date of the EC, we have encased the same via CTE and CCA.
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.	• **Complied** • There is no appeal against this environmental clearance lie with the National Green Tribunal.

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

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td>1</td><td>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 Noitification-2006.
<table>
<tr><th rowspan="2">Sr. No</th><th rowspan="2">Name of Product/ Activity</th><th colspan="3">Quantity (MT/Month)</th><th rowspan="2">End-use of product</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>1</td><td>Captive Power Plant (CPP)</td><td>96 MW</td><td>45 MW</td><td>141 MW</td><td>Power Generation for Captive use</td></tr>
</table></td><td>• Noted
• Copy of Environment Clearance is attached as Annexure-1.
• We have obtained EC to CTE and CCA application is under progress and scrutiny under GPCB HO Office, Gandhinagar.</td></tr>
<tr><td>A.</td><td>CONDITIONS :</td><td></td></tr>
<tr><td>A.1</td><td>SPECIFIC CONDITION :</td><td></td></tr>
<tr><td>2</td><td>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.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>3</td><td>Unit shall comply all the conditions stipulated in Coal Handling Guidelines published by GPCB.</td><td>• We shall comply with the Coal Handling Guidelines after commissioning of the captive power plant project.</td></tr>
<tr><td>4</td><td>The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/ or any other statutory authority.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>5</td><td>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.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>6</td><td>Complete Zero Liquid Discharge [ZLD] status shall be maintained all the time for CPP.</td><td>• We shall maintain Complete Zero Liquid Discharge [ZLD] status after commissioning of the captive power plant project.</td></tr>
<tr><td>7</td><td>All measures shall be taken to prevent soil and ground water contamination.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>8</td><td>There shall be no drainage connection to discharge waste water from the premises.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>A.2</td><td>WATER:</td><td></td></tr>
<tr><td>9</td><td>The fresh water requirement for the proposed expansion shall not exceed 14883 KL/day. Unit shall reuse 11689 KLD [5870 KLD</td><td>• Fresh Water requirement for</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
	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.	captive power plant shall be met through GIDC Water supply only. • We have obtained EC to CTE for captive power plant and CCA under scrutiny of HO GPCB, Gandhinagar office.
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.	• We shall install Meters and shall maintain the record of the same on regular basis. • Fresh Water requirement for captive power plant shall be met through GIDC Water supply only
11	Unit shall reuse 5870 KLD of Boiler condensate for Boiler feed water.	• We shall reuse boiler condensate water after commissioning of the captive power plant project.
12	The industrial effluent generation after proposed expansion in power plant shall not exceed 6505 KL/day.	• We shall comply with the condition after commissioning of the captive power plant project.
13	Entire quantity of waste water shall be subjected to Primary ETP (Cap. 500 KLD X 2) followed by RO plant.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
16	Complete Zero Liquid Discharge (ZLD) shall be maintained and there shall be no discharge of industrial effluent in any case.	• We shall maintain Complete Zero Liquid Discharge [ZLD] status after commissioning of the captive power plant project.
17	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.	• We shall comply with the condition after 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	• We shall comply with the condition after

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td>shall be stored within premises. There shall be no discharge of waste water outside the premises in any case.</td><td>commissioning of the captive power plant project.</td></tr>
<tr><td>19</td><td>Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>20</td><td>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.</td><td>• We shall install Meters and shall maintain the record of the same on regular basis.</td></tr>
<tr><td>21</td><td>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.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>22</td><td>The unit shall provide metering facility at the inlet and outlet of the ETP & RO system and maintain records for the same.</td><td>• We shall install Meters and shall maintain the record of the same on regular basis.</td></tr>
<tr><td>23</td><td>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.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>A.3</td><td colspan="2">AIR:</td></tr>
<tr><td>24</td><td>Unit shall not exceed fuel consumption for steam boiler and stand-by DG set as mentioned below:
<table>
<tr><th>Sr. No.</th><th>Source of emission with capacity</th><th>Stack Height (meter)</th><th>Name of the fuel</th><th>Quality of fuel MT/hr & MT/day</th><th>Type of emissions i.e. Air Pollutants</th><th>Air pollution Control Measures (APCM)</th></tr>
<tr><td></td><td>Existing</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>1</td><td>Boiler 1 & 2 (2 x 175 TPH)</td><td>125</td><td rowspan="2">Coal</td><td rowspan="2">100 MT/hr</td><td>SPM, SO2, NOX</td><td>ESP and Low NOx burners</td></tr>
<tr><td>2</td><td>Boiler 3 & 4 (2 x 175 TPH)</td><td>125</td><td>SPM, SO2, NOX</td><td>ESP and Low NOx burners</td></tr>
<tr><td></td><td>Proposed</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>3</td><td>Boiler-5 (175 TPH)</td><td>125</td><td>Coal</td><td>29.16 MT/hr</td><td>SPM, SO2, NOX</td><td>ESP and Low NOx burners</td></tr>
</table></td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>25</td><td>Unit shall provide adequate APCM with flue gas generation sources as mentioned above:</td><td>• We shall provide adequate APCM with flue gas generation before commissioning of the captive power plant project.</td></tr>
<tr><td>26</td><td>There shall be no process gas emission from existing as well as from the proposed project.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
<tr><td>27</td><td>Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.</td><td>• We shall comply with the condition after commissioning of the captive power plant project.</td></tr>
</table>

Sr. No.	EC Conditions	Compliance Status
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.	• We shall comply with the condition after commissioning of the captive power plant project.
29	Height of flue gas stacks attached to Boilers shall be minimum 125 meters.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
33	Lime stone injection technology shall be adopted to control SO2 and it shall be ensured that SO2 levels in the ambient air do not exceed the prescribed standards.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
35	Online monitoring system shall be installed to monitor the SOx, NOx 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.	• We shall install Online monitoring system to monitor the SOx, NOx and SPM in the flue gas stack after commissioning of the captive power plant project.
36	Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed.	• We shall comply with the condition after commissioning of the captive power plant project.
37	Handling of the fly ash shall be through a closed pneumatic system.	• We shall comply with the condition after commissioning of the

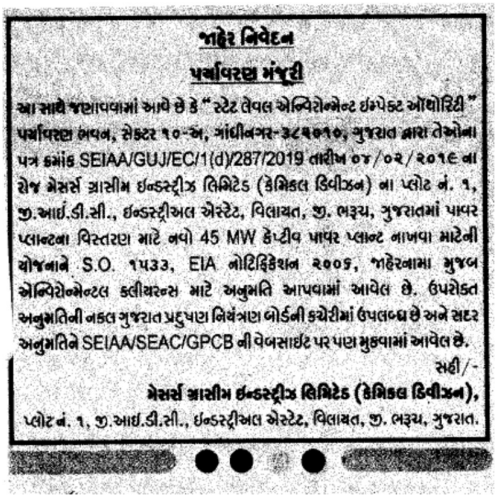
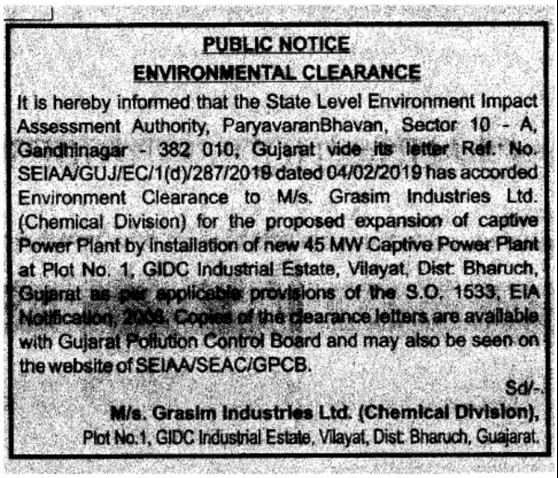
Sr. No.	EC Conditions	Compliance Status
		captive power plant project.
38	Ash shall be handled only in dry state.	• We shall comply with the condition after commissioning of the captive power plant project.
39	The unit shall strictly comply with the Fly Ash Notification under the EPA and it shall be ensured that there is 100% utilization of fly ash to be generated from the unit.	• We shall comply with the Fly Ash Notification under the EPA after commissioning of the captive power plant project.
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 lime (e.g. Directors of Industrial Safety & Health). Following indicative guidelines shall also be followed to reduce the fugitive emission.	• We shall comply with the condition after commissioning of the captive power plant project.
(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.	• We shall comply with the condition after commissioning of the captive power plant project.
A.4	**SOLID / HAZARDOUS WASTE:**	
42	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 lime. Authorization of the GPCB shall be obtained for collection / treatment / storage / disposal of hazardous wastes.	• We shall comply with the condition after commissioning of the captive power plant project.

Sr. No.	EC Conditions	Compliance Status
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.	• We shall comply with the condition after commissioning of the captive power plant project.
44	ETP waste & spent resin shall be disposed off to authorized TSDF site.	• We shall comply with the condition after commissioning of the captive power plant project.
45	Used oil shall be sold to only to the registered recyclers/rerefiners.	• We shall comply with the condition after commissioning of the captive power plant project.
46	Discarded containers / barrels / bags / liners shall be sold only to the authorized registered recycler.	• We shall comply with the condition after commissioning of the captive power plant project.
47	For storage of fly ash, closed silos of adequate capacity shall be provided. No ash pond shall be constructed in the project.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
49	All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
A.5	**SAFETY:**	
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
53	All the risk mitigation measures, general & specific recommendations mentioned in Risk Assessment Report shall be implemented.	• We shall comply with the condition after commissioning of the captive power plant project.
54	A well designed fire hydrant system shall be installed as per the prevailing standards.	• We shall comply with the condition after commissioning of the

Sr. No.	EC Conditions	Compliance Status
		captive power plant project.
55	Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
58	Flameproof fillings shall be provided in the plant area.	• We shall comply with the condition after commissioning of the captive power plant project.
59	Adequate firefighting facilities shall be provided at the proposed power plant.	• We shall comply with the condition after commissioning of the captive power plant project.
60	Proper ventilation shall be provided in the work area.	• We shall comply with the condition after commissioning of the captive power plant project.
61	All transporting routes within the factory premise shall have paved roads to minimize splashes and spillages.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
A.6	**NOISE:**	
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.	• We shall comply with the condition after commissioning of the captive power plant project.
(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.	
(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.	

Sr. No.	EC Conditions	Compliance Status
(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	• We shall comply with the condition after commissioning of the captive power plant project.
A.7	**GREEN BELT AND OTHER PLANTATION:**	
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.	• We shall comply with the condition after commissioning of the captive power plant project.
66	Drip irrigation/ low-volume, low-angle sprinkler system shall be used for the green belt development within the premises	• We shall comply with the condition after commissioning of the captive power plant project.
B	**OTHER CONDITIONS:**	
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.IIl dated 09/0812018.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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	• We shall comply with the condition after commissioning of the captive power plant project.

Sr. No.	EC Conditions	Compliance Status
	before SEAC, proposed in the EIA report shall be strictly adhered to in letter and spirit.	
71	All the recommendations of CREP guidelines as may be applicable from time to time shall be followed vigorously.	• We shall comply with the condition after commissioning of the captive power plant project.
72	A separate environment management cell with qualified staff shall be set up for information of the stipulated environmental safeguards.	• We shall comply with the condition after commissioning of the captive power plant project.
73	The project authorities must strictly adhere to the stipulations made by the Gujarat pollution control board (GPCB) state Government and any statutory authority.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
75	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Acl,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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
77	Unit shall comply provisions of MoEFCC's O.M. No.22-6512017-IA.III dated 01105/2018 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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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
	• Complied • 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. Name of Paper: Times of India Date of Issue: 09/02/2019 In: English language Name of Paper: Divya Bhaskar Date of Issue: 09/02/2019 In: Gujarati language  જાહેર નિવેદન પર્યાવરણ મંજૂરી આ સાથે જણાવવામાં આવે છે કે " સ્ટેટ લેવલ એન્વિરોનમેન્ટ ઇમ્પેક્ટ ઓથોરિટી " પર્યાવરણ ભવન, સેક્ટર ૧૦-એ, ગાંધીનગર-૩૮૨૦૧૦, ગુજરાત દ્વારા તેઓના પત્ર ક્રમાંક SEIAA/GUJ/EC/1(d)/287/2019 તારીખ ૦૪/૦૨/૨૦૧૯ ના રોજ મેસર્સ ગ્રાસીમ ઇન્ડસ્ટ્રીઝ લિમિટેડ (કેમિકલ ડિવીઝન) ના પ્લોટ નં. ૧, જી.આઇ.ડી.સી., ઇન્ડસ્ટ્રીઅલ એસ્ટેટ, વિલાયત, જી. ભરૂચ, ગુજરાતમાં પાવર પ્લાન્ટના વિસ્તરણ માટે નવો 45 MW કેપ્ટીવ પાવર પ્લાન્ટ નાખવા માટેની યોજનાને S.O. ૧૫૩૩, EIA નોટિફિકેશન ૨૦૦૬, જાહેરનામા મુજબ એન્વિરોન્મેન્ટલ ક્લીયરન્સ માટે અનુમતિ આપવામાં આવેલ છે. ઉપરોક્ત અનુમતિની નકલ ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડની કચેરીમાં ઉપલબ્ધ છે અને સદર અનુમતિને SEIAA/SEAC/GPCB ની વેબસાઇટ પર પણ મુક્વામાં આવેલ છે. સહી/- મેસર્સ ગ્રાસીમ ઇન્ડસ્ટ્રીઝ લિમિટેડ (કેમિકલ ડિવીઝન), પ્લોટ નં. ૧, જી.આઇ.ડી.સી., ઇન્ડસ્ટ્રીઅલ એસ્ટેટ, વિલાયત, જી. ભરૂચ, ગુજરાત.  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/1(d)/287/2019 dated 04/02/2019 has accorded Environment Clearance to M/s. Grasim Industries Ltd. (Chemical Division) for the proposed expansion of captive Power Plant by installation of new 45 MW Captive Power Plant 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. (Chemical Division), Plot No.1, GIDC Industrial Estate, Vilayat, Dist: Bharuch, Guajarat.	
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
84	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	• We shall comply with the condition after commissioning of the captive power plant project.
85	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.

Sr. No.	EC Conditions	Compliance Status
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.	• We shall comply with the condition after commissioning of the captive power plant project.
88	This environmental clearance is valid for seven years from the date of issue.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.
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.	• We shall comply with the condition after commissioning of the captive power plant project.

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

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td>1</td><td>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 & Dist: Bharuch, Gujarat. It is proposed in existing unit for manufacturing following products, which falls in the category - 1(d) & 4(d) of the schedule of the EIA Notification-2006.
<table>
<tr><th rowspan="2">Sr. no.</th><th rowspan="2">Name of Product</th><th rowspan="2">CAS no. / CI no.</th><th colspan="4">Quantity (MT/Month)</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th><th>End-use of product</th></tr>
<tr><td>1</td><td>Caustic Soda Lye</td><td>1310-73-2</td><td>30416.67</td><td>12166.67</td><td>42583.33</td><td>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.</td></tr>
<tr><td>2</td><td>Hydrogen</td><td>1333-74-0</td><td>8516666.67 (Nm³)</td><td>3406666.67 (Nm³)</td><td>11923333.33 (Nm³)</td><td>Industrial application such as refining, treating metals and food processing. It is also used as alternate fuel in industries.</td></tr>
<tr><td>3</td><td>Liquid Chlorine/ Sodium Hypochlorite/ Hydrochloric Acid</td><td>7782-50-5</td><td>27375</td><td>20865.83</td><td>48240.83</td><td>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,</td></tr>
</table>
</td><td>• Noted.
• EC copy is attached as Annexure 1.</td></tr>
</table>

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 us 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

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(ii) of the Environment Assessment notification-2006.

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.

A	**CONDITIONS :**	
A.1	**SPECIFIC CONDITION :**	

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.	• **Complied** • All the issues raised in the earlier public hearing dated 21.08.2018 are comprehensively addressed/ complied with in a time bound manner.
3	Total Sulphur content of fuel use in CPP shall not exceed 0.8% at any point of time.	• We shall comply with the condition after commissioning of the CPP.
4	Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.	• We shall comply with the condition after commissioning of the CPP.
5	Unit shall comply Coal handling Guidelines published by GPCB.	• We shall comply with the condition after commissioning of the CPP.
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.	• We shall comply with the condition after commissioning of the CPP.
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].	• 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
8	PP shall pursue health check-ups of the workers on regular basis and shall provide adequate personal protective equipments.	• We are carrying out check-ups of the workers on regular basis and providing adequate personal protective equipments & same shall be complied after commissioning of proposed project
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.	• Unit shall comply the condition after commissioning of proposed project
10	Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.	• Transportation route for vehicles carrying Fly Ash and Coal will have least minimum pass near human habitation.
11	Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.	• Unit shall comply the condition after commissioning of project

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.	• Unit shall comply the condition after commissioning of project
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.	• Unit shall comply the condition after commissioning of project
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.	• Unit shall comply the condition after commissioning of project
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.	• Unit shall comply the condition after commissioning of project
16	Lime stone injection technology shall be adopted to control SO2 and it shall be ensured that SO2 levels in the ambient air do not exceed the prescribed standards.	• Unit shall comply with the condition after commissioning of project
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.	• Unit shall comply with the condition after commissioning of project
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.	• Unit shall comply with the condition after commissioning of project
	Safety & Health	
19	PP shall provide Occupational Health Center (OHC) as per the under the Gujarat Factories Rule 68-I.	• OHC is equipped with fully fledged OHC & same shall be complied after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• 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 & same shall be complied after

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.	• We have already installed adequate fire hydrant system within premises and separate storage of water for existing scenario & same shall be complied after commissioning of proposed project.
23	PP shall take all the necessary steps for human safety within premises to ensured that not any harm is caused to any worker/ employee or labour within premises.	• We have taken all the necessary steps for human safety within premises to ensured that not any harm is caused to any worker/ employee or labour within premises & same shall be complied after commissioning of proposed project.
24	Flame proof electrical fittings shall be provided in the plant premises, wherever applicable.	• Flame proof electrical fittings are provided in the plant premises & same shall be complied after commissioning of proposed project.
A.2	**WATER :**	
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.	• Unit shall comply with the condition after commissioning of proposed project
26	The industrial effluent generation from the project shall not exceed 8,313 KLD.	• Unit shall comply with the condition after commissioning of proposed project
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 KDL shall be treated in RO Plants.	• Unit shall comply with the condition after commissioning of proposed project
28	5566 KLD. RO reject shall be used within premises and 686 KLD, RO permeate shall be reused for gardening/ plantation.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td>32</td><td>Unit shall provide buffer water storage tank of adequate capacity for storage of treated waste water during rainy days.</td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
<tr><td>33</td><td>The unit shall provide metering facility at the inlet of ETP, MEE, STP and RO and maintain records for the same.</td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
<tr><td>34</td><td>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.</td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
<tr><td>A.3</td><td colspan="2">AIR:</td></tr>
<tr><td>35</td><td colspan="2">Unit shall not exceed fuel consumption for boilers, Flaker Plant and DG set as mentioned below:
<table>
<tr><th>Sr. no.</th><th>Stack / Vent attached to</th><th>Type & Quantity of Fuel</th><th>Height of the Stack/ Vent (m)</th><th>Expected Emission</th><th>Air Pollution Control Measures</th></tr>
<tr><td colspan="6">EXISTING Flue Gas Emission</td></tr>
<tr><td>1</td><td>Boiler 1 & 2</td><td rowspan="2">Coal [100 MT/hr]</td><td>125</td><td>PM SO2 NO2</td><td>ESP and Low NOx Burners</td></tr>
<tr><td>2</td><td>Boiler 3 & 4</td><td>125</td><td>PM SO2 NO2</td><td>ESP and Low NOx Burners</td></tr>
<tr><td>3</td><td>Boiler -5 (175 TPH)</td><td>Coal [29.16 MT/hr]</td><td>125</td><td>PM SO2 NO2</td><td>ESP and Low NOx Burners</td></tr>
<tr><td>4</td><td>D.G. Sets (1875 KVA x 2)</td><td>HSD [400 lit/hr. each]</td><td>36</td><td>PM SO2 NO2</td><td rowspan="3">NA</td></tr>
<tr><td>5</td><td>D.G. Sets (750 KVA x 3)</td><td>HSD[200 lit/hr. each]</td><td>11</td><td>PM SO2 NO2</td></tr>
<tr><td>6</td><td>D.G. Sets (1875 KVA x 2)</td><td>HSD[400 lit/hr. each]</td><td>31</td><td>PM SO2 NO2</td></tr>
<tr><td colspan="6">PROPOSED Flue Gas Emission</td></tr>
<tr><td>1</td><td>Boiler -6 (250 TPH)</td><td>Coal [42 MT/hr]</td><td>125</td><td>PM SO2 NO2</td><td>ESP and Low NOx Burners</td></tr>
<tr><td>2</td><td>D.G. Sets (1875 KVA x 1)</td><td>HSD (400 lit/hr. each]</td><td>36</td><td>PM SO2 NO2</td><td>NA</td></tr>
<tr><td>3</td><td>Flaker Plant</td><td>Hydrogen [447.1 kg/hr.]</td><td>40</td><td>PM SO2 NO2</td><td>NA</td></tr>
</table>
</td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td>36</td><td>Unit shall provide adequate APCM with flue gas generation sources as mentioned above:</td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
<tr><td>37</td><td>Unit shall provide adequate APCM with process gas generation sources as mentioned below:
<table>
<tr><th colspan="6">EXISTING Process Gas Emission</th></tr>
<tr><td>1</td><td>Sodium Hypo Stack 1 (Caustic Plant)</td><td>--</td><td>35</td><td>Cl_2</td><td>Alkali Scrubber</td></tr>
<tr><td>2</td><td>HCI stack 1 (Caustic Plant)</td><td>--</td><td>35</td><td rowspan="2">HCI</td><td rowspan="2">Water scrubber having bubble cap tray absorption system.</td></tr>
<tr><td>3</td><td>HCI stack 2 (Caustic Plant)</td><td>--</td><td>35</td></tr>
<tr><td>4</td><td>Poly Aluminium Chloride Plant</td><td></td><td>35</td><td>HCI Cl_2</td><td>Water scrubber system</td></tr>
<tr><td>5</td><td>Chlorinated Paraffin plant</td><td>--</td><td>35</td><td>HCI Cl_2</td><td>Alkali scrubbing system</td></tr>
<tr><td>6</td><td>Aluminium Chloride</td><td>--</td><td>35</td><td>HCI Cl_2</td><td>Alkali scrubbing system</td></tr>
<tr><td>7</td><td>Stable Bleaching Powder</td><td>--</td><td>35</td><td>HCI Cl_2</td><td>Alkali scrubbing system</td></tr>
<tr><td>8</td><td>Sodium Hypo stack 2 (Caustic Plant)</td><td>--</td><td>35</td><td>Cl_2</td><td>Alkali Scrubber</td></tr>
<tr><td>9</td><td>HCI stack 3 (Caustic Plant)</td><td>--</td><td>35</td><td rowspan="2">HCI</td><td rowspan="2">Water scrubber having bubble cap tray absorption system.</td></tr>
<tr><td>10</td><td>HCI stack 4 (Caustic Plant)</td><td>--</td><td>35</td></tr>
<tr><td>11</td><td>Poly Aluminium Chloride Liquid</td><td>--</td><td>35</td><td rowspan="2">HCI Cl_2</td><td>Water scrubber system</td></tr>
<tr><td>12</td><td>Poly Aluminium Chloride Powder</td><td>--</td><td>35</td><td>3 stage water scrubber system</td></tr>
<tr><td>13</td><td>Chlorinated Paraffin plant</td><td>--</td><td>35</td><td>HCI Cl_2</td><td>Alkali scrubbing system</td></tr>
<tr><td>14</td><td>Aluminium Chloride</td><td>--</td><td>35</td><td>HCI Cl_2</td><td>Alkali scrubbing system</td></tr>
<tr><td>15</td><td>Stable Bleaching Powder</td><td>--</td><td>35</td><td>HCI Cl_2</td><td>Alkali scrubbing system</td></tr>
<tr><th colspan="6">Proposed</th></tr>
<tr><td colspan="6">Not any</td></tr>
</table></td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
<tr><td>38</td><td>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.</td><td rowspan="4">• Unit shall comply with the condition after commissioning of proposed project</td></tr>
<tr><td>39</td><td>Internal roads shall be either concreted or asphalted or reduce the fugitive emission during vehicular movement.</td></tr>
<tr><td>40</td><td>Air borne dust shall be controlled with water sprinklers locations in the plant.</td></tr>
<tr><td>41</td><td>A green belt shall be developed all around the plant boundary and also along to mitigate fugitive & transport dust emission.</td></tr>
<tr><td>42</td><td>Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.</td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
<tr><td>43</td><td>Regular monitoring of ground level concentration of PM10, PM2.5, SO2, NOx, Cl2 and VOCs shall be carried out in the GPCB. If at any stage these levels are found to exceed the</td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
</table>

<table>
<tr><th>Sr. No.</th><th>EC Conditions</th><th>Compliance Status</th></tr>
<tr><td></td><td>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.</td><td></td></tr>
<tr><td>A.4</td><td colspan="2">SOLID/ HAZARDOUS WASTE:</td></tr>
<tr><td>44</td><td colspan="2">All the hazardous waste management shall be taken care as mentioned below:
<table>
<tr><th rowspan="2">Sr. no.</th><th rowspan="2">Type/ Name of Hazardous waste</th><th rowspan="2">Specific Source of generation (Name of the Activity, Product etc.)</th><th rowspan="2">Category and Schedule as per HW Product Rules.</th><th colspan="3">Quantity (MT/Annum)</th><th rowspan="2">Management of HW</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>1</td><td>ETP Sludge</td><td>ETP</td><td>35.3</td><td>1524.50 MT</td><td>2557 MT</td><td>4081.5 MT</td><td>Will be collected stored, transported & Disposed at authorized TSDF site.</td></tr>
<tr><td>2</td><td>Spent Resin</td><td>From Chlor Alkali Plant</td><td>35.2</td><td>0.42 MT</td><td>0.33 MT</td><td>0.75 MT</td><td>Will be collected stored, transported & Disposed at designated CHWIF site.</td></tr>
<tr><td>3</td><td>Spent Carbon</td><td>From Chlor Alkali Plant</td><td>36.2</td><td>0.33 MT</td><td>0.07 MT</td><td>0.40 MT</td><td>Will be collected stored, transported & Disposed at designated CHWIF site.</td></tr>
<tr><td>4</td><td>Used Oil</td><td>From lubrication or D.G. set</td><td>5.1</td><td>128 KL</td><td>100 KL</td><td>228 KL</td><td>Will be collected, stored and sold to authorized recycler.</td></tr>
<tr><td>5</td><td>Discarded Containers</td><td>From Manufacturing</td><td>33.1</td><td>1680 Nos.</td><td>318 Nos.</td><td>1998 Nos.</td><td rowspan="2">Will be collected decontamination, stored and reused/sold to authorized recycler.</td></tr>
<tr><td>6</td><td>Discarded bags/ Liners</td><td>From Manufacturing</td><td>33.1</td><td>41.8 MT</td><td>54.2 MT</td><td>96 MT</td></tr>
</table></td><td>• Unit shall comply with the condition after commissioning of proposed project</td></tr>
</table>

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 **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 | 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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
A.5	**OTHER:**	

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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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 unit 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.	• 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.
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.	• Unit shall comply with the condition after commissioning of proposed project
B.	**GENERAL CONDITIONS :**	
B.1	**CONSTRUCTION PHASE**	
59	Water demand during construction shall be reduced by use of curing agents, super plasticizers and other best construction practices.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project

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.	• Unit shall comply with the condition before commissioning of proposed project
62	First Aid Box shall be made readily available in adequate quantity at all the times.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
66	Safe disposal of waste water and municipal solid wastes generated during the construction phase shall be ensured.	• Unit shall comply with the condition before commissioning of proposed project
67	All topsoil excavated during construction activity shall be used in horticultural/ landscape development within the project site.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
72	"No uncovered vehicles carrying construction material and waste shall be permitted."	• Unit shall comply with the condition before commissioning of proposed project
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."	• Unit shall comply with the condition before commissioning of proposed project

Sr. No.	EC Conditions	Compliance Status
74	Roads leading to or at construction site must be paved and blacktopped (i.e. – metallic roads).	• Unit shall comply with the condition before commissioning of proposed project
75	No excavation of soil shall be carried out without adequate dust mitigation measures in place.	• Unit shall comply with the condition before commissioning of proposed project
76	Dust mitigation measure shall be displayed prominently at the construction site for easy public viewing.	• Unit shall comply with the condition before commissioning of proposed project
77	Grinding and cutting of building materials in open area shall be prohibited.	• Unit shall comply with the condition before commissioning of proposed project
78	Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.	• Unit shall comply with the condition before commissioning of proposed project
79	Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site. (If applicable).	• Unit shall comply with the condition before commissioning of proposed project
B.2	**OPERATION PHASE:**	
B.2.1	**WATER:**	
80	The water meter shall be installed and records of daily and monthly water consumption shall be maintained.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
B.2.2	**AIR:**	
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
86	All the reactors/ vessels used in the manufacturing process shall be closed to reduce the fugitive emission.	• Unit shall comply with the condition after commissioning of proposed project

Sr. No.	EC Conditions	Compliance Status
B.2.3	**HAZARDOUS/ SOLID WASTE:**	
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
89	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF. (Whichever is applicable)	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
91	The design of the Trucks/ tankers shall be such that there is no spillage during transportation	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
B.2.4	**SAFETY:**	
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.	• Unit shall comply with the condition before commissioning of proposed project
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	• Unit shall comply with the condition before

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	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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition before commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
114	Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.	• Unit shall comply with the condition before commissioning of proposed project
B.2.5	**NOISE:**	
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 confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.	• Unit shall comply with the condition after commissioning of proposed project
B.2.6	**CLEANER PRODUCTION AND WASTE MINIMISATION:**	
116	The unit shall undertake the Cleaner Production Assessment study through a reputed institute/ organization and shall form a CP team in the company.	• Unit shall comply with the condition after commissioning of proposed project

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	The recommendations thereof along with the compliance shall be furnished to the GPCB.	
117	The company shall undertake various waste minimization measures such as :	• Unit shall comply with the condition after commissioning of proposed project
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.2.7	**GREEN BELT AND OTHER PLANTATION:**	
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.	• Unit shall comply with the condition after commissioning of proposed project
129	Drip irrigation/ low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.	• Unit shall comply with the condition after commissioning of proposed project
B.3	**OTHER CONDITION:**	
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.	• Unit shall comply with the condition after commissioning of proposed project
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.	• Unit shall comply with the condition after commissioning of proposed project
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

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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	

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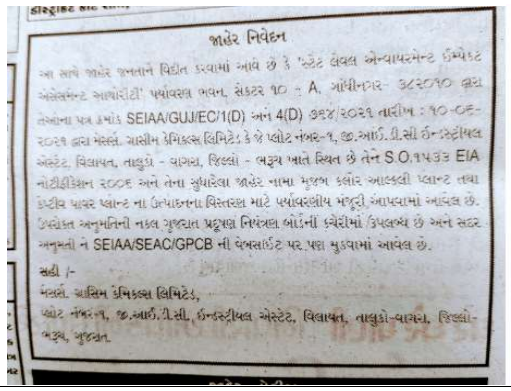
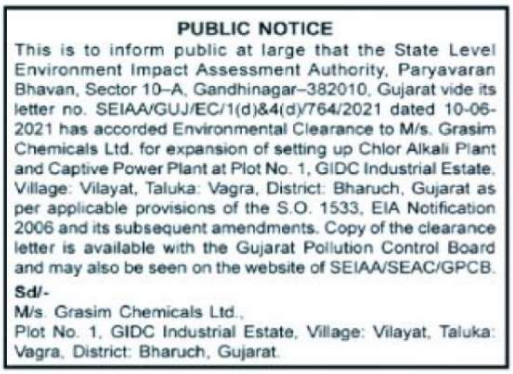
	and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	
	• Complied • 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. Name of Paper: Times of India Date of Issue: 15/06/2021 In: English language Name of Paper: Divya Bhaskar Date of Issue: 15/06/2021 In: Gujarati language  જાહેર નિવેદન આ સાથે જાહેર જનતાને વિદીત કરવામાં આવે છે કે 'સ્ટેટ લેવલ એન્વાયરમેન્ટ ઈમ્પેક્ટ એસેસમેન્ટ ઓથોરીટી' પર્યાવરણ ભવન, સેક્ટર ૧૦ - A, ગાંધીનગર- ૩૮૨૦૧૦ ખાતે તેમનાના પત્ર ક્રમાંક SEIAA/GUJ/EC/1(D) અને 4(D) ૭૬૪/૨૦૨૧ તારીખ : ૧૦-૦૬-૨૦૨૧ દ્વારા મેસર્સ. ગ્રાસીમ કેમિકલ્સ લિમિટેડ કે જે પ્લોટ નંબર-૧, જી.આઈ.ડી.સી ઈન્ડસ્ટ્રીયલ એસ્ટેટ, વિલાયત, તાલુકો - વાગરા, જિલ્લો - ભરૂચ ખાતે સ્થિત છે તેને S.O.૧૫૩૩ EIA નોટીફીકેશન ૨૦૦૬ અને તેના ત્યારપછીના જાહેર સામા મુજબ ક્લોર આલ્કલી પ્લાન્ટ તથા કેપ્ટીવ પાવર પ્લાન્ટ ના ઉત્પાદનના વિસ્તરણ માટે પર્યાવરણીય મંજૂરી આપવામાં આવેલ છે. ઉપરોક્ત મંજુરીની નકલ ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડની વેબસાઈટ પર પણ મુકવામાં આવેલ છે. સહી /- મેસર્સ. ગ્રાસિમ કેમિકલ્સ લિમિટેડ, પ્લોટ નંબર-૧, જી.આઈ.ડી.સી, ઈન્ડસ્ટ્રીયલ એસ્ટેટ, વિલાયત, તાલુકો-વાગરા, જિલ્લો-ભરૂચ, ગુજરાત.  **PUBLIC NOTICE** This is to inform public at large that the State Level Environment Impact Assessment Authority, Paryavaran Bhavan, Sector 10–A, Gandhinagar–382010, Gujarat vide its letter no. SEIAA/GUJ/EC/1(d)&4(d)/764/2021 dated 10-06-2021 has accorded Environmental Clearance to M/s. Grasim Chemicals Ltd. for expansion of setting up Chlor Alkali Plant and Captive Power Plant at Plot No. 1, GIDC Industrial Estate, Village: Vilayat, Taluka: Vagra, District: Bharuch, Gujarat as per applicable provisions of the S.O. 1533, EIA Notification 2006 and its subsequent amendments. Copy of the clearance letter is available with the Gujarat Pollution Control Board and may also be seen on the website of SEIAA/SEAC/GPCB. **Sd/-** M/s. Grasim Chemicals Ltd., Plot No. 1, GIDC Industrial Estate, Village: Vilayat, Taluka: Vagra, District: Bharuch, Gujarat.	
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.	• We are submitting half-yearly compliance report regularly
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.	• We shall comply with the condition after commissioning of the captive power plant project.
151	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	• We shall comply with the condition after commissioning of the project.
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.	• We shall comply with the condition after commissioning of the project.
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.	• We shall comply with the condition after commissioning of the project.
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 period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.	Noted

Sr. No.	EC Conditions	Compliance Status
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

R.G. SHAH
MEMBER SECRETARY
SEIAA (GUJARAT)

Government of Gujarat

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

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, CS2, 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 Nm3/Year (168000 Nm3/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 14th 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 Cl2 emission.
d. Sulphuric Acid Plant – DCDA system in manufacturing and scrubbing system.
e. Chlorosulphonic Acid Plant – Acid scrubber for absorption of SO3 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 CS2 plant. Thus, there shall be no CS2 & H2S emission from the CS2 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 SOx & 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 CS2, H2S, SO2, NOx, Cl2, HCl, PM10 and PM2.5 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, Handing 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, CS2, 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 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.

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:
    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.

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

R. G. SHAH
MEMBER SECRETARY
SEIAA (GUJARAT)

Government of Gujarat

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

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 (ElA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (ElA) 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 (ElA) 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

R. G. SHAH
MEMBER SECRETARY
SEIAA (GUJARAT)

Government of Gujarat

STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT
AUTHORITY
GUJARAT

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 (ElA) 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

N.K. PATEL
MEMBER SECRETARY
SEIAA (GUJARAT)

Government of Gujarat

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

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
Chloromethanes			
1	Methyl Chloride	Produced as 1st 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
FATTY ALCOHOLS			
A) FATTY ALCOHOLMANUFACTURING PLANT			
6	Fatty Alcohol	2700	--
7	Crude Alcohol Refining (Light)	--	25
8	Crude Alcohol Refining (Heavies)	--	144
B) FATTY ALCOHOL FRACTINATION PLANT			
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 14th 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 NOx, HCl & Cl_2.
    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 pro 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_2 & NOx 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_2, H_2S, SO_2, NOx, Cl_2, HCl, PM_{10} and $PM_{2.5}$ 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, Handing 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 confirm 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

G. J. DAVE
MEMBER SECRETARY
SEIAA (GUJARAT)

सत्यमेव जयते

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/5(f)&4(d)/642/2016

Date: 29 OCT 2016 By R P A D

Time Limit

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(f)&4(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIA/GJ/IND2/12124/2015 and File No. SIA/GJ/70505/2016.

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(f)&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	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 (Nm^3)	40880000 (Nm^3)	102200000 (Nm^3)
7	Liquid Chlorine / Sodium Hypochlorite Hydrochloric Acid	197100	131400	328500

The project activity is covered in 5(f)&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) (III) (i) (b) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated **18/10/2016** 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 14th September, 2006 subject to the compliance of the following conditions.

A. CONDITIONS :

A. 1 SPECIFIC CONDITION :

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

A. 2 WATER :

2. Total water requirement after proposed expansion shall not 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.
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 treatment plants.

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

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.

A. 3 AIR:

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 Aluminum Chloride Liquid – Water scrubber system for control of HCl & Cl2.
    e. Poly Aluminum 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.

A. 4 SOLID / HAZARDOUS WASTE:

26. 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,

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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, Brine/ 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 CHWIF.
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/CHWIF.

A. 5 SAFETY:

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 repot.
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.

A. 6 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 confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

A. 7 ENERGY CONSERVATION:

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

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Gujarat Pollution Control Board,
"Paryavaran Bhawan"
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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.

A. 7 CLEANER PRODUCTION AND WASTE MINIMISATION:

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.

A. 8 GREEN BELT AND OTHER PLANTATION:

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.

B. 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 29/06/2016 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 garland 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 Other Wastes (Management and Transboundary Movement) Rules 2016 and the Public Liability Insurance Act, 1991

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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 16 of the National Green Tribunal Act, 2010.

With regards,
Yours sincerely,

(G. J. DAVE)
Member Secretary

Issued to:
Mr. Ashu Pareek,,
M/s. Grasim Industries Limited.
Skyline Building,
3rd floor, Nr. Shital Guest House,
Old NH-8, Bharuch-392002

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

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

(G. J. DAVE)
Member Secretary

S. M. SAIYAD, IFS
MEMBER SECRETARY
SEIAA (GUJARAT)

सत्यमेव जयते

STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT
AUTHORITY
GUJARAT

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. SIA/GJ/THE/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)	96 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 14th 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. 826 (E) dated 16th 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 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.
9. 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 6505 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.

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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)
	Existing					
1.	Boiler 1 & 2 (2 x 175 TPH)	125	Coal	100 MT/hr	SPM, SO_2, NOx	ESP and Low NOx burners
2.	Boiler 3 & 4 (2 x 175 TPH)	125			SPM, SO_2, NOx	ESP and Low NOx burners
	Proposed					
3.	Boiler-5 (175 TPH)	125	Coal	29.16MT/hr	SPM, SO_2, NOx	ESP and Low NOx 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. 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.
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 SO2 and it shall be ensured that SO2 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 SOx, NOx 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 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.

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.
43. ETP waste & spent resin shall be disposed off to authorized TSDF site.
44. Used oil shall be sold to only to the registered recyclers / rerefiners.
45. Discarded containers / barrels / bags / liners shall be sold only to the authorized registered recycler.
46. For storage of fly ash, closed silos of adequate capacity shall be provided. No ash pond shall be constructed in the project.
47. 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.
48. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.
49. 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 Import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals.
51. 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.
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 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.

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.III dated 09/08/2018.
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 vigorously.
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-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.
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 MoEFCC's O.M. No. 22-65/2017-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.

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 withdrawal 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:
M/s. Grasim Industries Ltd.,
Plot No. -1, GIDC Industrial Estate,
P.O. Vilayat, Ta.: Vagra, Dist.: Bharuch

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

सत्यमेव जयते

Government of Gujarat

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY 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, Vill: Vilayat, 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. SIA/GJ/IND2/12124/2016.

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, Vill: Vilayat, 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.	Caustic Soda Lye	1310-73-2	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, mining, glass making and others.
2.	Hydrogen	1333-74-0	8516666.67 (Nm^3)	3406666.67 (Nm^3)	11923333.33 (Nm^3)	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

SEIAA

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 Agrochemical s, Pigments and Dyes, Pharma, Coating Industries
5.	Sodium Sulphate	7757-82-6	0	222.67	222.67	Sodium sulfat e 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(ii) of the Environment Impact Assessment Notification-2006.

The SEAC, Gujarat vide their letter dated **03/05/2021** had 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.

A.CONDITIONS :

A.1SPECIFIC CONDITION :

1. All the issues raised in the earlier public hearing dated 21.08.2018 shall be comprehensively addressed / complied with in a time bound manner.
2. Total Sulphur content of fuel use in CPP shall not exceed 0.8% at any point of time.
3. Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.
4. Unit shall comply Coal Handling Guidelines published by GPCB.
5. 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.
6. Unit shall install CEMS **[Continuous Emission Monitoring System]** in line to CPCB directions to all SPCB vide letter no. B-29016/04/06PCI-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].**
7. PP shall pursue health check-ups of the workers on regular basis and shall provide adequate personal protective equipments.
8. 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.
9. Transportation route for vehicles carrying Fly Ash and Coal shall have least minimum pass near human habitation.
10. Sulfur and ash content of the fuel to be used shall be analyzed and its record shall be maintained.
11. 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. 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.
12. 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.
13. 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 SO2 and it shall be ensured that SO2 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.

A-2 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, 600 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 686 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.

A-3 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
EXISTING Flue Gas Emission					
1.	Boiler 1 & 2	Coal [100 MT/hr]	125	PM SO_2 NO_2	ESP and Low NOx Burners
2.	Boiler 3 & 4		125	PM SO_2 NO_2	ESP and Low NOx Burners
3.	Boiler-5 (175 TPH)	Coal [29.16 MT/hr]	125	PM SO_2 NO_2	ESP and Low NOx Burners

4.	D.G. Sets (1875 KVA x 2)	HSD [400 lit/hr. each]	36	PM SO_2 NO_2	NA
.5.	D.G. Sets (750 KVA x 3)	HSD [200 lit/hr. each]	11	PM SO_2 NO_2	
6.	D.G. Sets (1875 KVA x 2)	HSD [400 lit/hr. each]	31	PM SO_2 NO_2	
PROPOSED Flue Gas Emission					
1.	Boiler -6 (250 TPH)	Coal [42 MT/hr]	125	PM SO_2 NO_2	ESP and Low NOx Burners
2.	D.G. Sets (1875 KVA x 1)	HSD [400 lit/hr. each]	36	PM SO_2 NO_2	NA
3.	Flaker Plant	Hydrogen [447.1 kg/hr.]	40	PM SO_2 NO_2	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_2	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_2	Water scrubber system
5.	Chlorinated Paraffin Plant	--	35	HCl Cl_2	Alkali scrubbing system
6.	Aluminum Chloride	--	35	HCl Cl_2	Alkali scrubbing system
7.	Stable Bleaching Powder	--	35	HCl Cl_2	Alkali scrubbing system
8.	Sodium Hypo Stack 2 (Caustic Plant)	--	35	Cl2	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_2	3 stage Water scrubber system
13.	Chlorinated Paraffin Plant	--	35	HCl Cl_2	Alkali scrubbing system
14.	Aluminum Chloride	--	35	HCl Cl_2	Alkali scrubbing system
15.	Stable Bleaching Powder	--	35	HCl Cl_2	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	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	
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	139302 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 CHWIF & 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. 5OTHER:

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 30.09.2020. 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.
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 neighbouring 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 piling 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).

B.2 OPERATION PHASE:

B.2.1 WATER:

71. The water meter shall be installed and records of daily and monthly water consumption shall be maintained.
72. 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.

B.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 & 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.
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.

B.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 TSDF site and CHWIF. (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 TSDF/CHWIF.
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.

B.2.4 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 (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.
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 controls 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.

B.2.5 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 confirm to the standards prescribed under The Environment (Protection) Act, 1986 & Rules.

B.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 by-products from the process as raw materials or as raw materials substitutes.
    c. Use of automated and close filling 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 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.
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 MoEFCC'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 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.
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 garland 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 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.
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

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

State Level Environment Impact Assessment Authority SEIAA Gujarat

भारत सरकार /Government of India
वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन /Petroleum & Explosives Safety Organisation (PESO)
आंठवी मंजिल, यश कमल बिल्डींग, 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 .

30th September 2032 तक विधिमान्य 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 30th 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 नही 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 30th September, **2032**) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30th September, **2032** but not later than 30th 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 30th 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

Note:-This is system generated document does not require physical signature.

Disclaimer : This page gives the latest action taken by this organization on your application. This page is made available for the information of concerned applicant/licensee only. All efforts have been made to secure this information. However, PESO will not be responsible for any misuse of the information by unauthorized persons including the hackers.

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 बिल्डींग, सयाजी गंज
वडोदरा- 390020
8th Floor, Yash Kamal Building, Sayajigunj,
Vadodara - 390020

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

संख्या /No. : P/WB/GJ/15/5600 (P451445)

दिनांक /Dated : 05/10/2021

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

05 OCT 2021

विषय /Sub : 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 में पेट्रोलियम वर्ग A का अधिष्ठापन -अनुज्ञप्ति जारी करने के बारे में ।

Petroleum Class A Installation 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 Grant of License** regarding.

महोदय /Sir (s),

कृपया आपके पत्र क्रमांक nil दिनांक 05/10/2021 का अवलोकन करें ।

Please refer to your letter No. nil dated **05/10/2021**

विषयान्तर्गत अधिष्ठापन में निम्नलिखित पेट्रोलियम पदार्थों के वर्ग तथा मात्रा के भंडारण के लिए पेट्रोलियम नियम, 2002 के अधीन प्ररूप - XV में स्वीकृत, दिनांक **31/12/2025** तक वैध अनुज्ञप्ति संख्या P/WB/GJ/15/5600 (P451445) दिनांक 05/10/2021 भेजी जा रही है ।

Licence No. **P/WB/GJ/15/5600 (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	किलोलीटर्स में अनुज्ञप्त क्षमता /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 भिन्ना /Petroleum Class C,otherwise than in bulk	**NIL**
कुल क्षमता /Total Capacity	**1570.00 KL**

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कडाई से पालन करें और अनुज्ञप्ति के नवीकरण हेतु समस्त दस्तावेजों को अनुज्ञप्ति की वैधता समाप्ती की तारीख या उससे पूर्व **Jt. Chief Controller of Explosives, Vadodara** को प्रेषित करें ।

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 अनुमोदन/ अनुमति अन्य प्राधिकारियो से आवश्यक अनुमति/क्लीयरन्स प्राप्त करने से या यथा लागू अन्य विधियों से छूट नही देती है ।

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

भवदीय /Yours faithfully,

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

Copy forwarded to :-
1. The District Magistrate & Collector, BHARUCH(Gujarat) with reference to his NOC No MAG/NOC/WS/9073/9087/9531/2021 Dated 31/08/2021

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

अनुज्ञप्ति सं. (Licence No.) : **P/WB/GJ/15/5600(P451445)** फीस रुपए (Fee Rs.) **50000**/- per year

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 विनिर्दिष्टु वर्ग और मात्राओं 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 हैं, 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 हैं ।

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 अनुज्ञप्ति 31st day of December **2025** तक प्रवृत रहेगी ।
The Licence shall remain in force till the 31st day of December **2025**

पेट्रोलियम का विवरण /Description of Petroleum	अनुज्ञप्त मात्रा (किलोलीटरों 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, Vadodara
संयुक्त मुख्य विस्फोटक नियंत्रक, वडोदरा
Joint Chief Controller of Explosives, Vadodara

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

अनुज्ञप्त परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टयां 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 |

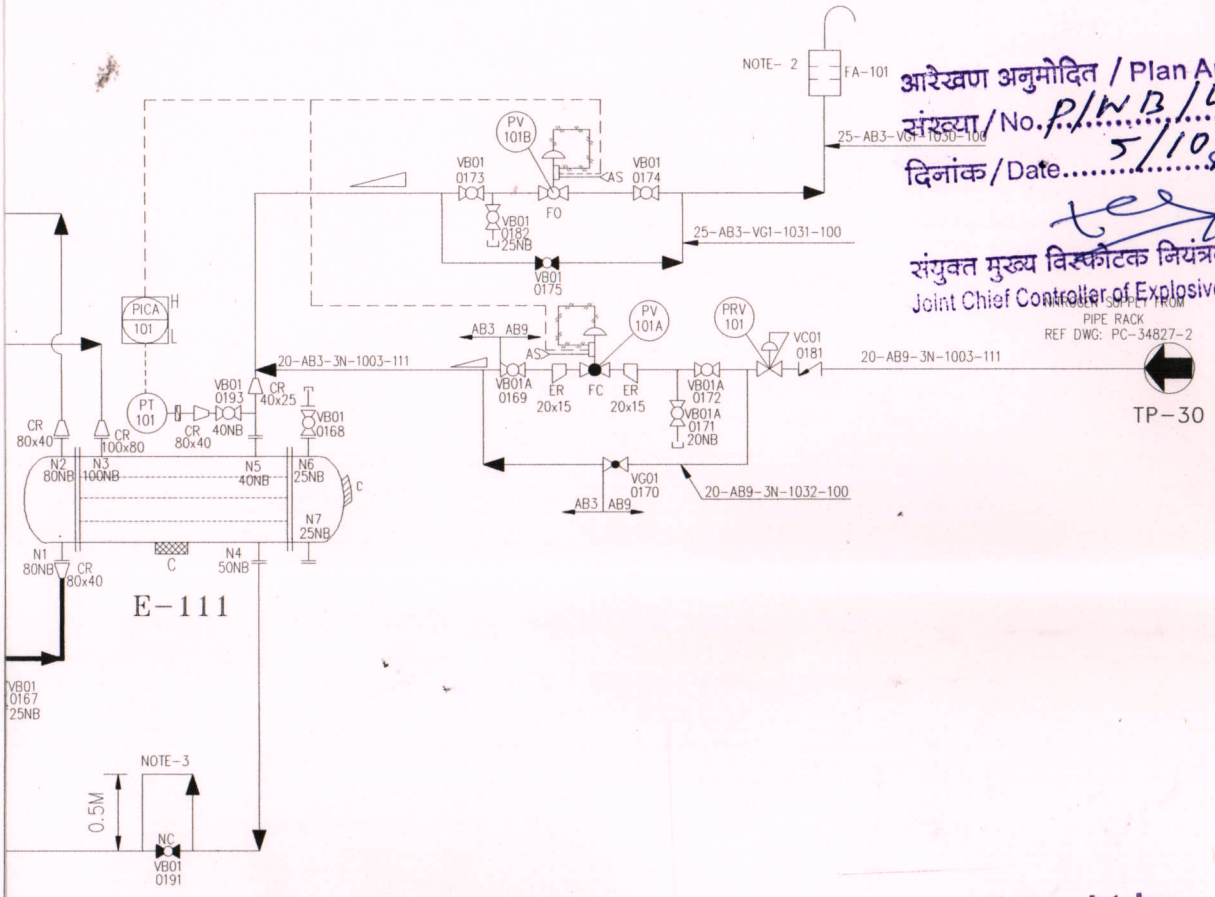
The licensed premises, the layout , boundaries and other particulars of which are shown in the attached approved plan are situated at **Plot No: Plot No.1, Plot No.1, G.I.D.C Estate, Village Vilayat, Tahsil Vagra, Dist. Bharuch 392012 (Gujarat), India, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, 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

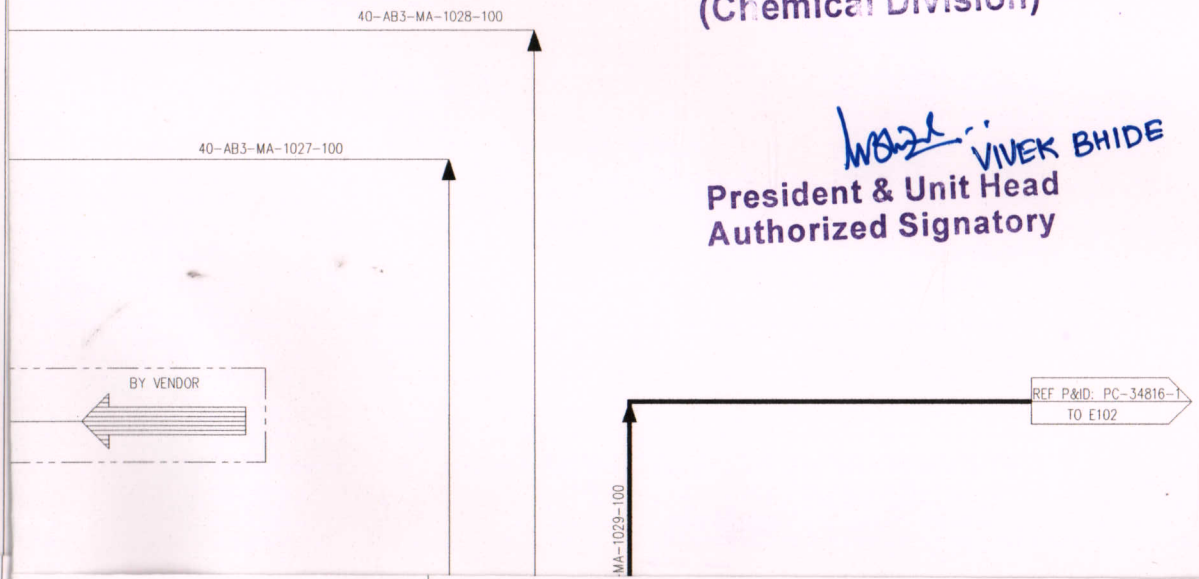
आरेखण अनुमोदित / Plan Approved
संख्या / No. P/WB/43/15/5600
दिनांक / Date 5/10/2021

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



For Grasim Industries Ltd.
(Chemical Division)

VIVEK BHIDE
President & Unit Head
Authorized Signatory



VED FOR CONSTRUCTION

OMMENTS INCORPORATED & MARKED AS 2	S.F	RVK
OMMENTS INCORPORATED & MARKED AS 1	AB	RVK
PRELIMINARY ISSUE	S.G	GSS
DESCRIPTION	BY.	CHD.

Protech Consultants Pvt. Ltd.,
OFFICE: 173 T.T.K ROAD ALWARPET CHENNAI-600 018

CLIENT : GRASIM INDUSTRIES LIMITED, VILAYAT, BHARUCH (GUJRAT)
PROJECT : HYDROCHLORINATION
ADITYA BIRLA GROUP

TITLE :

P&ID FOR METHANOL STORAGE & HANDLING

	NAME	DATE
DGN.	PCPL	18.01.2019
DRN.	S.GANESAN	18.01.2019
CHD.	GSS	24.01.2019
APPD.	NRP	24.01.2019

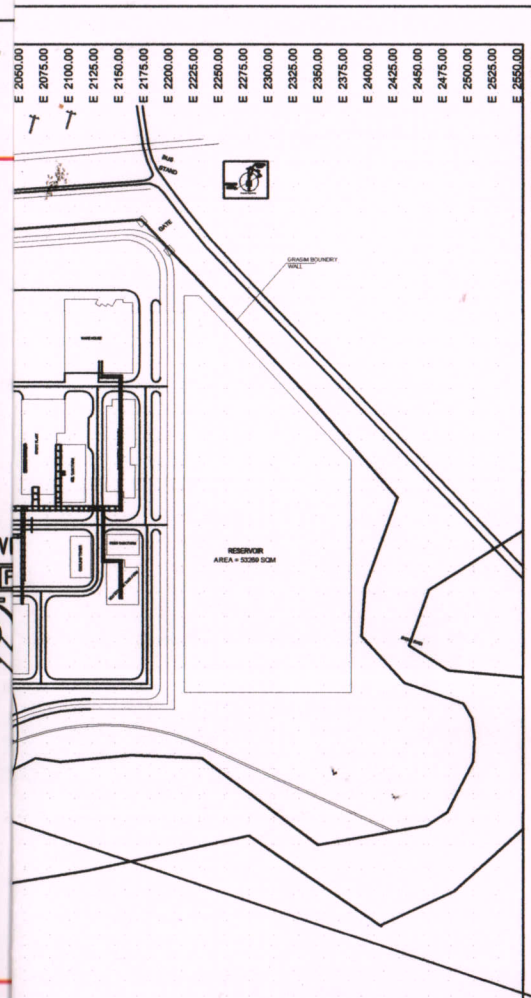
SCALE : NTS JOB NO.: 517

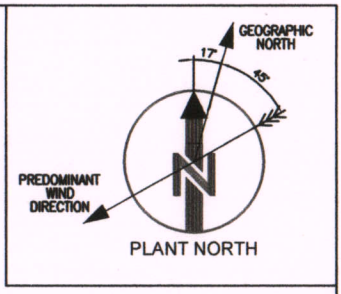
CIVIL	STRUCT.	MECH	PROCESS	ELE.	INS.
			✓		

DRAWING No. PC-34815-1 REV.NO. 2

A1 SIZE: 841mm x 594mm

Z:\Drawings\GRASIM-HYDRO CHLORINATION\1. PROCESS\2.P&ID\PC-34815-1 R2 (P&ID FOR METHANOL STORAGE & HANDLING).dwg





P 451445

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

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

GRASIM BOUNDARY WALL

REFER DWG: PC-35158-1

PARTIAL PLOT PLAN FOR BLOWN UP VIEW (SCALE 1:600)

000m = RL EL+12.500

1.000m = RL EL+11.500

DESCRIPTION	BY.	CHD.
S PER PESO COMMENT	RP/PP	DM
	RP/PP	DM
E-MAIL DATED 26.09.19) INCORPORATED AND REVISION MARKED AS 3	MKK	SP
(VIDE Lr. APPROVAL No. NA (P451445) Dt.27.08.19) INCORPORATED.	MKK	SP
OMMENTS (VIDE E-MAIL DATED 10.06.19) INCORPORATED.	MKK	SP

ASIM INDUSTRIES LIMITED.

L DIVISION, VILAYAT, PLOT 1, GIDC VILAYAT INDUSTRIAL ESTATE,

YAT, TALUK: VAGRA, BHARUCH-392130, GUJARAT-INDIA.

NGEMENT FOR
TALLATION OF
TANK - (2 x 826.6 KL)
M CLASS-A)

	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

A1 SIZE: 841mm x 594mm

RO CHLORINATION\2. MECH\PESO\PC-35157-1 R3 METHANOL STORAGE-PESO LAYOUT.dwg

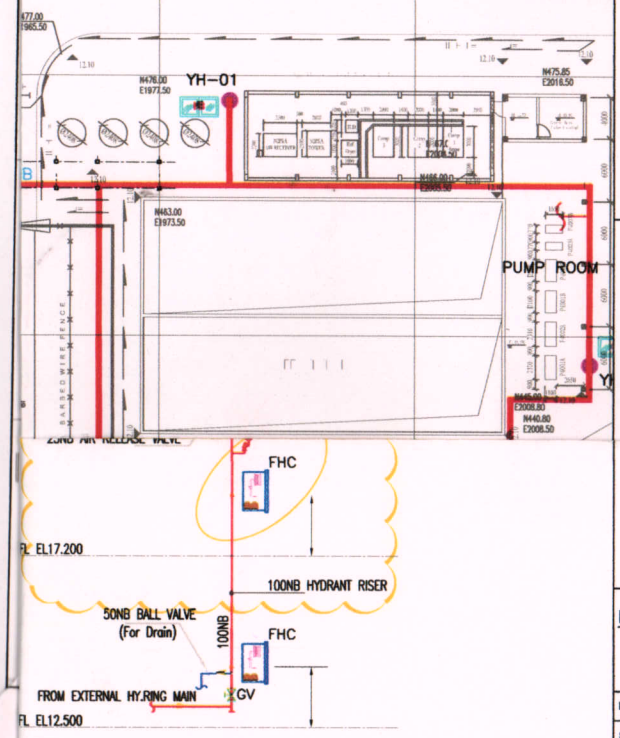
GRASIM INDUSTRIES LTD.
CHEMICAL DIVISION
AUTHORISED SIGNATORY

P 451445

आरेखण अनुमोदित / Plan Approved
संख्या / No. P/W13/GJ/15/5600
दिनांक / Date 5-10-20

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

KEYPLAN:



COMPREHENSIVE BUILDING HYDRANT NO. 11&12

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:13039.
3. PIPE SHALL BE MS PIPES COMPLYING TO IS:1239 PART–1, HEAVY (UPTO 150NB) CLASS AND IS:3589 FE410(FOR 250NB & ABOVE) AND ASME B16.11(FOE 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.

FIRE LEGEND:–

SL.NO.	SYMBOL	DESCRIPTION
01.	——	250NB HYDRANT PIPE (MS 'C' CLASS PIPE)
02.	——	150NB HYDRANT PIPE (MS 'C' CLASS PIPE)
03.	——	100NB HYDRANT PIPE (MS 'C' CLASS PIPE)

CRESCON PROJECTS & SERVICES PVT LTD
Gulecha Towers,No:158,3rd Floor, Arcot Road
Vadapalani
Chennai - 26
TEL : 044 - 23664945, Email : design@candeo.co.in

DRAWING TITLE :-

EXTERNAL FIRE HYDRANT SYSTEM LAYOUT

DRAWN :- VENKATESH	CHECKED :- ALAGARSAMY	APPROVED :- A.P.K.N
SIGN :-	SIGN :-	SIGN :-
SCALE :- 1:500		
SHOP DWG NO. CPS-GRA-FPS-001		Rev. R5
SHEET NO. 01	CON'T. ON END	Size. A1

NOZZ. PROJ.	R.F. PAD ODxIDxTHK.	REMARKS
	180x90x10THK.	WITH DIP PIPE
	217x117x10THK.	AS SHOWN
	--	AS SHOWN
	180x90x10THK.	
	180x90x10THK.	
	180x90x10THK.	
	--	WITH DIP PIPE
	--	
150	217x117x10THK.	
	180x90x10THK.	WITH DIP PIPE
	180x90x10THK.	
	180x90x10THK.	WITH B/F
	--	
	--	AS SHOWN
	--	
	180x90x10THK.	
300	913x613x10THK.	WITH COVER AND DAVIT
	913x613x10THK.	DELETED 5

13000 TANK HEIGHT

DESIGN DATA

DESIGN CODE		API 620 ED. 2013
TAG NO.		TK-101 A/B
MEDIUM		METHYL ALCOHOL (METHANOL)
SP.GRAVITY		0.787
PRESSURE. (mmWC)	OP.	1500
	DES.	(-)150 ~~-2000~~
	TEST	FULL OF WATER
TEMP. °C	OP.	30 / 50
	DES.	70
CORR. ALL.mm.		3.0
RADIOGRAPHY		SHELL : SPOT + ALL 'T' JOINTS
		BOTTOM : FULL
JT. EFFICIENCY		SHELL : 0.85 / BOTTOM : 1.0
STRESS RELEIVING		NIL
VOLUME M^3		ACTUAL : 826.6 / NORMAL : 763
Wt. EMPTY Kg.		~ 41015
Wt. OF INT. Kg		-
OP. WEIGHT Kg.		~ 689615
TEST WEIGHT Kg.		~ 865160
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 III
	SEISMIC COEFFICIENT : AS PER IS:1893

MATERIALS

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
M/H DAVIT (HINGES		IS:2062 Gr. E250 A

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

P45/445

आरेखण अनुमोदित / Plan Approved
संदर्भ / No. P/WB/42/15/5600
दिनांक / Date 5-10-2021

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

OFFICE: 173, T.T.K ROAD ALWARPET MADRAS-600 018

MANUFACTURER :-

KAYPEE

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/TPI
SCALE	NTS	PROJECT : HYDROCHLORINATION	
QTY.	2 Nos.	REF.PO 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

DETAIL ENGINEERING:- KALKANCUTECH ENGINEERING

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 बिल्डींग, 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 herwith.

दिनांक 30/09/**2027** . से आगे अनुज्ञप्ति नवीनीकरण हेतु उपरोक्त नियम के नियम 55 के प्रावधानों का पालन किया जाएं । 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)

Note:-This is system generated document does not require physical signature.

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

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

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

दि/Dated : 07/10/2019

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, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin : 999999में सिलण्डररों में CHLORINE गैस का भरण-एवं भण्डा5रण गोडाउन- गैस सिलेण्ड,र्स नियम, 2016 के अंतर्गत फार्म 'इ' एवं 'एफ' में जारी अनुज्ञप्ति सं. G/HO/GJ/05/733 & G/HO/GJ/06/724(G31658) नवीकरण के बारे में / Filling of CHLORINE and Storage of CHLORINE at Plot No, 1& 2 Survey No 357 Paiky, GIDC Industrial Estate Taluka Vagra, VILAYAT, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin : 999999 Licence No. G/HO/GJ/05/733 & G/HO/GJ/06/724(G31658) granted in Form E & F of Gas Cylinders Rules, 2016 - Renewal regarding

महोदय/Sir (s),

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

अनुज्ञप्ति संख्या G/HO/GJ/05/733 & G/HO/GJ/06/724 30th Septemebr, 2028 तक नवीनीकृत कर भेजी जा रही है / Licence Number: G/HO/GJ/05/733 & G/HO/GJ/06/724 is renewed and valid upto 30th Septemebr, 2028 is forwarded herewith.

कृपया नोट करें कि गैस सिलेण्डर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञप्ति के पुनः नवीकरण हेतु आवेदन The Dy. Chief Controller of Explosives, Vadodara इस कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर2028 को या इससे पूर्व) जमा कर दें । दिनांक 30 सितम्बर 2028 के पश्चात परंतु दिनांक 30 सितम्बर 2029 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलेण्डर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा । दिनांक 30 सितम्बर 2029 तक कोई नवीनीकरण आवेदन प्राप्त नही 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 the The Dy. Chief Controller of Explosives, Vadodara before the licence expires (i.e. on or before 30th Septemebr, 2028) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30th Septemebr, 2028 but not later than 30th 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 30th 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,

((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)

फार्म ई /FORM E

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

सिलेंडरों में संपीड़ित गैस भरने के लिए अनुज्ञप्ति / Licence to fill compressed gas in cylinders

अनुज्ञप्ति संख्यास/ Licence No. : **G/HO/GJ/05/733(G31658)** वार्षिक शुल्का रू/ Fee Rs.**5000/-** per year

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 अनुज्ञप्त परिसर में भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों के उपबंधों तथा इस अनुज्ञप्ति की अन्य शर्तों के अधीन रहते हुए, केवल संपीड़ित गैस से भरे सिलेण्डरों को रखने के लिए ही विधिमान्य अनुज्ञप्ति 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 अनुज्ञप्ति 30 सितम्बर **2028** तक प्रवृत्त रहेगी । / The Licence shall remain in force till the **30th September 2028.**

For Chief Controller of Explosives
Nagpur
कृते मुख्य विस्फोटक नियंत्रक
नागपुर

March 13, 2013

1)Amendment dated - 18/09/2018

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

निम्नलिखित विवरण के अनुसार सिलेण्डरों में गैस भरने के लिए अनुज्ञप्त परिसर, जिसकी अभिन्यास 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 जोडे गए **CHLORINE - 28 Nos. (2x9+10)** फिलिंग पॉइन्ट्स है । / 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 fecilities 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)	गैर विषैले और गैर ज्वलनशील /Non-Toxic and Non Flammable	--NIL--
c)	गैर विषैले और ज्वलनशील /Non-Toxic and Flammable	--NIL--
d)	घुलित एसिटिलीन गैस /Dissolved Acetylene Gas	--NIL--
e)	एलपीजी के अलावा गैर विषैले और ज्वलनशील द्रवित गैस /Non-Toxic & Flammable liquefiable gas other than LPG	--NIL--
f)	एलपीजी/ Liquefied Pertoleum Gas	--NIL--

और प्लाट 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 पृष्ठांकन के लिए स्थान / SPACE FOR ENDORSEMENT OF RENEWALS

	नवीकरण की तारीख/Date of Renewal	समाप्ति की तारीख/Date of Expiry	अनुज्ञप्ति प्राधिकारी के हस्ताक्षर/Signature and stamp of the licensing authority
इस अनुज्ञप्ति को, विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए गैस सिलेण्डर नियम, 2016 के उपबंधों या इस अनुज्ञप्ति 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** उप मुख्य विस्फोटक नियंत्रक, वडोदरा Dy. Chief Controller of Explosives, Vadodara

यदि अनुज्ञप्त परिसर इससे उपाबद्ध विवरण और शर्तों के अनुरुप नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति दी गई है, उनमे से किसी का उल्लंघन होता है तो यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्ति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकेगी, या जुर्माने से, जो तीन हजार रुपये तक का हो सकेगा, 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 rupees or with both.

अनुज्ञप्ति की शर्त संख्या 8 में निहित कुछ भी होते हुए, सूर्यास्त और सूर्योदय के भीतर, 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.

फार्म फ /FORM F
नियम 50,51 और 54 देखें /(See Rules 50, 51 and 54)
Licence to store compressed gas in cylinders

अनुज्ञप्ति संख्या/ Licence No. : G/HO/GJ/06/724(G31658)

वार्षिक शुल्का रू/Fee Rs. 12000/- per year

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/06/724(G31658) dated 13/03/2013 में दर्शित किए गए अनुज्ञप्त परिसर में, भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों के उपबंधों तथा इस अनुज्ञप्ति की अन्य शर्तों के अधीन रहते हुए, केवल संपीड़ित गैस से भरे सिलेण्डरों को रखने के लिए ही विधिमान्य अनुज्ञप्ति 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 **G/HO/GJ/06/724(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 अनुज्ञप्ति 30 सितम्बर 2028 तक प्रवृत रहेगी । / The Licence shall remain in force till the **30th September 2028.**

For Chief Controller of Explosives
Nagpur
कृते मुख्य विस्फोटक नियंत्रक
नागपुर

March 13, 2013

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

निम्नलिखित विवरण के अनुसार सिलेण्डरों में भरी गैस रखने के लिए अनुज्ञप्त परिसर, जिसकी अभिन्यास सीमाओं और अन्य विशिष्टियों को संलग्न अनुमोदित रेखांक सं **G/HO/GJ/06/724** dated **March 13, 2013** में दिखाया गया है, में अवस्थित है और जिसमें एक भण्डारण शेड है। / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. **G/HO/GJ/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)	विषैले/ Toxic	CHLORINE - 1191 Nos.
b)	गैर विषैले और गैर ज्वलनशील /Non-Toxic and Non Flammable	--NIL--
c)	गैर विषैले और ज्वलनशील /Non-Toxic and Flammable	--NIL--
d)	घुलित एसिटिलीन गैस /Dissolved Acetylene Gas	--NIL--
e)	एलपीजी के अलावा गैर विषैले और ज्वलनशील द्रवित गैस /Non-Toxic & Flammable liquefiable gas other than LPG	--NIL--
f)	एलपीजी/ Liquefied Pertoleum Gas	--NIL--

और प्लाट संख्या PlotNo : **1& 2 Survey No 357 Paiky** गली का नाम गांव : **VILAYAT** या नगर पुलिस थाना : **Vagra** जिला : **BHARUCH**,राज्या : **Gujarat**.
/ and is situated at PlotNo : **1& 2 Survey No 357 Paiky** Village/Town :**VILAYAT** Police Station : **Vagra** District : **BHARUCH**, State: **Gujarat**.

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

	नवीकरण की तारीख/Date of Renewal	समाप्ति की तारीख/Date of Expiry	अनुज्ञप्ति प्राधिकारी के हस्ताक्षर/Signature and stamp of the licensing authority
इस अनुज्ञप्ति को, विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए गैस सिलेण्डर नियम, 2016 के उपबंधों या इस अनुज्ञप्ति 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** उप मुख्य विस्फोटक नियंत्रक, वडोदरा Dy. Chief Controller of Explosives, Vadodara

यदि अनुज्ञप्त परिसर इससे उपाबद्ध विवरण और शर्तों के अनुरूप नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति दी गई है, उनमे से किसी का उल्लंघन होता है तो यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्ति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकेगी, या जुर्माने से, जो तीन हजार रुपये तक का हो सकेगा, 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 rupees or with both.

Government of India
Ministry of Commerce & Industry
Petroleum & Explosives Safety Organisation (PESO)
9th Floor, Park Paradise, Vadsar,
Vadodara - 390012

E-mail : **jtcce.vadodara@explosives.gov.in**
Phone/Fax No : **0265 - 2361035**

No : A/G/WC/GJ/GCT/11(G58778) Dated : **18/10/2023**

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

Sub : Periodical Examination and testing of **CHLORINE,CHLORINE,CHLORINE,CHLORINE,CHLORINE,CHLORINE , Seamless,Seamless,Seamless,Seamless,Seamless,Seamless** cylinders at **Plot No, plot no. 1 , GIDC Industrial Estate, Vagra, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin : 392012.**Renewal under Gas Cylinders Rules, 2016 regarding.

Sir(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,CHLORINE,CHLORINE,CHLORINE,CHLORINE,CHLORINE , Seamless,Seamless,Seamless,Seamless,Seamless,Seamless** cyliners in your above mentioned container testing station subject to the obsevance 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 experinaced pesonnel.

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 ebe 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 clerly 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 accrediation with NABCB(Indian Acrediation 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 maintainanace system shall be fully computerised .

11.The cylinders found unserviceable (Service life expired and failed in tests) shall be condemned as required under rule 36 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 **30/09/2032** 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 statutes/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 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, 2016,framed there under or of the conditions of the licence	**18/10/2023**	**30/09/2032**	**Dr. R.Venugopal JCCE For Jt. Chief Controller of Explosives Vadodara**

Yours faithfully,

(Dr. R.Venugopal)
Jt. Chief Controller of Explosives
Vadodara

Copy together with a copy of approved drawing is forwarded to .With referance to his Memo Number:_____

Note:-This is system generated document does not require physical signature.

Digitally signed by DR R VENUGOPAL
Reason: Licence No. : A/G/WC/GJ/GCT/11
Location:Vadodara [G58778]
Date:18-10-2023 15:55:58 PM

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

अनुज्ञप्ति सं. (Licence No.) : **P/HQ/GJ/15/5344(P296022)** फीस रूपए (Fee Rs.) **23500**/- per year

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 यथा विनिर्दिष्टु 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 **30/09/2019** जो कि इससे उपाबद्ध हैं, 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 हैं ।

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 plan No **P/HQ/GJ/15/5344(P296022)** dated **30/09/2019** 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 अनुज्ञप्ति 31st day of December **2033** तक प्रवृत रहेगी ।
The Licence shall remain in force till the 31st day of December **2033**

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 विशिष्टयां संलग्न अनुमोदित नक्शेी में दिखाई गई हैं **Plot No: 1 , G.I.D.C. Vilayat Industrial Estate, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392140** 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, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, PIN: 392140** and consists of **Three aboveground Petroleum Class B storage tanks together with connected facilities.** together with connected facilities.

Note:-This is system generated document does not require signature.

Digitally signed by DR R VENUGOPAL
Reason: Licence No. : P/HQ/GJ/15/5344
Location:Vadodara [P296022]
Date:06-10-2023 18:41:02 PM

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

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

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

दि/Dated : 07/10/2019

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 सिलण्डरों में HYDROGEN गैस का भरण-एवं भण्डा5रण गोडाउन- गैस सिलेण्ड,र्स नियम, 2016 के अंतर्गत फार्म 'इ' एवं 'एफ' में जारी अनुज्ञप्ति सं. G/HO/GJ/05/738 & G/HO/GJ/06/728(G31657) नवीकरण के बारे में / Filling 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 .

अनुज्ञप्ति संख्या G/HO/GJ/05/738 & G/HO/GJ/06/728 30th 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 30th Septemebr, 2029 is forwarded herewith.

कृपया नोट करें कि गैस सिलेण्डर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञप्ति के पुनः नवीकरण हेतु आवेदन The Dy. Chief Controller of Explosives, Vadodara इस कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर2029 को या इससे पूर्व) जमा कर दें । दिनांक 30 सितम्बर 2029 के पश्चात परंतु दिनांक 30 सितम्बर 2030 से पूर्व प्राप्त नवीनीकरण आवेदन, गैस सिलेण्डर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा । दिनांक 30 सितम्बर 2030 तक कोई नवीनीकरण आवेदन प्राप्त नही 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 the The Dy. Chief Controller of Explosives, Vadodara before the licence expires (i.e. on or before 30th Septemebr, 2029) as required under Rule 55(5) of Gas Cylinders Rules, 2016. Application for renewal of licence received after 30th Septemebr, 2029 but not later than 30th 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 30th Septemebr, 2030 .

कृपया इस पत्र की प्राप्ति की पावती दें/ 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)

फार्म ई /FORM E

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

सिलेंडरों में संपीड़ित गैस भरने के लिए अनुज्ञप्ति / Licence to fill compressed gas in cylinders

अनुज्ञप्ति संख्या/ Licence No. : **G/HO/GJ/05/738(G31657)** वार्षिक शुल्का रु/ Fee Rs.**5000/-** per year

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/05/738(G31657)** dated **14/05/2013** में दर्शित किए गए अनुज्ञप्त परिसर में, भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों के उपबंधों तथा इस अनुज्ञप्ति की अन्य शर्तों के अधीन रहते हुए, केवल संपीड़ित गैस से भरे सिलेण्डरों को रखने के लिए ही विधिमान्य अनुज्ञप्ति 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/05/738(G31657)** dated **14/05/2013** 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 अनुज्ञप्ति 30 सितम्बर **2029** तक प्रवृत रहेगी । / The Licence shall remain in force till the **30th September 2029.**

For Chief Controller of Explosives
Nagpur
कृते मुख्य विस्फोटक नियंत्रक
नागपुर

May 14, 2013

1)Amendment dated - 18/10/2018

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

निम्नलिखित विवरण के अनुसार सिलेण्डरों में गैस भरने के लिए अनुज्ञप्त परिसर, जिसकी अभिन्यास सीमाओं और अन्य विशिष्टियों को संलग्न अनुमोदित रेखांक सं. **G/HO/GJ/05/738** dated **May 14, 2013** में दिखाया गया है,| **Vilayat** में अवस्थित है और जिसमें अन्य सुविधाओं से जोडे गए **HYDROGEN - 8 Nos.(8x1)** फिलिंग पॉइन्ट्स है । / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No **G/HO/GJ/05/738** dated **May 14, 2013** are situated at **Vilayat** and consists of **HYDROGEN - 8 Nos.(8x1)** filling points with connected other fecilities for filling of the gas(es) in cylinders as described here under:

	गैस का प्रकार Type of Gas	मात्रा /Quantity
a)	विषैले/ 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)	घुलित एसिटिलीन गैस /Dissolved Acetylene Gas	--NIL--
e)	एलपीजी के अलावा गैर विषैले और ज्वलनशील द्रवित गैस /Non-Toxic & Flammable liquefiable gas other than LPG	--NIL--
f)	एलपीजी/ Liquefied Pertoleum Gas	--NIL--

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

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

	नवीकरण की तारीख/Date of Renewal	समाप्ति की तारीख/Date of Expiry	अनुज्ञप्ति प्राधिकारी के हस्ताक्षर/Signature and stamp of the licensing authority
इस अनुज्ञप्ति को, विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए गैस सिलेण्डर नियम, 2016 के उपबंधों या इस अनुज्ञप्ति 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**	**30/09/2029**	**Sanjay Kumar** **CE** **For Dy. Chief Controller of Explosives** **Vadodara** उप मुख्य विस्फोटक नियंत्रक, वडोदरा Dy. Chief Controller of Explosives, Vadodara

यदि अनुज्ञप्त परिसर इससे उपाबद्ध विवरण और शर्तों के अनुरुप नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति दी गई है, उनमे से किसी का उल्लंघन होता है तो यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्ति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकेगी, या जुर्माने से, जो तीन हजार रुपये तक का हो सकेगा, 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 rupees or with both.

अनुज्ञप्ति की शर्त संख्या 8 में निहित कुछ भी होते हुए, सूर्यास्त और सूर्योदय के भीतर, 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.

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

सत्यमेव जयते

फार्म फ /FORM F

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

Licence to store compressed gas in cylinders

अनुज्ञप्ति संख्या/ Licence No. : **G/HO/GJ/06/728(G31657)** वार्षिक शुल्का रु/Fee Rs. **4000**/- per year

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/06/728(G31657)** dated **14/05/2013** में दर्शित किए गए अनुज्ञप्त परिसर में, भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों के उपबंधों तथा इस अनुज्ञप्ति की अन्य शर्तों के अधीन रहते हुए, केवल संपीड़ित गैस से भरे सिलेण्डरों को रखने के लिए ही विधिमान्य अनुज्ञप्ति 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 **G/HO/GJ/06/728(G31657)** dated **14/05/2013** 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 अनुज्ञप्ति 30 सितम्बर 2029 तक प्रवृत रहेगी । / The Licence shall remain in force till the **30th September 2029.**

For Chief Controller of Explosives
Nagpur
कृते मुख्य विस्फोटक नियंत्रक
नागपुर

May 14, 2013

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

निम्नलिखित विवरण के अनुसार सिलेण्डरों में भरी गैस रखने के लिए अनुज्ञप्त परिसर, जिसकी अभिन्यास सीमाओं और अन्य विशिष्टियों को संलग्न अनुमोदित रेखांक सं **G/HO/GJ/06/728** dated **May 14, 2013** में दिखाया गया है, में अवस्थित है और जिसमें एक भण्डारण शेड है। / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. **G/HO/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	--NIL--
b)	गैर विषैले और गैर ज्वलनशील /Non-Toxic and Non Flammable	--NIL--
c)	गैर विषैले और ज्वलनशील /Non-Toxic and Flammable	**HYDROGEN - 360 Nos.**
d)	घुलित एसिटिलीन गैस /Dissolved Acetylene Gas	--NIL--
e)	एलपीजी के अलावा गैर विषैले और ज्वलनशील द्रवित गैस /Non-Toxic & Flammable liquefiable gas other than LPG	--NIL--
f)	एलपीजी/ Liquefied Pertoleum Gas	--NIL--

और प्लाट संख्या PlotNo : **1** गली का नाम गांव : **Vilayat** या नगर पुलिस थाना : जिला : **BHARUCH**,राज्या : **Gujarat**. / and is situated at PlotNo : **1** Village/Town :**Vilayat** Police Station : District : **BHARUCH**, State: **Gujarat**.

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

	नवीकरण की तारीख/Date of Renewal	समाप्ति की तारीख/Date of Expiry	अनुज्ञप्ति प्राधिकारी के हस्ताक्षर/Signature and stamp of the licensing authority
इस अनुज्ञप्ति को, विस्फोटक अधिनियम, 1884 या उसके अधीन बनाए गए गैस सिलेण्डर नियम, 2016 के उपबंधों या इस अनुज्ञप्ति 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**	**30/09/2029**	**Sanjay Kumar** **CE** **For Dy. Chief Controller of Explosives** **Vadodara** उप मुख्य विस्फोटक नियंत्रक, वडोदरा Dy. Chief Controller of Explosives, Vadodara

यदि अनुज्ञप्त परिसर इससे उपाबद्ध विवरण और शर्तों के अनुरूप नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति दी गई है, उनमे से किसी का उल्लंघन होता है तो यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्ति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकेगी, या जुर्माने से, जो तीन हजार रुपये तक का हो सकेगा, 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 rupees or with both.

भारत सरकार /Government of India
वाणिज्य और उद्योग मंत्रालय /Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो) /Petroleum & Explosives Safety Organisation (PESO)
पाँचवा तल, ए-ब्लाक, सी.जी.ओ.कॉम्प्लेक्स,सेमिनरी हिल्स
नागपुर - 440006
5th Floor, A-Block, CGO Complex, Seminary Hills, Nagpur - 440006

इमेल /E-mail : **explosives@explosives.gov.in**
दूरभाष /Phone/Fax No : **0712 -2510248, Fax-2510577**

सं/No : G/HO/GJ/05/738 & G/HO/GJ/06/728(G31657) दि/Dated : **27/06/2022**

सेवा में/
To,

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

विषय/ **Subject:** **Plot No, 1, GIDC Industrial Estate Taluka Vagra, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin : 392140.** में सिलण्डररों में **HYDROGEN** गैस का भरण-एवं भण्डा5रण गोडाउन,गैस सिलेण्डLर्स नियम, 2016 के अंतर्गत जारी अनुज्ञप्ति सं. **G/HO/GJ/05/738 & G/HO/GJ/06/728(G31657)** – अनुज्ञप्ति संशोधित करने के बारे में//Filling of **HYDROGEN** and Storage of **HYDROGEN** gas in cylinders at **Plot No, 1, GIDC Industrial Estate Taluka Vagra, Vilayat, Bharuch, Taluka: Vagra, District: BHARUCH, State: Gujarat, Pin : 392140.** Licence No. **G/HO/GJ/05/738 & G/HO/GJ/06/728(G31657)** granted in Form E&F of Gas Cylinders Rules, 2016 - Amendment of Licence regarding.

महोदय/
Sir(s),

कृपया आपके दि. **20/06/2022** के पत्र सं. **OIN1089201** का संदर्भ ग्रहण करें/ Please refer to your application No.**OIN1089201** dated **20/06/2022** for **additions/ alterations,**.

फार्म इ एवं एफ के अंतर्गत जारी अनुज्ञप्ति सं. **G/HO/GJ/05/738 & G/HO/GJ/06/728** इसके साथ संशोधित कर भेजी जा रही हैं/ The licence number in Form-E&F **G/HO/GJ/05/738 & G/HO/GJ/06/728** is sent herewith duly amended -

(The amendment is due to additions/ alterations, Change in Capacity Details , Change in Layout)

अनुज्ञप्ति फ़ीस में बदलाव हुआ है और भण्डारकरण के लिए फ़ीस रु. **4000/-** प्रति वर्ष तथा भरण के लिए फ़ीस रु **5000/-** प्रति वर्ष है. यह अनुज्ञप्ति दिनांक 30 सितम्बर **2029** तक प्रवृत्त रहेगी । The licence fee is changed. Storage fee is Rs. **4000/-** per year and Filling fee is Rs.**5000/-** per year and the licence is valid upto **30th Sep, 2029.**
कृपया पावती दें और भावी पत्राचार में इस अनुज्ञप्ति नंबर का संदर्भ दें. नवीनीकरण के लिए गैस सिलिण्डर नियम 2016 के नियम 55 के अनुसार प्रक्रिया का अनुपालन करें । / Please acknowledge the receipt of the same and quote this licence number in future correspondence.Please follow a procedure under Rule 55 of Gas Cylinders Rules, 2016 for Renewal of License.

भवदीय/Yours faithfully,

((पी.सीनीराज)
(P. SEENIRAJ))
उप मुख्य विस्फोटक नियंत्रक
Dy. Chief Controller of Explosives
कृते मुख्य विस्फोटक नियंत्रक
For Chief Controller of Explosives
नागपुर/Nagpur

Copy forwarded to :-
1. The Jt. Chief Controller of Explosives, Vadodara. A Copy of the licence along with approved plan is enclosed.

For Chief Controller of Explosives
Nagpur

कृते मुख्य विस्फोटक नियंत्रक
नागपुर

Note:-This is system generated document does not require physical signature.

BEIL INFRASTRUCTURE LIMITED
(Formely 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/BD/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

BEIL INFRASTRUCTURE LIMITED
(Formely Known As Bharuch Enviro Infrastructure Limited)

REF: BEIL/ANK/2022 02ND 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

"Certificate"

DETOX INDIA
operated by VEOLIA

Certificate No.:104361

To Whomsoever it may concern

This is to certify that

GRASIM INDUSTRIES LIMITED(CHEMICAL DIVISION)

PLOT NO. 1
GIDC INDUSTRIAL ESTATE VILAYAT
TAL : VAGRA
BHARUCH

is a valid member of

SAFE ENVIRO PRIVATE LIMITED

SEPL - Magnad

for

Integrated Common Hazardous Waste Management Facility

This membership is valid for a period of

05 Years

Date of Issue :09-11-2022
Date of Expiration : 09-11-2027
Place of Issue : Surat

For, Safe Enviro Private Limited

Director

SUBJECT TO SURAT JURISDICTION

Safe Enviro Private Limited
Survey No. 868, Village - Magnad, Tal. - Jambusar, Dist. - Bharuch - 392150 (Guj.) INDIA
Corporate Office : Detox House, Opp. Gujarat Samachar Press, Udhna Darwaja, Ring Road, Surat-395 002 (Guj.) INDIA
Ph. : +91 261 2351248, 2346181 | E-mail : info.safeenviro@veolia.com | CIN : U51101GJ2015PTC083237

DETOX INDIA
operated by VEOLIA

REF:SEPL/ACCEPTANCE/104361/2022/31

Date:06.11.2022

TO WHOMSOEVER CONCERNED

CERTIFICATE

This is to inform **M/s. GRASIM INDUSTRIES LTD.(CHEMICAL DIVISION)** Situated at **Plot No.1, GIDC Industrial Estate Vilayat, Tal.Vagra, Dist.Bharuch.** is an active member of Integrated Common Hazardous Waste Management Facility (TSDF) operated by **M/s. Safe Enviro Pvt. Ltd.** vide Membership No.104361. Details of Waste type along With Quantity Proposed by the member unit are mentioned below:

Sr. No.	Type of Waste	Quantity (MT/Annum)
2	Phosphoric Acid (35.3) & Brine Sludge (16.2)	40,000 MT

M/s. Safe Enviro Pvt. Ltd. shows its readiness to accept the above waste proposed by **M/s. GRASIM INDUSTRIES LTD.(CHEMICAL DIVISION)** after conducting Comprehensive analysis of their waste to confirm disposal pathway for its safe disposal at our site.

For, Safe Enviro Pvt. Ltd.

(Authorised Signatory)

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 –392001PH :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 26/07/2018

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.

4/8/18

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 4th 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,
9/10/17
(B C Warli)
Chief Engineer,
GIDC, Gandhinagar.

GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION

(A Govt. of Gujarat Undertaking)
Office of the Superintending Engineer (CG)
1st Floor, Narmada Commercial Complex,
M.G.Road, PanchBatti, Bharuch-392001
Phone: (02642)242432/244183
FAX:(02642)241902

Ref:- No. No.GIDC/SE/CG/BRH/1236 Dated:- 29/12/2016

To,
M/s Grasim Industries Limited
Plot NO. 1, Vilayat 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 15.60 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 15.60 MLD water supply as per prevailing policy of the Corporation. Now as approved by GPCB, increase in quantity of water supply from 15.50 MLD to 25.00 MLD is approved in principally. In view of this, you are requested to apply online for water supply connection for ultimately quantity of 25.00 MLD.

Thanking you,
Yours faithfully

Superintending Engineer (CG)
GIDC, Bharuch

Copy submitted w.r. to-
The Chief Engineer, GIDC, Gandhinagar for kind information please.

Copy to:-
The Executive Engineer, GIDC, Bharuch
The Dy. Executive Engineer (Drg - W/s), GIDC, Bharuch

P. K. PUJARI, IAS
Vice Chairman & Managing Director

GUJARAT INDUSTRIAL
DEVELOPMENT CORPORATION
(A Govt. of Gujarat Undertaking)

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

GIDC Gandhinagar

Vilayat Estate allottee - M/s. Grasim Industries Limited

Sr. No.	Issue	GIDC's reponse
1.	**Land Cost -** – Initial understanding 30% discount – Actual working out 28.4% **Request -** To consider giving 30% discount	Bulk Area Discount scheme since discontinued from 1.10.2006. GIDC cannot consider the request for flat rate of discount.
2.	**Water -** **Quantity -** – Allotted 12.21 MLD against 30 MLD. – First Phase minimum requirement 15.60 MLD (on an increasing spread of 5 years) **Request -** To revise quantity to 15.60 MLD within same allotment price. **Minimum Charges -** Minimum Charges for 70% of the demand quantity payable after 3 years from the date of allotment. **Request -** To revise 3 years to 5 years. **Variable Charges -** **Request -** Should be charged on actual consumption basis.	Quantity of water allotted 15.60 MLD. Grasim's water requirement staggerred as follows :- 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 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.

3.	**Effluent -** **Quantity -** – Allotted quantity 9.76 MLD. – For first phase minimum requirement is 12.48 MLD. **Request -** To revise quantity to 12.48 MLD within the same allotment price. **Charges -** **Request -** To be charged based on actual disposal quantity on similar lines of water.	EDP utilization staggerred. 80% of the water requirement indicated at Column-2 above.
4.	**Power Line-** **Request-** Power Lin passing through the plot to be shifted at no extra cost to us.	GIDC is shifting the power line as per the revised planning of the Estate.
5.	**Commencement of Production -** **Request -** 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.	Not acceptable.
6.	**The Project -** **Request -** To allow any other project from Aditya Birla Group.	GIDC will consider such requests as per rules for sub-letting & sub-dividing.

7.	**Staff and Workers Colony -** **Request -** Guru 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.	Regular residential colony within the plot cannot be permitted. However, transit/emergency housing may be considered on merits.
8.	**Date of Allotment -** **Request -** 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.	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. GIDC will hand over possession of land after removal of encroachments and power line would be shifted at the earliest possible.
9.	**Future Water & Effluent Requirement -** **Request -** Assurance for making available additional water & effluent for second phase.	Any additional capacity beyond the quantity mentioned above will be at a cost and subject to availability.

Date: 31/05/2023

GRASIM INDUSTRIES LIMITED
"A-2, ADITYA BIRLA CENTRE, S.K.AHIRE MARG,
WORLI SEA FACE,MUMBAI,
MUMBAI - 400030
MUMBAI
MAHARASHTRA
INDIA
27AAACG4464B9ZQ(GSTIN Number)

Policy No : 0304010255
Renewal : 00
Endorsement : 00

Dear Sir / Madam,

We thank you for choosing **Tata AIG General Insurance Company Ltd**. as your preferred insurer. Your Policy No. Is 0304010255 00 00.

We are glad that you have chosen our product **PUBLIC LIABILITY ACT** and given us an opportunity to be your risk carrier for this Product.

'Casualty Line' caters to most of the Enterprises / Industries in India, whether Large, Medium or Small. As one of the India's most established insurance companies, we understand these unique needs of coverage. At Tata AIG we care for you and would strive to offer convenience coupled with a range of products that cater continously to your ever increasing needs.

Enclosed please find your policy docket based on the information furnished by you in the Proposal.

We look forward to a long and mutually beneficial relationship and providing you wider range of benefits in the years to come.

Yours Sincerely,
For Tata AIG General Insurance Company Limited

Authorized Signatory

PUBLIC LIABILITY ACT POLICY
POLICY SCHEDULE

Agent/Broker Name -ADITYA BIRLA INSURANCE BROKERS LTD
Agent/Broker License Code - 146:Agent/Broker :Contact No - 022-22058770 (mobile or landline)

Attaching to and forming part of Policy No.	0304010255 00 00
Name of Insured Owner:	GRASIM INDUSTRIES LIMITED
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, Asset Management and Life Insurance) player in India, The company has also announced entry into paints business
Address:	"A-2, ADITYA BIRLA CENTRE, S.K.AHIRE MARG, WORLI SEA FACE,MUMBAI, MUMBAI - 400030 MUMBAI MAHARASHTRA INDIA 27AAACG4464B9ZQ(GSTIN Number) Place of supply -MAHARASHTRA State code -27
Territorial limits:	Anywhere in India

Policy Period: **From:** 01/04/2023 12:00 AM/ PM
To Midnight of: 31/03/2024 12:00 AM/ PM

Indemnity limit:Rs 50,000,000.00 in respect of any one accident and not exceeding 3 times thereof in the aggregate during the policy period.

Service Tax Registration No:

Premium	₹ 26,000.00
UGST/SGST @9 %	₹ 2,340.00
CGST @9 %	₹ 2,340.00

Contribution to the Environment Relief Fund:₹ 26,000.00

Date of Proposal and declaration:22/01/2022

In witness whereof the undersigned being duly authorized by the company and on behalf of the company has hereto set his hand at MUMBAI on 31/05/2023

The stamp duty of 0.5 paid in cash or demand draft or by pay order,vide Receipt/Challan no: LOA/CSD/30/2023/2079 dated the 03/05/2023

For Tata AIG General Insurance Company Limited

Authorized Signatory

Date :31/05/2023
Place :MUMBAI

Policy Servicing Office
Tata AIG General Insurance Company Limited
2ND FLOOR, CITI TOWER, 61, DR. S.S.RAO ROAD,, NEXT TO M.G.M HOSPITAL, PAREL(E), MUMBAI - 400012,MUMBAI,MAHARASHTRA,MUMBAI-400012
Tel No:22-22-62606600

RECEIPT

Receipt No. : 102001046028325

Receipt Date : 30/03/2023

Policy No : 0304010255 00 00

Received with thanks from GRASIM INDUSTRIES LIMITED a sum of ₹ **56,680.00** (Rupees Fifty Six Thousand Six Hundred Eighty And Paise Zero Only)

Sr. No.	Policy Number	Total Premium (₹)	Utilized from the receipt for policy (₹)	Balance (₹)
1	0304010255 00 00	56,680.00	56,680.00	0.00

Note:

1. This is a computer generated receipt and does not require a signature.
2. Upon issuance of this Receipt, all previously issued temporary receipts, if any, related to this Policy shall be considered null and void.
3. Amounts received by cheque shall be subject to realisation.
4. Any amount received in excess of the Premium is being/shall be refunded by the Company.

GSTIN : 27AABCT3518Q1ZW - MAHARASHTRA Service Accounting Code : 997139

Revenue (consolidated) Stamp Duty duly paid vide challan No.LOA-NO.CSD/507/4491 date 18/10/2022 for applicable cases.

Insurance is the subject matter of the solicitation. For more details on risk factors, terms and conditions, please read sales brochure carefully before concluding a sale.
TATA AIG General Insurance Company Ltd. Regd. Office: 15th floor, Tower A, Peninsula Business Park,Ganpatrao Kadam Marg, Off Senapati Bapat Marg, Lower Parel, Mumbai- 400 013.
IRDA Registration No.108, CIN No : U85110MH2000PLC128425, PAN : AABCT3518Q, UIN No : IRDAN108CP0058V01201819
Website: www.tataaig.com 24X7 Tollfree Helpline 1800-266-7780 E-mail: customersupport@tataaig.com

LIABILITY INSURANCE POLICY
(UNDER PUBLIC LIABILITY INSURANCE ACT 1991)

1.OPERATIVE CLAUSE

Whereas the Insured Owner named in the schedule hereto and carrying on business described in the said schedule has applied to the Tata AIG 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 per the provisions of the Public Liability Insurance Act and the rules framed thereunder.

NOW THIS POLICY WITNESSETH that subject to the terms, exceptions and conditions contained herein or endorsed hereon, the company will indemnify the insured owner against the statutory liability arising out of accidents occurring during the currency of the policy due to handling hazardous substances as provided for in the said Act and the Rules framed thereunder.

2.DEFINITIONS:

a)"ACT" unless otherwise specifically mentioned shall mean the Public Liability Insurance Act 1991 as amended from time to time;

b) "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;

c) "Handling" in relation to any harzardous 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;

d) "Hazardous Substance" means any substance or preparation which is defined as hazardous substance under the Environment (Protection) Act, 1986, and exceeding such quantity as may be specified, by notification, by the Central Government;

e)"Owner" means a person who owns, or has control over handling any hazardous substance at the time of accident and includes:
i) in the case of a firm any of its partners;
ii) in the case of an association, any of its members, and
iii) 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;

f) "Turnover" shall mean
i) Manufacturing units-Annual Gross Sales of all goods including all levies and taxes
ii) Godowns/ warehouse owners-Total Annual rental receipts.
iii)Transport Operators-Total Annual freight receipts.
iv)Others-Total Annual gross receipts.

3. EXCLUSIONS:

(1) arising out of wilful or intentional non-compliance of any Statutory provisions.

(2) in respect of fines, penalties, punitive and/or exemplary damages.

(3) arising under any other legislation except in so far as provided for in Section 8 Sub Section (1) and (2) of the Act.

(4) 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 Owner's control, care or custody.

(5) 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;

(6) 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.

4. CONDITIONS:

(1) The Insured owner shall give written notice to the Company as soon as reasonably 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 applications forwarded by the Collector and all

such additional information and or assistance that the company may require.

(2) No admission, offer, promise or payments 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 this policy there be any other insurance covering the same liability, then the Company shall not be liable to pay or contribute more than its ratable proportion of such liability.

(6) This policy may be cancelled by the Insured Owner by giving 30 days notice in writing to the company in which event the Company will retain premium at short period scale subject to there not having occurred an accident during the policy period which may give rise to a claims(s), failing which no refund of premium shall be allowable.

(7) This Policy may also be cancelled by the Insurer by giving 30 days notice in writing to the Insured Owner in which event the Company shall be liable to repay on demand a ratable proportion of the premium for the unexpired term from the date of cancellation.

(8) If the Company shall disclaim liability to 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 the practical purposes shall be deemed to have been abandoned and shall not thereafter be recoverable hereunder or be made the subject matter of any suit.

(9) The Company shall not be liable to make any payment in respect of any claim if such claim shall 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.

(10) 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 thereunder or in this Policy shall bear such specific meaning.

(11) Any dispute regarding interpretation of the terms, conditions and exclusions of this Policy shall be determined in accordance with the law and practice of a court of competent jurisdiction within India.

GRIEVANCE REDRESSAL POLICY

Grievance Lodgment Stage

The Company is committed to extend the best possible services to its customers. However, if you are not satisfied with our services and wish to lodge a complaint, please feel free to contact us through below channels:

Call us 24X7 toll free helpline 1800 266 7780
Email us at customersupport@tataaig.com

Write to us at : Customer Support, Tata AIG General Insurance Company Limited
A-501 Building No.4 IT Infinity Park, Dindoshi, Malad (E), Mumbai - 400097
Visit the Servicing Branch mentioned in the policy document

Nodal Officer

Please visit our website at www.tataaig.com to know the contact details of the Nodal Officer for your servicing branch.
After investigating the grievance internally and subsequent closure, we will send our response within a period of 10 days from the date of receipt of the complaint by the Company or its office in Mumbai. In case the resolution is likely to take longer time, we will inform you of the same through an interim reply.

Escalation Level 1

For lack of a response or if the resolution still does not meet your expectations, you can write to manager.customersupport@tataaig.com. After investigating the matter internally and subsequent closure, we will send our response within a period of 8 days from the date of receipt of your complaint.

Escalation Level 2

For lack of a response or if the resolution still does not meet your expectations, you can write to the Head-Customer Services at head.customerservices@tataaig.com. After examining the matter, we will send you our response within a period of 7 days from the date of receipt of your complaint. Within 30 days of lodging a complaint with us, if you do not get a satisfactory response from us and you wish to pursue other avenues for redressal of grievances, you may approach Insurance Ombudsman appointed by IRDA under the Insurance Ombudsman Scheme. Given below are details of the Insurance Ombudsman located at various centers.

List of Insurance Ombudsman Offices

Office of the Ombudsman	Address & Contact details	Jurisdiction of Office Union Territory, District
AHMEDABAD	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	Gujarat, Dadra & Nagar Haveli, Daman and Diu.
BENGALURU	Office of the Insurance Ombudsman, Jeevan Soudha Building, PID No. 57-27-N-19 Ground Floor, 19/19, 24th Main Road, JP Nagar, Ist Phase, Bengaluru – 560 078. Tel.: 080 - 26652048 / 26652049 Email: bimalokpal.bengaluru@ecoi.co.in	Karnataka
BHOPAL	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	Madhya Pradesh Chattisgarh
BHUBANESHWAR	Office of the Insurance Ombudsman, 62, Forest park, Bhubneshwar - 751 009. Tel.: 0674 - 2596461 /2596455 Fax: 0674 - 2596429 Email: bimalokpal.bhubaneswar@ecoi.co.in	Orissa
CHANDIGARH	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	Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Chandigarh
CHENNAI	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	Tamil Nadu, Pondicherry Town and Karaikal (which are part of Pondicherry).
DELHI	Office of the Insurance Ombudsman, 2/2 A, Universal Insurance Building, Asaf Ali Road, New Delhi – 110 002. Tel.: 011 - 23239633 / 23237532 Fax: 011 - 23230858 Email: bimalokpal.delhi@ecoi.co.in	Delhi
GUWAHATI	Office of the Insurance Ombudsman, Jeevan Nivesh, 5th Floor, Nr. Panbazar over bridge, S.S. Road, Guwahati – 781001(ASSAM). Tel.: 0361 - 2132204 / 2132205 Fax: 0361 - 2732937 Email : bimalokpal.guwahati@ecoi.co.in	Assam, Meghalaya, Manipur, Mizoram, Arunachal Pradesh, Nagaland and Tripura
HYDERABAD	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 - 65504123 / 23312122 Fax: 040 - 23376599 Email : bimalokpal.hyderabad@ecoi.co.in	Andhra Pradesh, Telangana, Yanam and part of Territory of Pondicherry.
JAIPUR	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	Rajasthan
ERNAKULAM	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	Kerala, Lakshadweep, Mahe-a part of Pondicherry
KOLKATA	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	West Bengal, Sikkim, Andaman & Nicobar Islands
LUCKNOW	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	Districts of Uttar Pradesh : Laitpur, Jhasi, Mahoba, Hamirpur, Banda, Chitrakoot, Allahabad, Mirzapur, Sonbhabdra, 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

MUMBAI	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	Goa, Mumbai Metropolitan Region excluding Navi Mumbai & Thane
NOIDA	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	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, Ghazaibad, Hardoi, Shahjahanpur, Hapur, Shamli, Rampur, Kashganj, Sambhal, Amroha, Hathras, Kanshiramnagar, Saharanpur
PATNA	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	Bihar, Jharkhand
PUNE	Bhagwan Sahai Palace , 4th Floor, Main Road, Naya Bans, Sector 15, G.B. Nagar, Noida. NOIDA – 201301 Tel: 0120-2514250/51/53 Email: bimalokpal.noida@gbic.co.in	Maharashtra, Area of Navi Mumbai and Thane excluding Mumbai Metropolitan Region

shree shyam

S R Healthcare Services

+91 704 371 6666
srhealthcarebh@gmail.com

conto - shree shyam
mob No - 9955057411
Ad. No - 346509473758

Medical Certificate of Fitness

PMPT = MEL
Date - 29/3/2023

Date: 25/03/2023

BP - 120/70 mmhg

We here by certify that we have carefully examined Mr. Birjhu Gond Age: 36 Yrs/Male and find that he is not suffering from any illness and is Fit to continue duties in your organization. We also certify that before arriving at this decision, we have examined all the original medical records of his

☐ Pre-employment Medical Health Checkup.

☑ Periodical Medical Health Checkup.

Sign of Consultant:

Stamp of Consultant:

DR DEVKUMAR SHARMA
M.D. (PSM), MBBS, CIH
OCCUPATIONAL HEALTH CONSULTANT
REG. No.: G-11075

I. 234. 2nd Floor, Golden Plaza, Opp. Telephone Exchange, M.G. Road, Bharuch - 392001
II. Shop. No.6, Sky View Shopping Centre, Near Villayat Cross Road, Vagra Road, Bharuch.

GRASIM INDUSTRIES LIMITED - CHEMICAL DIVISION, VILAYAT
AGENCY STAFF MEDICAL EXAMINATION RECORD
FORMAT NO.: F05 (OHC-P-02)

Name Brijhu Chand
Gender male
DOB 1987
Age 36 Years
Marital Status married
Children Male: 01 Female: 01
Residential Address Jharkhand
Contract Name: Shree Shyam Con

PERSONAL HISTORY

Diet Mix Veg N-Veg
Smoking Yes No
Tobacco Chewing Yes No
Any Medication Yes No
Details of Medication (If Any)

Past History (Self/ Family)

Sr. No.	Disease	Yes	No	Relation
1	Diabetes		✓	
2	Hypertension		✓	
3	Heart Disease		✓	
4	Stroke/Paralysis		✓	
5	Epilepsy/Seizure disorder		✓	
6	Jaundice		✓	
7	Tuberculosis		✓	
8	Cancer		✓	
9	Leprosy		✓	
10	Shortness of Breath/Asthama		✓	
11	Peptic ulcer		✓	
12	Mental Disorder		✓	
13	Vertigo / Height Phobia		✓	
14	Arthritis/ gout		✓	
15	Chronic Backache		✓	
16	Chronic dysentry		✓	
17	Kidney/Urinary ailment		✓	
18	Recurrent ear,nose,throat problem		✓	
19	Any Allergy		✓	
20	Any surgery		✓	
21	Recurrent headache or eye problem		✓	
22	Thyroid Dysfunction		✓	
23	Any Accident:		✓	
24	Declared UNFIT in any examination:		✓	

OCCUPATIONAL HISTORY

(In Chronological Order – Starting from Present)

Sr. No.	Name of Orgnization	Type of Work *[Office work/ Field work/ Mixed]*	Exposure *[Noise/Gas/ Chemical/ Computer/Dust etc.]*	Duration

I, hereby, declare that the above statement and information are correct to the best of my knowledge. I fully understand that any information furnished above (page 1 & 2), if found incorrect or false will render me to disciplinary actions .

Signature of Candidate
Date

Signature of Doctor with Seal
Date

DR. DEVKUMAR VARMA
M.D. (PATH), MOHS, DIH
OCCUPATIONAL HEALTH CONSULTANT
REG. No.: G-11075

Medical Examination Record of Mr./Ms.

CLINICAL EXAMINATION FINDINGS:

Height 166 Cms Weight 69. Kgs
BMI: 25.0
Abd. Girth 87 Chest Inspiration 94 Cms
Expiration 96 Cms

RESPIRATORY SYSTEM

Resp.Rate: 17/m Shape of Chest: R Trachea: R
Breath sounds: R Any Adventitious sound: R

CARDIO –VASCULAR SYSTEM

Pulse: 67 /min, Regular/Irregular Blood Pressure: 130/80.
Heart Sounds: R Murmur: Absent

CENTRAL NERVOUS SYSTEM

Cranial Nerves: R Sensory Functions: R
Motor Functions: R Reflexes: R

GASTRO-INTESTINAL SYSTEM:

Teeth: R Gums: R Tongue: R
Liver: R Spleen: R Any Lump: R

GENITO-URINARY SYSTEM

Hernia: R Hydrocoele: R
Phimosis: R Crypto-Orchidism: R
Any feature of STD: R

EXAMINATION OF EYES

Squint: R Nystagmus: R

	Far Vision		Near Vision	
	Right	Left	Right	Left
Without Glass	6/6	6/6	N/6	N/6
With Glass				
Power of Glasses				
Colour Vision	Normal			

Remarks

EXAMINATION OF EAR, NOSE & THROAT

Tonsils
Ear Canal : (P) Tympanic Membrane: (P)
Whispered voice : (P) Any discharge: (P)

LOCOMOTOR SYSTEM

Gait : (P) Spine : (P) Any abnormality: (P)

For Females Only:
Age of Menarche Pregnancy test (If indicated):
Breast examination: N.A L. M. P.: N.A

INVESTIGATION REPORTS OF Mr./ Ms.

BLOOD

B. Sugar F	–			S. Uric Acid	–		
B. Sugar PP	–			SGPT	27		
B. Sugar R	89			SGOT	33.4		
S. Cholesterol	–			Hb%	14.30		
S. Triglyceride	–			Total WBC count	6,500		
HDL	–			RBC	4.70		
LDL	–			Total platelet	2,19,000		
S. Creat.	1.0			ESR	7		
B. Urea	–			Blood Group	B+Ve		
Differential Count	Neutro	62	Lymph	34	Eosino	02	Mono 02
Urine R/E	Colour	P.Y	pH	Acidic	Sugar	Ab	Albumin Ab
Microscopy	PusCell	OCC.	RBC	Ab	Epith.	4-5	Cast –

Any Other Investigation

X-Ray Chest Report: – N.A

ECG Report: – WNL

Audiometry Report: – B/L Normal

PFT Report: Normal

Ultrasonography report (If required)

Any Other Investigation done:

OBSERVATIONS

DR. DEVKUMAR VARMA
M.D. (PATH), DIH, CIH
OCCUPATIONAL HEALTH CONSULTANT
REG. No.: G-11075

Signature & Seal
Examining Doctor

Registration Number:
Date:

VARMA LABORATORY
ADVANCED PATHOLOGICAL LABORATORY

Dr. Dev Varma
M.D. (Path.) CIH
Consultant Pathologist
Reg. No. G - 2489

Name : BIRJHU GOND
Ref By : C/O S . R .H

Age/Sex : 36 Yrs./M
Date : 25/03/2023
Report ID. : 7

HAEMATOLOGY ANALYSIS

TEST		RESULT	UNIT	METHOD	REFERENCE INTERVAL
BLOOD COUNTS & INDICES					
Haemoglobin	:	14.30	gm%		13.5 - 17.0 gm%
Total RBC	:	4.70	mill/cmm		4.6 - 6.2 mill/cmm
PCV	:	47.00	%		40 - 54 %
MCV	:	**100.00**	fL		80 - 96 fL
MCH	:	30.43	pg		27 - 31 pg
MCHC	:	**30.43**	%		32 - 36 %
RDW	:	12.40	%		10 - 15 %
Total WBC	:	6,500	/cmm		4,000 - 11,000/cmm
Platelet Count	:	2,19,000	/cmm		1.5 - 4.0 Lac/cmm.
DIFFERENTIAL LEUCOCYTES COUNT					
Neutrophils	:	62	%		55 - 70 %
Lymphocytes	:	34	%		20 - 40 %
Eosinophils	:	02	%		01 - 06 %
Monocytes	:	02	%		02 - 08 %
Platelet In Smear	:	ADEQUATE			
ERYTHROCYTES SEDIMENTATION RATE					
ESR	:	7	mm	Westergren	01 - 07 mm
Blood Group	:	" B "			
Rh Factor (Anti D.)	:	" POSITIVE "			

Test done on Fully automated Cellcounter - NIHON KOHDEN, JAPAN

End Of Report

Dr. Dev Varma
M.D. (PATH) C.I.H.
Dr. Dev Varma
M.D. (Path.) CIH
Consultant Pathologist

VARMA LABORATORY
ADVANCED PATHOLOGICAL LABORATORY

Dr. Dev Varma
M.D. (Path.) CIH
Consultant Pathologist
Reg. No. G - 2489

Name : BIRJHU GOND
Ref By : C/O S . R .H

Age/Sex : 36 Yrs./M
Date : 25/03/2023
Report ID. : 7

BIOCHEMISTRY ANALYSIS

TEST		RESULT	UNIT	REFERENCE INTERVAL
Creatinine	:	1.0	mg/dl	0.70 - 1.40 mg/dl
S.G.P.T.	:	27	U/L	UP TO 40 U/L
S.G.O.T.	:	33.4	U/L	up to 40 U/L
Random Blood Glucose (RBS)	:	89	mg/dl	70 - 140 mg/dl

Test done on Fully automated Bio - Chemistry analyzer - TurboChem100.

URINE ANALYSIS

Sample	:	RANDOM
PHYSICAL EXAMINATION		
Quantity	:	10 ml
Colour	:	PALE YELLOW
Transperancy	:	CLEAR
Specific Gravity	:	1.030
pH	:	ACIDIC
CHEMICAL EXAMINATION		
Albumin	:	ABSENT
Sugar	:	ABSENT
Acetone	:	ABSENT
Bile Salts	:	ABSENT
Bile Pigments	:	ABSENT
Occult Blood	:	ABSENT
MICROSCOPIC EXAMINATION		
Pus Cells / h.p.f.	:	OCCASIONAL
R.B.C. / h.p.f.	:	ABSENT
Epithelial / h.p.f.	:	4-5

End Of Report

Dr. Dev Varma
M.D. (PATH) C.I.H.
Dr. Dev Varma
M.D. (Path.) CIH
Consultant Pathologist

MATESHREE ENT. HOSPITAL

AUDIOGRAM

DR. GAURANG JOSHI
D.L.O.M.S. (ENT)
CIH
C-15, Capital Business Centre,
Opp. Central Bank of India,
Panch Batti, Bharuch-392 001.
Phone : (H) 269880

Code No. : _____ Date : 25/03/23

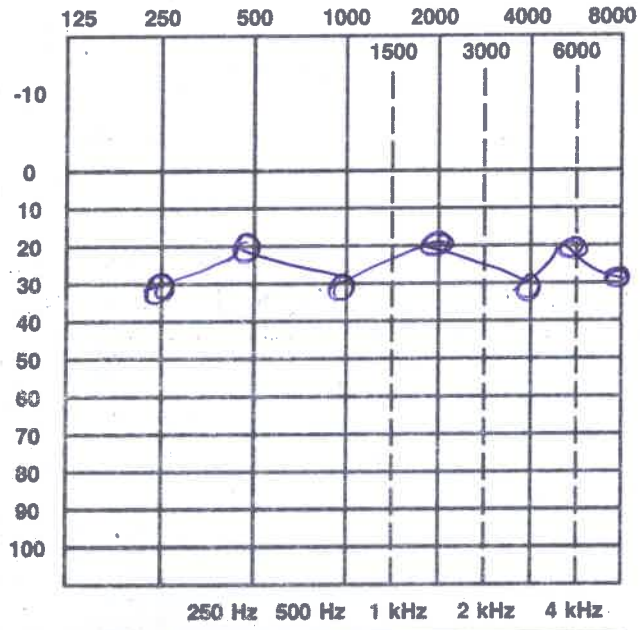
Audiogram of Bijalben Gamel

Age 36 Yrs. Sex M Ref. by _____

Occupation _____

Address _____

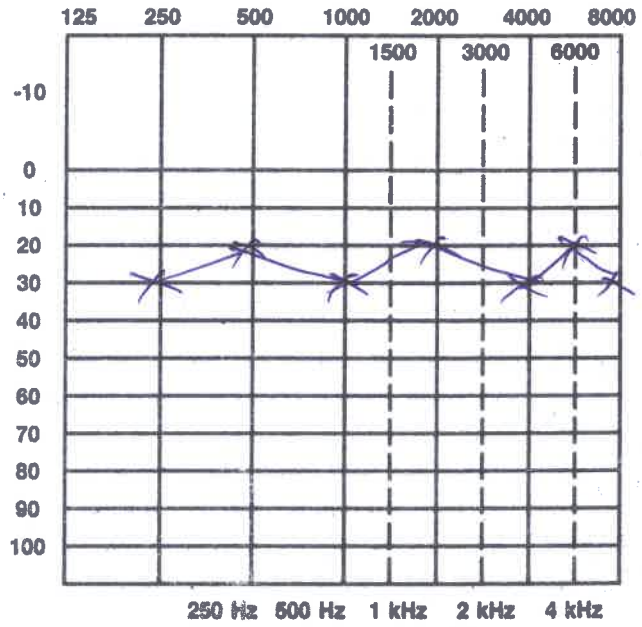
RIGHT



WEBER Lateralized to

	A.C.	B.C.	A.C. MASK	B.C. MASK	NOT HEARD
R	O	<	△	]	♀
L	X	>	□	[	X

LEFT



Clinical Findings _____

Comments B/L Normal

Dr. Gaurang Joshi
DLO MS (ENT)
Regd G 7667
Mateshree ENT Hospital
C-15, Capital Business Center,
Panchbatti, BHARUCH-392001
Ph.: (H)02642-269880

DR. GAURANG JOSHI
D.L.O.M.S. (ENT) CIH

Medicaid

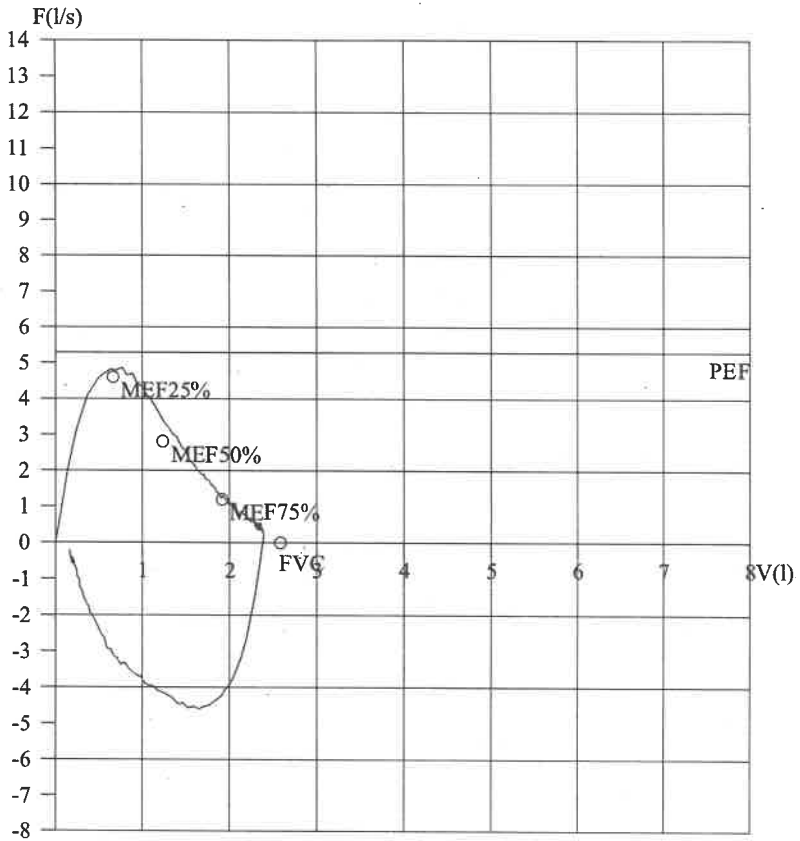
Krishna Occupational Health Center
Bharuch

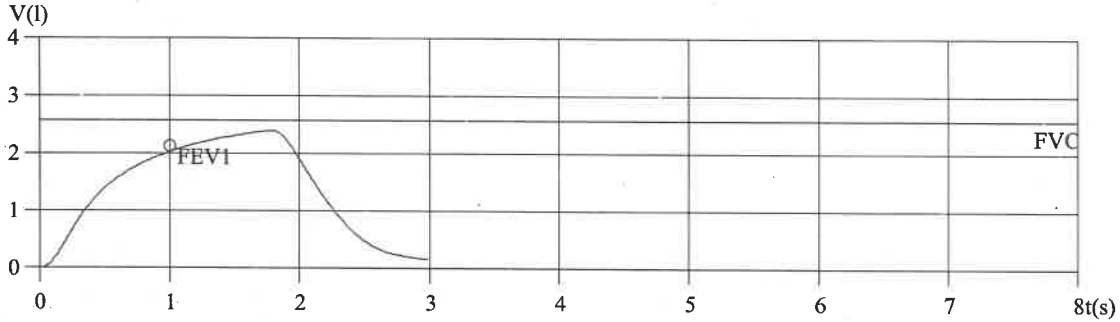
Last Name:
First Name: BIRJHU GOND
ID: SR05704
Date: 25-03-2023
Predicted: ERS 93

Date of Birth: 10-03-1987
Sex: Male
Ethnic Corr.: 60%
Description:
Comments:

Age: 36
Weight (Kg): 69
Height (cm): 166
BSA (m2): 1.77
Smoke: ex

Forced Vital Capacity — TEST #1 - 25-03-2023





Parameter (U)	Pred.	Pre	%Pred.
FVC(L)	2.57	2.53	98.4
FEV0.5(L)	---	1.47	---
FEV1(L)	2.16	2.14	99.1
FEV1/FVC%	80.73	84.58	104.8
PEF(L/s)	5.28	4.86	92
PIF(L/s)	---	4.6	---
FEF25-75%(L/s)	2.62	3.08	117.6
Vmax25%(L/s)	4.53	4.83	106.6
Vmax50%(L/s)	2.9	3.42	117.9
Vmax75%(L/s)	1.23	1.6	130.1
FET100%(s)	---	1.79	---
ELA (Years)	**81**	**81**	

INTERPRETATION

Pre : Normal Spirometry (%FEV1/FVC>80%Pred%FEV1/FVC and FVC>80%PredFVC)

Printed 25-03-2023
SPIRO EXCEL 1.1

Dr. Gaurang Joshi (M.B. C.I.H.)

Dr. GAURANG JOSHI
MS., M.B., C.I.H.

FORM NO. 32

(Prescribed under Rule 68-T and 102)

Health Register

1. **Serial Number in the Register Of adult Workers:**
2. **Name of Worker:** Birjhu Mue
3. **Sex:** Gond
4. **Date of birth:** 1967

1 Helper	Department Works	
2. Manipulation of Acid & Alkalis	Name of Hazardous process	
3. Chemical Works.	Dangerous process/operation	
4	Nature of job or occupation	
5	Raw materials, products or By-products likely to be exposed to	
6 11/10/22	Date of posting	
7	Date of leaving/transfer to or transfer	
8	Reasons for Discharge/ leaving or transfer	
9 25/03/23	Date	Medical examination Results therefore
10	Signs and symptoms Observed during examination	
11 CBC,ESR,RBS,B.G.,SGPT, SGOT,CREAT,,URINE R/M, ECG,EYE,AUDIO,SPIRO.	Nature of tests & results thereof	
12 fit	Result Fit/Unfit	
13	Period of temporary Withdrawal from that work	If declared unfit for work
14	Reasons for such withdrawal	
15	Date of declaring him Unfit for that work	
16 25/03/23 Birjhu	Date of issuing fitness Certificate	
17 DR. DEVKUMAR VARMA M.D. (PATH), MBBS, CIH OCCUPATIONAL HEALTH CONSULTANT REG. No.: G-11075	Signature with date of the factory Medical Officer/ the Certifying Surgeon.	

ભારત સરકાર
Government of India

આધાર

બિરજૂ ગોંડ
Birjhu Gond
જન્મ તારીખ/DOB: 01/01/1987
પુરુષ/ MALE

Issue Date: 22/12/2012

3465 0947 3758
VID : 9179 5484 7972 2761

મારો આધાર, મારી ઓળખ

ભારતીય વિશિષ્ટ ઓળખાણ પ્રાધિકરણ
Unique Identification Authority of India

આધાર

સરનામું :
S/O: જકુલ ગોંડ, ડીપા ટોલી, ગ્રામ- સિકરીયાડાંડ ,થાના- સિમડેગા, સિકરિયાડાંડ, સિમડેગા, ઝારખણ્ડ - 835228

Address:
S/O: Jakul Gond, DIPA TOLI, VILL-SIKARIYADANR ,PS- SIMDEGA, Sikariadanr, Simdega, Jharkhand - 835228

Download Date: 15/12/2022

3465 0947 3758
VID : 9179 5484 7972 2761

1947 | help@uidai.gov.in | www.uidai.gov.in

Birjhu

Shree Bhagwati

S R Healthcare Services

+91 704 371 6666
srhealthcarebh@gmail.com

[redacted]
Bp - 130/80 mm hg
28/3/23

Medical Certificate of Fitness

Cont: Shree Bhagwati
Plant: S.B.P
Desig: Helper
Mo: 7990477835
A.D. No: 6321 1591 1050

Date: 27/03/2023

We here by certify that we have carefully examined Mr. Fuleshwar Kora Age: 30 Yrs/Male and find that he is not suffering from any illness and is Fit to continue duties in your organization. We also certify that before arriving at this decision, we have examined all the original medical records of his

☐ **Pre-employment Medical Health Checkup.**

☑ **Periodical Medical Health Checkup.**

Sign of Consultant:

Stamp of Consultant:

DR. DEVKUMAR VARMA
M.D. (PATH), MBBS, CIH
OCCUPATIONAL HEALTH CONSULTANT
REG. No.: G-11075

GRASIM INDUSTRIES LIMITED - CHEMICAL DIVISION, VILAYAT
AGENCY STAFF MEDICAL EXAMINATION RECORD
FORMAT NO.: F05 (OHC-P-02)

Name Fuleshwar B. Koser
Gender male
DOB 01/01/1993.
Age 30 Years
Marital Status married
Children Male: 03. Female:
Residential Address Bhera
Contract Name: Shree Bhagyalakshmi Jay.

PERSONAL HISTORY

Diet Mix Veg N-Veg
Smoking Yes No
Tobacco Chewing Yes No
Any Medication Yes No
Details of Medication (If Any)

Past History (Self/ Family)

Sr. No.	Disease	Yes	No	Relation
1	Diabetes		✓	
2	Hypertension		✓	
3	Heart Disease		✓	
4	Stroke/Paralysis		✓	
5	Epilepsy/Seizure disorder		✓	
6	Jaundice		✓	
7	Tuberculosis		✓	
8	Cancer		✓	
9	Leprosy		✓	
10	Shortness of Breath/Asthama		✓	
11	Peptic ulcer		✓	
12	Mental Disorder		✓	
13	Vertigo / Height Phobia		✓	
14	Arthritis/ gout		✓	
15	Chronic Backache		✓	
16	Chronic dysentry		✓	
17	Kidney/Urinary ailment		✓	
18	Recurrent ear,nose,throat problem		✓	
19	Any Allergy		✓	
20	Any surgery		✓	
21	Recurrent headache or eye problem		✓	
22	Thyroid Dysfunction		✓	
23	Any Accident:		✓	
24	Declared UNFIT in any examination:		✓	

OCCUPATIONAL HISTORY

(In Chronological Order – Starting from Present)

Sr. No.	Name of Orgnization	Type of Work *[Office work/ Field work/ Mixed]*	Exposure *[Noise/Gas/ Chemical/ Computer/Dust etc.]*	Duration

I, hereby, declare that the above statement and information are correct to the best of my knowledge. I fully understand that any information furnished above (page 1 & 2), if found incorrect or false will render me to disciplinary actions .

Signature of Candidate
Date

Signature of Doctor with Seal
Date

DR. DEVKUMAR VARMAA
M.D. (PATH), MBBS, CIH
OCCUPATIONAL HEALTH CONSULTANT
REG.No.GC-10995

Medical Examination Record of Mr./Ms.

CLINICAL EXAMINATION FINDINGS:

Height	153	Cms	Weight	46.7	Kgs
BMI:	19.9				
Abd. Girth	73		Chest Inspiration	86	Cms
			Expiration	88	Cms

RESPIRATORY SYSTEM

Resp.Rate: 18/m
Shape of Chest: ✓
Trachea: ✓
Breath sounds: ✓
Any Adventitious sound: ✓

CARDIO –VASCULAR SYSTEM

Pulse: 72/min, Regular/Irregular
Blood Pressure: 130/88
Heart Sounds: ✓
Murmur: Absent

CENTRAL NERVOUS SYSTEM

Cranial Nerves: ✓
Sensory Functions: ✓
Motor Functions: ✓
Reflexes: ✓

GASTRO-INTESTINAL SYSTEM:

Teeth: ✓
Gums: ✓
Tongue: ✓
Liver: ✓
Spleen: ✓
Any Lump: ✓

GENITO-URINARY SYSTEM

Hernia: ✓
Hydrocoele: ✓
Phimosis: ✓
Crypto-Orchidism: ✓
Any feature of STD: ✓

EXAMINATION OF EYES

Squint: ✓
Nystagmus: ✓

	Far Vision		Near Vision	
	Right	Left	Right	Left
Without Glass	6/6	6/6	N/6	N/6
With Glass				
Power of Glasses				
Colour Vision	Normal			

Remarks

EXAMINATION OF EAR, NOSE & THROAT		
Tonsils / Ear Canal : / Whispered voice :	(R) (R)	Tympanic Membrane: (R) / Any discharge:

LOCOMOTOR SYSTEM		
Gait : (R)	Spine : (R)	Any abnormality: (R)
For Females Only: / Age of Menarche / Breast examination: N.A	Pregnancy test (If indicated): / L. M. P.: N.A.	

INVESTIGATION REPORTS OF Mr./ Ms.

BLOOD							
B. Sugar F	—			S. Uric Acid	—		
B. Sugar PP	—			SGPT	20		
B. Sugar R	87			SGOT	22.5		
S. Cholesterol	—			Hb%	15.20		
S. Triglyceride	—			Total WBC count	8,800		
HDL	—			RBC	5.30		
LDL	—			Total platelet	2,33,000		
S. Creat.	0.8			ESR	4		
B. Urea	—			Blood Group	A+ve		
Differential Count	Neutro	56	Lymph	38	Eosino	03	Mono	03
Urine R/E	Colour	P.Y	pH	Acidic	Sugar	Ab	Albumin	Ab
Microscopy	PusCell	1-2	RBC	Ab	Epith.	3-4	Cast	—

Any Other Investigation

X-Ray Chest Report: — N.A

ECG Report: — WNL

Audiometry Report: — B/L Normal

PFT Report: — Normal

Ultrasonography report (If required)

Any Other Investigation done:

OBSERVATIONS

DR. DEVKUMAR VARMA
M.D. (PATH), MBBS, CIH
OCCUPATIONAL HEALTH CONSULTANT
REG. No.: G-11075

Signature & Seal
Examining Doctor

Registration Number:
Date:

VARMA LABORATORY
ADVANCED PATHOLOGICAL LABORATORY

Dr. Dev Varma
M.D. (Path.) CIH
Consultant Pathologist
Reg. No. G - 2489

Name : FULESWAR BUDHAN
Ref By : C/O S.H.R

Age/Sex : 30 Yrs./M
Date : 27/03/2023
Report ID. : 19

HAEMATOLOGY ANALYSIS

TEST		RESULT	UNIT	METHOD	REFERENCE INTERVAL
BLOOD COUNTS & INDICES					
Haemoglobin	:	15.20	gm%		13.5 - 17.0 gm%
Total RBC	:	5.30	mill/cmm		4.6 - 6.2 mill/cmm
PCV	:	**39.80**	%		40 - 54 %
MCV	:	**75.09**	fL		80 - 96 fL
MCH	:	28.68	pg		27 - 31 pg
MCHC	:	**38.19**	%		32 - 36 %
RDW	:	12.30	%		10 - 15 %
Total WBC	:	8,800	/cmm		4,000 - 11,000/cmm
Platelet Count	:	2,33,000	/cmm		1.5 - 4.0 Lac/cmm.
DIFFERENTIAL LEUCOCYTES COUNT					
Neutrophils	:	56	%		55 - 70 %
Lymphocytes	:	38	%		20 - 40 %
Eosinophils	:	03	%		01 - 06 %
Monocytes	:	03	%		02 - 08 %
Basophils	:	00	%		00 - 01 %
Platelet In Smear	:	ADEQUATE			
ERYTHROCYTES SEDIMENTATION RATE					
ESR	:	4	mm	Westergren	01 - 07 mm
Blood Group	:	" A "			
Rh Factor (Anti D.)	:	" POSITIVE "			

Test done on Fully automated Cellcounter - NIHON KOHDEN, JAPAN

End Of Report

Dr. Dev Varma
M.D. (PATH) C.I.H.
Consultant Pathologist

VARMA LABORATORY
ADVANCED PATHOLOGICAL LABORATORY

Dr. Dev Varma
M.D. (Path.) CIH
Consultant Pathologist
Reg. No. G - 2489

Name : FULESWAR BUDHAN
Ref By : C/O S.H.R

Age/Sex : 30 Yrs./M
Date : 27/03/2023
Report ID. : 19

BIOCHEMISTRY ANALYSIS

TEST		RESULT	UNIT	REFERENCE INTERVAL
Creatinine	:	0.8	mg/dl	0.7- 1.4 mg/dl
S.G.P.T.	:	20	U/L	UP TO 40 U/L
S.G.O.T.	:	22.5	U/L	up to 40 U/L
Random Blood Glucose (RBS)	:	87	mg/dl	70 - 140 mg/dl

Test done on Fully automated Bio - Chemistry analyzer - TurboChem100.

URINE ANALYSIS

Sample	:	RANDOM
PHYSICAL EXAMINATION		
Quantity	:	20 ml
Colour	:	PALE YELLOW
Transperancy	:	CLEAR
Specific Gravity	:	1.030
pH	:	ACIDIC
CHEMICAL EXAMINATION		
Albumin	:	ABSENT
Sugar	:	ABSENT
Acetone	:	ABSENT
Bile Salts	:	ABSENT
Bile Pigments	:	ABSENT
Occult Blood	:	ABSENT
MICROSCOPIC EXAMINATION		
Pus Cells / h.p.f.	:	1-2
R.B.C. / h.p.f.	:	ABSENT
Epithelial / h.p.f.	:	3-4

End Of Report

Dr. Dev Varma
M.D. (PATH) C.I.H.
Consultant Pathologist

MATESHREE ENT. HOSPITAL

AUDIOGRAM

DR. GAURANG JOSHI
D.L.O.M.S. (ENT)
CIH
C-15, Capital Business Centre,
Opp. Central Bank of India,
Panch Batti, Bharuch-392 001.
Phone : (H) 269880

Code No. : _____ Date 27/03/23

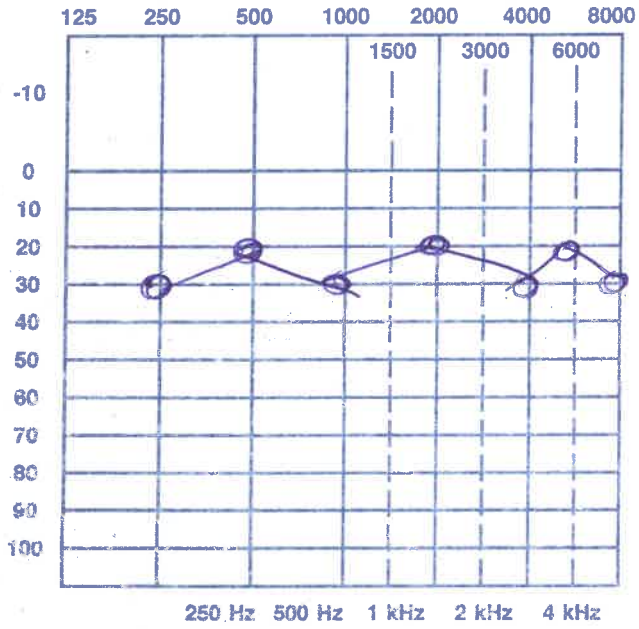
Audiogram of Fuleshwar.

Age 30 Yrs. Sex M Ref. by _____

Occupation _____

Address _____

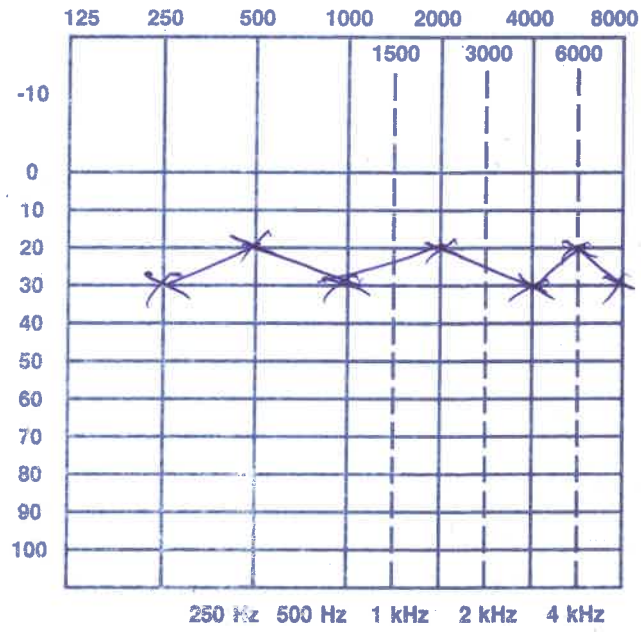
RIGHT



WEBER Lateralized to

	A.C.	B.C.	A.C. MASK	B.C. MASK	NOT HEARD
R	O	<	△	]	0 ↓
L	X	>	□	[	X ↓

LEFT



Clinical Findings _____

Comments BIL Normal

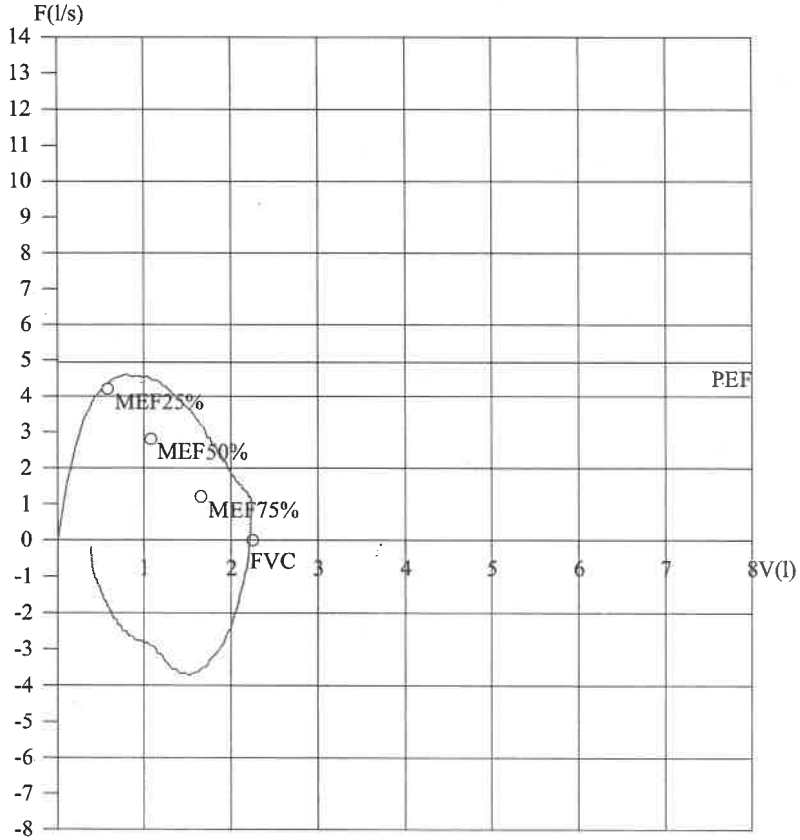
Dr. Gaurang Joshi
DLO MS (ENT)
Regd G 7667
Mateshree ENT Hospital
C-15, Capital Business Center,
Panchbatti, BHARUCH 392001
Ph : (0)

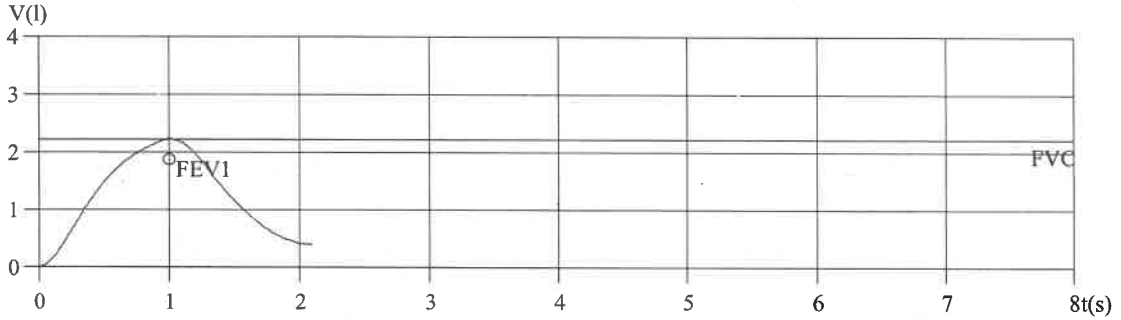
DR. GAURANG JOSHI
D.L.O.M.S. (ENT) CIH

Krishna Occupational Health Center
Bharuch

Last Name:		**Date of Birth:** 10-03-1993	**Age:** 30
First Name: FULESHWAR KORA		**Sex:** Male	**Weight (Kg):** 46
ID: SR05728		**Ethnic Corr.:** 60%	**Height (cm):** 153
Date: 27-03-2023		**Description:**	**BSA (m2):** 1.4
Predicted: ERS 93		**Comments:**	**Smoke:** ex

Forced Vital Capacity — TEST #1 - 27-03-2023





Parameter (U)	Pred.	Pre	%Pred.
FVC(L)	2.22	2.37	106.8
FEV0.5(L)	---	1.56	---
FEV1(L)	1.93	2.37	122.8
FEV1/FVC%	81.81	100	122.2
PEF(L/s)	4.95	4.61	93.1
PIF(L/s)	---	3.72	---
FEF25-75%(L/s)	2.63	4.1	155.9
Vmax25%(L/s)	4.21	4.39	104.3
Vmax50%(L/s)	2.71	4.45	164.2
Vmax75%(L/s)	1.12	3.13	279.5
FET100%(s)	---	1	---
ELA (Years)	**73**	73	

INTERPRETATION

Pre : Normal Spirometry (%FEV1/FVC>80%Pred%FEV1/FVC and FVC>80%PredFVC)

Dr. GAURANG JOSHI
MS., M.B., C.I.H.

Dr. Gaurang Joshi (M.B. C.I.H.)

Printed 27-03-2023
SPIRO EXCEL 1.1

FORM NO. 32
(Prescribed under Rule 68-T and 102)

Health Register

1. **Serial Number in the Register Of adult Workers:**
2. **Name of Worker:** Fuleshwar Brijlal Kosel
3. **Sex:** male
4. **Date of birth:** 01/07/1993.

1 Helper	Department Works	
2. Manipulation of Acid & Alkalis	Name of Hazardous process	
3. Chemical Works.	Dangerous process/operation	
4	Nature of job or occupation	
5	Raw materials, products or By-products likely to be exposed to	
6 30/09/2022	Date of posting	
7	Date of leaving/transfer to or transfer	
8	Reasons for Discharge/ leaving or transfer	
9 27/03/23	Date	Medical examination Results therefore
10	Signs and symptoms Observed during examination	
11 CBC,ESR,RBS,B.G.,SGPT, SGOT,CREAT,,URINE R/M, ECG,EYE,AUDIO,SPIRO.	Nature of tests & results thereof	
12 Fit	Result Fit/Unfit	
13	Period of temporary Withdrawal from that work	If declared unfit for work
14	Reasons for such withdrawal	
15	Date of declaring him Unfit for that work	
16 27/03/23	Date of issuing fitness Certificate	
17 DR. DEVKUMAR VARMA M.D. (PATH), MBBS, CIH OCCUPATIONAL HEALTH CONSULTANT REG. No.: G-10075	Signature with date of the factory Medical Officer/ the Certifying Surgeon.	

amax MEDICAL CENTER

A Multi Super Speciality Center

EMPLOYEE DETAILS				SR NO. 36
EMPLOYEE NAME	PATEL USMANGANI H.	AGE/GENDER	23	MALE
FATHER'S NAME	HASANBHAI	DATE OF BIRTH	22.01.2000	
DESIGNATION	JR. TECHNICIAN ASSISTANT	DATE	05.12.2022	
DEPARTMENT	CMS-INSTRUMENT	EMP. CODE	11523	
COMPANY NAME	GRASSIM CHEMICAL DIVISION, VILAYAT			

GENERAL EXAMINATION					
WEIGHT	77	Kg	HEIGHT	170	cm
BP	120/80	mm of Hg	PULSE	76	/min
BMI	26.64	Kg/m^2	BLOOD GROUP	***	
SPO2	99	%	TEMPERATURE	NORMAL	

MEDICAL HISTORY			
Past History	NILL SIGNIFICANT	Personal History	NILL SIGNIFICANT
Family History	FATHER - D.M.	Addiction	NILL SIGNIFICANT
Allergic History	NILL SIGNIFICANT	Occupational History	NIL SIGNIFICANT
Present Complains	NO SPECIFIC HISTORY OF FEVER OR COUGH	Symptoms of COVID-19	NAD

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	Musculosketeal System	NAD
CNS	CONCIOUS & ORIENTED	Genitourinary System	NAD
IDENTIFICATION MARK	SCAR ON FOREHEAD		

ADVICE	REGULAR EXERCISE & DIET
REMARK	OVERWEIGHT
ECG	NORMAL
X-RAY	***
SPIROMETARY	WITH NORMAL LIMIT
AUDIOMETARY	B/L WITH NORMAL LIMIT
FITNESS STATUS	FIT

NOTE :THIS REPORT IS NOT FOR LEGEL IMPLICATION AND PURPOSE,CONFIDENTIAL REPORT ONLY FOR COMPANY USE

DR. MAHINATH MISHRA
M.B.B.S., C.I.H.
Reg. No.- G-16814
Family Physician & Industrial
Health Consultant

BHARUCH : 2nd Floor,Yash Complex,
Opp. INOX Cinema, Zadeshwar Rd., Bharuch.
Ph : 02642-227771/227882 Mo : +91 9099227882

RAHIYAD : Bhrugu Complex,
Ground Floor, Rahiyad Chokdi,
Bharuch-392130 Mo : 9327703283

VILAYAT : Shop No.16, Sky View Shopping Centre,
Opp. Birla Grasim, Vilayat Chokdi, Derol Road,
Argama, Ta. Vagar, Dist. Bharuch. Mo : +91 9099227882

amaxhseq@gmail.com amaxhseq.com

TEST REPORT

Reg. No :	2212100394 **Reg. Date :** 05-Dec-2022 00:00	**Collected On :**	05-Dec-2022 19:18
Name :	PATEL USMANGANI H.	**Report Date :**	06-Dec-2022
Age/Sex :	23 Years / Male	**Dispatch At :**	
Ref. By :		**Tele No:**	
Location :	AMAX MEDICAL CENTER @BHARUCH	**DOB:**	

Parameter	Result	Unit	Reference Interval
***COMPLETE BLOOD COUNT (CBC)**			
SPECIMEN: EDTA BLOOD			
Hemoglobin (SLS method)	13.9	g/dL	13.0 - 17.0
*Hematrocrit (Electrical Impedance)	47.3	%	40 - 54
RBC Count (Electrical Impedance)	5.42	million/cmm	4.5 - 5.5
WBC Count (Flowcytometry)	7400	/cmm	4000 - 10000
*Platelet Count (Electrical Impedance)	**568000**	/cmm	150000 - 410000
MCV (Calculated)	87.3	fL	83 - 101
MCH (Calculated)	**25.6**	Pg	27 - 32
MCHC (Calculated)	**29.4**	%	31.5 - 34.5
RDW (Calculated)	14.2	%	11.5 - 14.5
DIFFERENTIAL WBC COUNT (Manual By Microscopy)			
Neutrophils (%)	49	%	38 - 70
Lymphocytes (%)	**46**	%	20 - 45
Monocytes (%)	04	%	2 - 8
Eosinophils (%)	01	%	1 - 4
Basophils (%)	00	%	0 - 1
Platelets	Platelets are adequate with normal morphology.		
Parasites	Malarial parasite is not detected.		
*ESR (After 1 hour) *Modified Westergren Method*	06	mm/hr	0 - 14

---------- End Of Report ----------

This is an electronically authenticated report.

* Denotes Test not in NABL Scope.

Approved On : 06-Dec-2022 11:14

Generated On : 10-Dec-2022 19:15

Test done from collected sample

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

* The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

205 - 210 , 2nd Floor, Golden Triangle, Near Sardar Patel Stadium, Navrangpura, AHMEDABAD - 380 009
T: 079 48004474 I M: 9537485100, 9537485200 I e: invitrolaboratory.s@gmail.com

TEST REPORT

Reg. No :	2212100394 **Reg. Date :** 05-Dec-2022 00:00	**Collected On :**	05-Dec-2022 19:18
Name :	PATEL USMANGANI H	**Report Date :**	06-Dec-2022
Age/Sex:	23 Years / Male	**Dispatch At :**	
Ref. By :		**Tele No:**	
Location :	AMAX MEDICAL CENTER @BHARUCH	**DOB:**	

Parameter	Result	Unit	Biological Reference Interval
***RANDOM PLASMA GLUCOSE**			
Specimen: Flouride plasma			
*Random Blood Sugar (RBS) *Glucose Oxidase-Peroxidase*	75	mg/dL	70 - 140
Urine Glucose - R	Nil	gm/dl	
Urine Acetone - R	Nil		

Criteria for the diagnosis of diabetes1. HbA1c >/= 6.5 *
Or
2. Fasting plasma glucose >126 gm/dL. Fasting is defined as no caloric intake at least for 8 hrs.
Or
3. Two hour plasma glucose >/= 200mg/dL during an oral glucose tolerence test by using a glucose load containing equivalent of 75 gm anhydrous glucose dissolved in water.
Or
4. In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose >/= 200 mg/dL.
*In the absence of unequivocal hyperglycemia, criteria 1-3 should be confirmed by repeat testing.
American diabetes association. Standards of medical care in diabetes 2011. Diabetes care 2011;34;S11.

ALANINE AMINOTRANSFERASE			
*SGPT *UV with P5P*	25	U/L	16 - 63
ASPARTATE AMINOTRANSFERASE			
*SGOT *Siemens Dade Standard Non IFCC Correlated*	22	U/L	15 - 37
GAMMA GLUTAMYL TRANSFERASE			
*GGT	24	U/L	15 - 85
ALKALINE PHOSPHATASE			
*Alakaline Phosphatase *P-nitrophenyl phosphatase-AMP Buffer*	83	U/L	46 - 116
*Total Bilirubin *Diazo with sulphanilic acid*	0.74	mg/dL	0.2 - 1.0
Conjugated Bilirubin *Diazo with sulphanilic acid*	0.1	mg/dL	0.0 - 0.3
Unconjugated Bilirubin *Calculated*	0.64	mg/dL	0.0 - 1.1
*Total Protein *Biuret Reagent Blank*	7.4	g/dL	6.4 - 8.2

This is an electronically authenticated report.
* Denotes Test not in NABL Scope.

Approved On : 06-Dec-2022 16:12
Generated On : 10-Dec-2022 19:15

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

Test done from collected samole

* The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

TEST REPORT

Reg. No : 2212100394 **Reg. Date :** 05-Dec-2022 00:00
Name : PATEL USMANGANI H.
Age/Sex: 23 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On : 05-Dec-2022 19:18
Report Date : 06-Dec-2022
Dispatch At :
Tele No:
DOB:

Parameter	Result	Unit	Biological Reference Interval
*Albumin *By Bromocresol Purple*	4.1	g/dL	3.4 - 5.0
Globulin *Calculated*	3.30	g/dL	2.3 - 3.5
A/G Ratio *Calculated*	1.24		0.8 - 2.0

---------- End Of Report ----------

This is an electronically authenticated report.
* Denotes Test not in NABL Scope.

Approved On : 06-Dec-2022 16:12
Generated On : 10-Dec-2022 19:15

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

Test done from collected sample

* The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

TEST REPORT

Reg. No :	2212100394 **Reg. Date :** 05-Dec-2022 00:00	**Collected On :**	05-Dec-2022 19:18
Name :	PATEL USMANGANI H.	**Report Date :**	06-Dec-2022
Age/Sex:	23 Years / Male	**Dispatch At :**	
Ref. By :		**Tele No:**	
Location :	AMAX MEDICAL CENTER @BHARUCH	**DOB:**	

Parameter	Result	Unit	Biological Reference Interval
***HEMOGLOBIN A1 C ESTIMATION**			
Specimen: Blood EDTA			
Hb A1C *HPLC method.*	6.1	% of Total Hb	Non-diabetic Level : <5.6 % Pre-diabetes : 5.7-6.4% Diabetes>=6.5% Diabetes control criteria: 6-7% = Near Normal glycemia 7-8% : Good Control >8% : Action Suggested
Mean Blood Glucose *Calculated*	128.37	mg/dL	

* High risk of developing long term complication such as retinopathy, nephropathy, neuropathy, cardiopathy,etc.
* Some danger of hypoglycemic reaction in Type I diabetics.
* Some glucose intolerant individuals and "subclinical" diabetics may demonstrate HbA1c levels in this area.

EXPLANATION :-

*Total haemoglobin A1 c is continuo. sly symthesised in the red blood cell throught its 120 days life span.The concentration of HBA1c in the cell reflects the average blood glucose concentration it encounters.
*The level of HBA1c increases proportionately in patients with uncontrolled diabetes. It reflects the average blood glucose oncentration over an extended time period and remains unaffected by short-term fluctuations in blood glucose levels.
*The measurement of HbA1c can serve as a convenient test for evaluating the adequacy of diabetic control and in preventing various diabetic complications. Because the average half life of a red blood cell is sixty days,HbA1c has been accepted as a measurnment which eflects the mean daily blood glucose concentration, better than fasting blood glucose determination, and the degree of carbohydrate imbalance over the preceding two months.
*It may also provide a better index of control of the diabetic patient without resorting to glucose loading procedures.

HbA1c assay Interferences:

*Errneous values might be obtained from samples with abnormally elevated quantities of other Haemoglobins as a result of either their simultaneous elution with HbA1c(HbF) or differences in their glycation from that of HbA(HbS)

---------- End Of Report ----------

This is an electronically authenticated report.
* Denotes Test not in NABL Scope.

Approved On : 06-Dec-2022 15:31
Generated On : 10-Dec-2022 19:15

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

Test done from collected sample

* The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

TEST REPORT

Reg. No : 2212100394 **Reg. Date :** 05-Dec-2022 00:00
Name : PATEL USMANGANI H.
Age/Sex: 23 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On :05-Dec-2022 19:18
Report Date : 06-Dec-2022
Dispatch At :
Tele No:
DOB:

Parameter	Result	Unit	Biological Reference Interval
		CREATININE	
*Serum Creatinine *Jaffe- Kinetic*	0.96	mg/dL	0.7 - 1.30
*Cholesterol *Cholestrol Oxidase Esterase , peroxidase*	148	mg/dL	Desirable : < 200.0 Borderline High : 200-239 High : > 240.0
*Triglyceride *Lipase/GPO-PAP no correction*	243	mg/dL	Normal : < 150.0 Borderline : 150-199 High : 200-499 Very High : > 500.0
VLDL *Calculated*	**48.60**	mg/dL	15 - 35
LDL CHOLESTEROL	61.40	mg/dL	Optimal : < 100.0 Near / above optimal : 100-129 Borderline High : 130-159 High : 160-189 Very High : >190.0
*HDL Cholesterol *Direct HDL PEGME*	38	mg/dL	Low : < 40 High : > 60

This is an electronically authenticated report.

* Denotes Test not in NABL Scope.

Approved On : 06-Dec-2022 18:48
Generated On : 10-Dec-2022 19:15

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

* The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

205 - 210 , 2nd Floor, Golden Triangle, Near Sardar Patel Stadium, Navrangpura, AHMEDABAD - 380 009
T: 079 48004474 I M: 9537485100, 9537485200 I e: invitrolaboratory.s@gmail.com

TEST REPORT

Reg. No : 2212100394 **Reg. Date :** 05-Dec-2022 00:00
Name : PATEL USMANGANI H.
Age/Sex: 23 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On :05-Dec-2022 19:18
Report Date : 06-Dec-2022
Dispatch At :
Tele No:
DOB:

Parameter	Result	Unit	Biological Reference Interval
Cholesterol /HDL Ratio *Calculated*	3.89		0 - 5.0
LDL / HDL RATIO *Calculated*	1.62		0 - 3.5
Total Lipids *Calculated*	742.00		400 - 1000

---------- End Of Report ----------

This is an electronically authenticated report.

* Denotes Test not in NABL Scope.

Approved On : 06-Dec-2022 18:48
Generated On : 10-Dec-2022 19:15

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

* The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

205 - 210 , 2nd Floor, Golden Triangle, Near Sardar Patel Stadium, Navrangpura, AHMEDABAD - 380 009
T: 079 48004474 I M: 9537485100, 9537485200 I e: invitrolaboratory.s@gmail.com

TEST REPORT

Reg. No :	2212100394 **Reg. Date :** 05-Dec-2022 00:00	**Collected On :**	05-Dec-2022 19:18
Name :	PATEL USMANGANI H.	**Report Date :**	06-Dec-2022
Age/Sex :	23 Years / Male	**Dispatch At :**	
Ref. By :		**Tele No:**	
Location :	AMAX MEDICAL CENTER @BHARUCH	**DOB:**	

Parameter	Result	Reference Interval
***URINE ROUTINE EXAMINATION**		
PHYSICAL EXAMINATION		
Quantity	20 cc	
Colour	Pale Yellow	
Clarity	Clear	
CHEMICAL EXAMINATION (BY REFLECTANCE PHOTOMETRIC METHOD)		
pH	7.0	4.6 - 8.0
Sp. Gravity	1.020	1.002 - 1.03
Protein	Nil	
Glucose	Nil	
Ketone Bodies	Nil	
Urobilinogen	Nil	
Bilirubin	Nil	
Nitrite	Nil	
Leucocytes	Nil	
Blood	Nil	
MICROSCOPIC EXAMINATION (MANUAL BY MCIROSCOPY)		
Leucocytes (Pus Cells)	1 - 5/hpf	
Erythrocytes (Red Cells)	Nil	
Epithelial Cells	1-2/hpf	
Amorphous Material	Nil	
Casts	Nil	
Crystals	Nil	
Bacteria	Nil	
Monilia	Nil	
T. Vaginalis	Nil	
Spermatozoa	Nil	

---------- End Of Report ----------

This is an electronically authenticated report.

* Denotes Test not in NABL Scope.

Approved On : 06-Dec-2022 18:05

Generated On : 10-Dec-2022 19:15

Test done from collected sample

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

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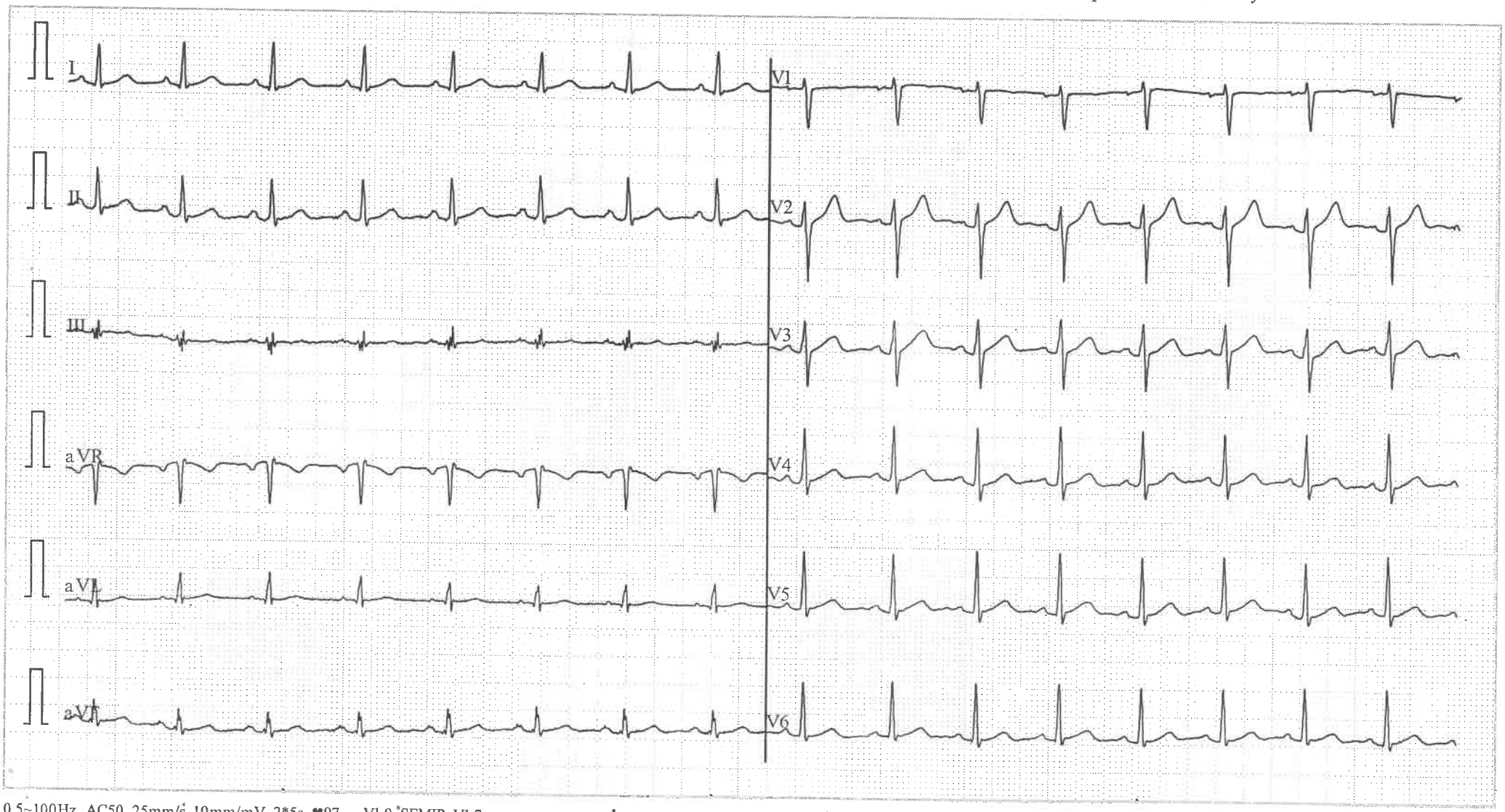
T: 079 48004474 | M: 9537485100, 9537485200 | e: invitrolaboratory.s@gmail.com

AMAX_MEDICAL_CENTER ECG REPORT

ID : 36 23Years Male cm kg / mmHg Race:Unknown Room No.: Department:
Exam.Room: Medication:

HR	: 97 bpm	Diagnosis Information:
P	: 96 ms	Sinus Rhythm
PR	: 143 ms	***Normal ECG***
QRS	: 74 ms	
QT/QTc	: 318/404 ms	
P/QRS/T	: 52/32/43 °	
RV5/SV1	: 1.052/0.650 mV	

Technician :
Ref-Phys. :
Report Confirmed by:



0.5~100Hz AC50 25mm/s 10mm/mV 2*5s ♥97 V1.0 SEMIP V1.7

05-12-2022 12:32:31

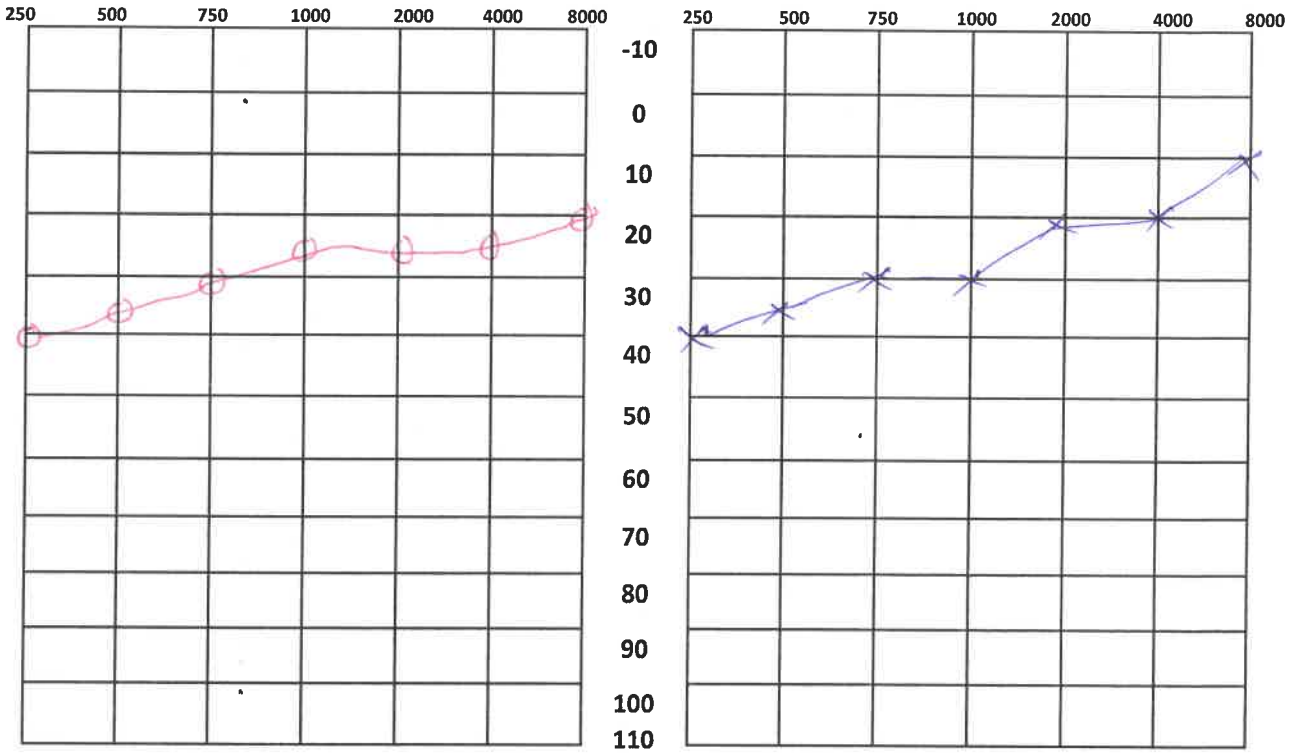
amax MEDICAL CENTER

1st Floor,Bhurugu Complex,Rahiyad Chokdi,Ta-Vagra, Dist-Bharuch, Gujrat , CONT NO.:-7041274129

AUDIOGRAM

Employee Name	PATEL USMANGANI H.	**Age:**	23 MALE
Employee Code	11523	**Sr No.**	36
Company Name	GRASSIM CHEMICAL DIVISION, VILAYAT	**Date:**	05.12.2022

Right Ear — **Frequency in Harz (Hz)** — **Left Ear**



Air Conduction X=Left Ear
O=Right Ear

Bone Conduction >=Left Ear
<=Right Ear

Remark: B/L WITH NORMAL LIMIT

DR. MAHINATH MISHRA
M.B.B.S., C.I.H.
Reg. No.- G-16014
Family Physician & Industrial Health Consultant

Sign & Stamp

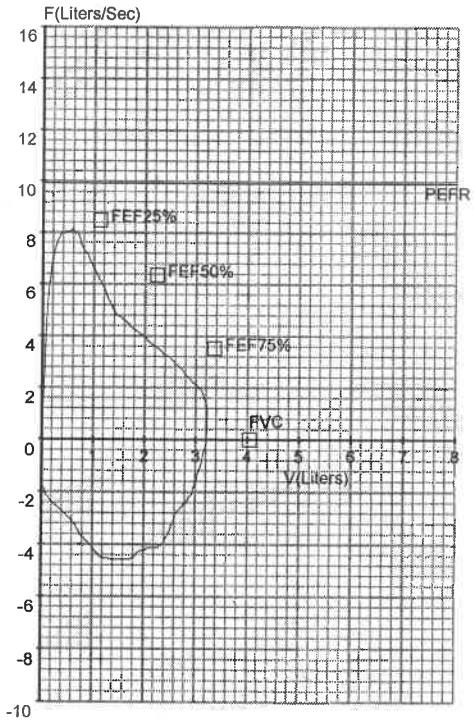
Clarity
Clarity Medical Pvt. Ltd.

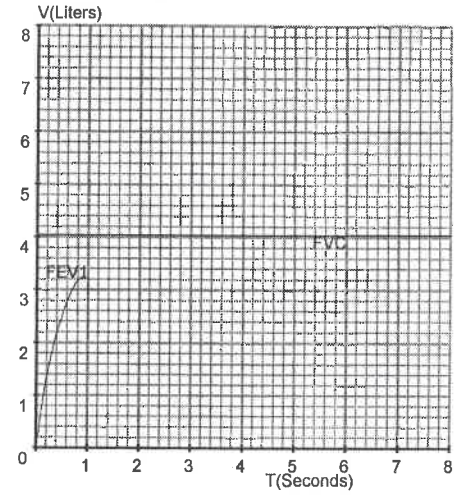
AMAX MEDICAL CENTER
BHARUCH .GUJRAT.(INDIA)

GRCD-36 - PATEL USMANGANI H.
23 Years / Male / Ht 177 Cms /77 Kgs / Non-Smoker

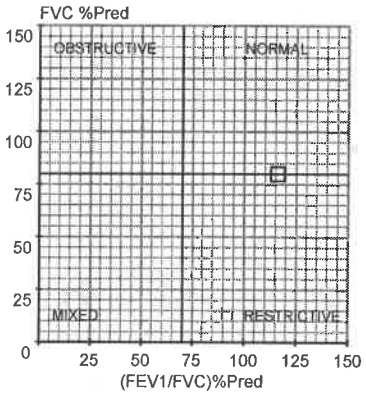
FVC TEST
Date: 05-12-2022 (T1)

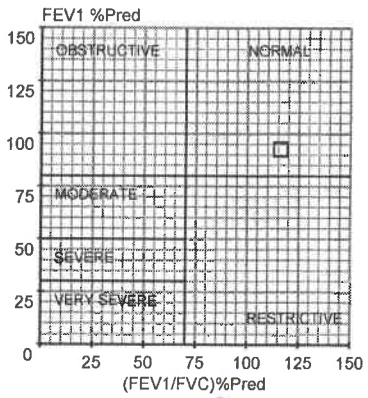
Pred Eqn : CLARITY Eth.Corr : 100 Temp : 0°C
Ref By : NONE





Parameter		Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	4.04	3.22	80	--	--	--
FEV1	[L]	3.47	3.21	93	--	--	--
FEV.5	[L]	--	2.55	--	--	--	--
FEV3	[L]	3.92	--	--	--	--	--
FEV6	[L]	--	--	--	--	--	--
PEFR	[L/s]	9.94	8.11	82	--	--	--
FEF25-75	[L/s]	4.84	4.88	101	--	--	--
FEF75-85	[L/s]	--	3.02	--	--	--	--
FEF.2-1.2	[L/s]	8.40	7.05	84	--	--	--
FEF25%	[L/s]	8.47	8.14	96	--	--	--
FEF50%	[L/s]	6.31	5.13	81	--	--	--
FEF75%	[L/s]	3.52	3.52	100	--	--	--
FEV.5/FVC	[%]	--	79.15	--	--	--	--
FEV1/FVC	[%]	85.86	99.52	116	--	--	--
FEV3/FVC	[%]	97.00	--	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--	--
FET	[S]	--	0.94	--	--	--	--
ExplTime	[S]	--	0.08	--	--	--	--
LungAge	[Y]	23.00	25.00	109	--	--	--
FIVC	[L]	--	3.34	--	--	--	--
PIFR	[L/s]	--	4.63	--	--	--	--
FIF25%	[L/s]	--	8.32	--	--	--	--
FIF50%	[L/s]	--	5.34	--	--	--	--
FIF75%	[L/s]	--	3.84	--	--	--	--
FIV.5	[L]	--	0.52	--	--	--	--
FIV1	[L]	--	2.55	--	--	--	--
FIV3	[L]	--	--	--	--	--	--
FIV.5/FIVC	[%]	--	15.70	--	--	--	--
FIV1/FIVC	[%]	--	76.36	--	--	--	--
FIV3/FIVC	[%]	--	--	--	--	--	--





- Pre Medication Report :
Spirometery shows Mild Restriction as FVC% < 80 A nd FEV1/FVC% > 70

- Pre COPD Severity Report:
COPD Severity within Normal range

- Doctor's Comments :

DR. MAHINATH MISHRA
M.B.S., C.I.H.
Reg. No. 2014
DR. MAHINATH MISHRA
Family Physician & Industria
Health Consultant

amax MEDICAL CENTER

A Multi Super Speciality Center

EMPLOYEE DETAILS				SR NO. 316
EMPLOYEE NAME	RAKESH K. RANA	AGE/GENDER	37	MALE
FATHER'S NAME	KISHORBHAI C. RANA	DATE OF BIRTH	30.08.1984	
DESIGNATION	SR.TECHNICIAN ASSOCIATE	DATE	07.12.2022	
DEPARTMENT	INSTRUMENT	EMP. CODE	10878	
COMPANY NAME	GRASSIM CHEMICAL DIVISION, VILAYAT			

GENERAL EXAMINATION					
WEIGHT	90	Kg	HEIGHT	168	cm
BP	130/80	mm of Hg	PULSE	94	/min
BMI	31.89	Kg/m^2	BLOOD GROUP	***	
SPO2	99	%	TEMPERATURE	NORMAL	

MEDICAL HISTORY			
Past History	NILL SIGNIFICANT	Personal History	NILL SIGNIFICANT
Family History	FATHER - HTN	Addiction	NILL SIGNIFICANT
Allergic History	NILL SIGNIFICANT	Occupational History	NIL SIGNIFICANT
Present Complains	NO SPECIFIC HISTORY OF FEVER OR COUGH	Symptoms of COVID-19	NAD

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	Musculosketeal System	NAD
CNS	CONCIOUS & ORIENTED	Genitourinary System	NAD
IDENTIFICATION MARK	BIRTH MARK ON RT SHOULDER		

ADVICE	REGULAR EXERCISE & DIET
REMARK	OBESE CLASS-I
ECG	NORMAL
X-RAY	***
SPIROMETARY	WITH NORMAL LIMIT
AUDIOMETARY	B/L WITH NORMAL LIMIT
FITNESS STATUS	FIT

NOTE :THIS REPORT IS NOT FOR LEGEL 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 : 02642-227771/227882 Mo : +91 9099227882

RAHIYAD : Bhrugu Complex, Ground Floor, Rahiyad Chokdi, Bharuch-392130 Mo : 9327703283

VILAYAT : Shop No.16, Sky View Shopping Centre, Opp. Birla Grasim, Vilayat Chokdi, Derol Road, Argama, Ta. Vagar, Dist. Bharuch. Mo : +91 9099227882

amaxhseq@gmail.com amaxhseq.com

316

IN VITRO
SPECIALITY LABORATORY
A Unit of IN VITRO Speciality Lab Pvt. Ltd.
Serving for better health

TEST REPORT

Reg. No :	2212100870 **Reg. Date :** 07-Dec-2022 00:00	**Collected On :**	07-Dec-2022 20:46
Name :	RAKESH K RANA	**Report Date :**	08-Dec-2022
Age/Sex :	37 Years / Male	**Dispatch At :**	
Ref. By :		**Tele No:**	
Location :	AMAX MEDICAL CENTER @BHARUCH	**DOB:**	

*COMPLETE BLOOD COUNT (CBC)

SPECIMEN: EDTA BLOOD

Parameter	Result	Unit	Reference Interval
Hemoglobin (SLS method)	15.2	g/dL	13.0 - 17.0
*Hematrocrit (Electrical Impedance)	48.7	%	40 - 54
RBC Count (Electrical Impedance)	5.04	million/cmm	4.5 - 5.5
WBC Count (Flowcytometry)	9810	/cmm	4000 - 10000
*Platelet Count (Electrical Impedance)	369000	/cmm	150000 - 410000
MCV (Calculated)	96.6	fL	83 - 101
MCH (Calculated)	30.2	Pg	27 - 32
MCHC (Calculated)	**31.2**	%	31.5 - 34.5
RDW (Calculated)	14.4	%	11.5 - 14.5
DIFFERENTIAL WBC COUNT (Manual By Microscopy)			
Neutrophils (%)	66	%	38 - 70
Lymphocytes (%)	30	%	20 - 45
Monocytes (%)	02	%	2 - 8
Eosinophils (%)	02	%	1 - 4
Basophils (%)	00	%	0 - 1
PERIPHERAL SMEAR STUDY			
RBC Morphology	RBCs are Normocytic and Normochromic.		
WBC Morphology	Total WBC and differential count is within normal limit.		
Platelets	Platelets are adequate with normal morphology.		
Parasites	Malarial parasite is not detected.		
*ESR (After 1 hour) *Modified Westergren Method*	02	mm/hr	0 - 14

---------- End Of Report ----------

This is an electronically authenticated report.

* Denotes Test not in NABL Scope.

Approved On : 08-Dec-2022 15:24

Generated On : 12-Dec-2022 11:12

Test done from collected sample

Approved by: DR. AMI GAJJAR
M.B.B.S D.C.P

*The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

205 - 210, 2nd Floor, Golden Triangle, Near Sardar Patel Stadium, Navrangpura, AHMEDABAD - 380 009.
T : 079 48004474 | M : 9537485100, 9537485200 | e : invitrolaboratory.s@gmail.com

TEST REPORT

Reg. No : 2212100870 **Reg. Date :** 07-Dec-2022 00:00
Name : RAKESH K RANA
Age/Sex: 37 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On : 07-Dec-2022 20:46
Report Date : 08-Dec-2022
Dispatch At :
Tele No:
DOB:

Parameter	Result	Unit	Biological Reference Interval
***RANDOM PLASMA GLUCOSE**			
	Specimen: Flouride plasma		
*Random Blood Sugar (RBS) *Glucose Oxidase-Peroxidase*	109	mg/dL	70 - 140
Urine Glucose - R	Nil	gm/dl	
Urine Acetone - R	Nil		

Criteria for the diagnosis of diabetes1. HbA1c >/= 6.5 *
Or
2. Fasting plasma glucose >126 gm/dL. Fasting is defined as no caloric intake at least for 8 hrs.
Or
3. Two hour plasma glucose >/= 200mg/dL during an oral glucose tolerence test by using a glucose load containing equivalent of 75 gm anhydrous glucose dissolved in water.
Or
4. In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis, a random plasma glucose >/= 200 mg/dL.
*In the absence of unequivocal hyperglycemia, criteria 1-3 should be confirmed by repeat testing.
American diabetes association. Standards of medical care in diabetes 2011. Diabetes care 2011;34;S11.

ALANINE AMINOTRANSFERASE			
*SGPT *UV with P5P*	29	U/L	16 - 63
ASPARTATE AMINOTRANSFERASE			
*SGOT *Siemens Dade Standard Non IFCC Correlated*	19	U/L	15 - 37
GAMMA GLUTAMYL TRANSFERASE			
*GGT	29	U/L	15 - 85
ALKALINE PHOSPHATASE			
*Alakaline Phosphatase *P-nitrophenyl phosphatase-AMP Buffer*	96	U/L	46 - 116
*Total Bilirubin *Diazo with sulphanilic acid*	0.21	mg/dL	0.2 - 1.0
Conjugated Bilirubin *Diazo with sulphanilic acid*	0.1	mg/dL	0.0 - 0.3
Unconjugated Bilirubin *Calculated*	0.11	mg/dL	0.0 - 1.1
*Total Protein *Biuret Reagent Blank*	7.3	g/dL	6.4 - 8.2

This is an electronically authenticated report.
* Denotes Test not in NABL Scope.

Approved On : 08-Dec-2022 11:11
Generated On : 12-Dec-2022 11:12

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No : G - 8725

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Test done from collected sample

TEST REPORT

Reg. No : 2212100870 **Reg. Date :** 07-Dec-2022 00:00
Name : RAKESH K RANA
Age/Sex: 37 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On : 07-Dec-2022 20:46
Report Date : 08-Dec-2022
Dispatch At :
Tele No:
DOB:

Parameter	Result	Unit	Biological Reference Interval
*Albumin *By Bromocresol Purple*	3.9	g/dL	3.4 - 5.0
Globulin *Calculated*	3.40	g/dL	2.3 - 3.5
A/G Ratio *Calculated*	1.15		0.8 - 2.0

---------- End Of Report ----------

This is an electronically authenticated report.
* Denotes Test not in NABL Scope.

Approved On : 08-Dec-2022 11:11
Generated On : 12-Dec-2022 11:12

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

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Test done from collected sample

TEST REPORT

Reg. No :	2212100870 **Reg. Date :** 07-Dec-2022 00:00	**Collected On :**	07-Dec-2022 20:46
Name :	RAKESH K RANA	**Report Date :**	08-Dec-2022
Age/Sex:	37 Years / Male	**Dispatch At :**	
Ref. By :		**Tele No:**	
Location :	AMAX MEDICAL CENTER @BHARUCH	**DOB:**	

*HEMOGLOBIN A1 C ESTIMATION

Specimen: Blood EDTA

Parameter	Result	Unit	Biological Reference Interval
Hb A1C *HPLC method.*	5.8	% of Total Hb	Non-diabetic Level : <5.6 % Pre-diabetes : 5.7-6.4% Diabetes>=6.5% Diabetes control criteria: 6-7% = Near Normal glycemia 7-8% : Good Control >8% : Action Suggested
Mean Blood Glucose *Calculated*	119.76	mg/dL	

* High risk of developing long term complication such as retinopathy, nephropathy, neuropathy, cardiopathy,etc.
* Some danger of hypoglycemic reaction in Type I diabetics.
* Some glucose intolerant individuals and "subclinical" diabetics may demonstrate HbA1c levels in this area.

EXPLANATION :-

*Total haemoglobin A1 c is continuously symthesised in the red blood cell throught its 120 days life span.The concentration of HBA1c in the cell reflects the average blood glucose concentration it encounters.
*The level of HBA1c increases proportionately in patients with uncontrolled diabetes. It reflects the average blood glucose oncentration over an extended time period and remains unaffected by short-term fluctuations in blood glucose levels.
*The measurement of HbA1c can serve as a convenient test for evaluating the adequacy of diabetic control and in preventing various diabetic complications. Because the average half life of a red blood cell is sixty days,HbA1c has been accepted as a measurnment which eflects the mean daily blood glucose concentration, better than fasting blood glucose determination, and the degree of carbohydrate imbalance over the preceding two months.
*It may also provide a better index of control of the diabetic patient without resorting to glucose loading procedures.

HbA1c assay Interferences:

*Errneous values might be obtained from samples with abnormally elevated quantities of other Haemoglobins as a result of either their simultaneous elution with HbA1c(HbF) or differences in their glycation from that of HbA(HbS)

---------- End Of Report ----------

This is an electronically authenticated report.
* Denotes Test not in NABL Scope.

Approved On : 08-Dec-2022 19:53
Generated On : 12-Dec-2022 11:12

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

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Test done from collected sample

205 - 210, 2nd Floor, Golden Triangle, Near Sardar Patel Stadium, Navrangpura, AHMEDABAD - 380 009.
T : 079 48004474 | M : 9537485100, 9537485200 | e : invitrolaboratory.s@gmail.com

TEST REPORT

Reg. No : 2212100870 **Reg. Date :** 07-Dec-2022 00:00
Name : RAKESH K RANA
Age/Sex: 37 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On : 07-Dec-2022 20:46
Report Date : 08-Dec-2022
Dispatch At :
Tele No:
DOB:

Parameter	Result	Unit	Biological Reference Interval
		CREATININE	
*Serum Creatinine *Jaffe- Kinetic*	0.74	mg/dL	0.7 - 1.30
*Cholesterol *Cholestrol Oxidase Esterase , peroxidase*	212	mg/dL	Desirable : < 200.0 Borderline High : 200-239 High : > 240.0
*Triglyceride *Lipase/GPO-PAP no correction*	239	mg/dL	Normal : < 150.0 Borderline : 150-199 High : 200-499 Very High : > 500.0
VLDL *Calculated*	**47.80**	mg/dL	15 - 35
LDL CHOLESTEROL	119.20	mg/dL	Optimal : < 100.0 Near / above optimal : 100-129 Borderline High : 130-159 High : 160-189 Very High : >190.0
*HDL Cholesterol *Direct HDL PEGME*	45	mg/dL	Low : < 40 High : > 60

This is an electronically authenticated report.

* Denotes Test not in NABL Scope.

Approved On : 08-Dec-2022 19:55

Generated On : 12-Dec-2022 11:12

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

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205 - 210, 2nd Floor, Golden Triangle, Near Sardar Patel Stadium, Navrangpura, AHMEDABAD - 380 009.
T : 079 48004474 | M : 9537485100, 9537485200 | e : invitrolaboratory.s@gmail.com

TEST REPORT

Reg. No : 2212100870 **Reg. Date :** 07-Dec-2022 00:00
Name : RAKESH K RANA
Age/Sex: 37 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On :07-Dec-2022 20:46
Report Date : 08-Dec-2022
Dispatch At :
Tele No:
DOB:

Parameter	Result	Unit	Biological Reference Interval
Cholesterol /HDL Ratio *Calculated*	4.71		0 - 5.0
LDL / HDL RATIO *Calculated*	2.65		0 - 3.5
Total Lipids *Calculated*	862.00		400 - 1000

---------- End Of Report ----------

This is an electronically authenticated report.

* Denotes Test not in NABL Scope.

Approved On : 08-Dec-2022 19:55

Generated On : 12-Dec-2022 11:12

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Reg No :- G - 8725

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205 - 210, 2nd Floor, Golden Triangle, Near Sardar Patel Stadium, Navrangpura, AHMEDABAD - 380 009.
T : 079 48004474 | M : 9537485100, 9537485200 | e : invitrolaboratory.s@gmail.com

TEST REPORT

Reg. No : 2212100870 **Reg. Date :** 07-Dec-2022 00:00
Name : RAKESH K RANA
Age/Sex : 37 Years / Male
Ref. By :
Location : AMAX MEDICAL CENTER @BHARUCH

Collected On : 07-Dec-2022 20:46
Report Date : 08-Dec-2022
Dispatch At :
Tele No:
DOB:

*URINE ROUTINE EXAMINATION

Parameter	Result	Reference Interval
PHYSICAL EXAMINATION		
Quantity	10 cc	
Colour	Pale Yellow	
Clarity	Clear	
CHEMICAL EXAMINATION (BY REFLECTANCE PHOTOMETRIC METHOD)		
pH	7.0	4.6 - 8.0
Sp. Gravity	1.030	1.002 - 1.03
Protein	Nil	
Glucose	Nil	
Ketone Bodies	Nil	
Urobilinogen	Nil	
Bilirubin	Nil	
Nitrite	Nil	
Leucocytes	Nil	
Blood	Nil	
MICROSCOPIC EXAMINATION (MANUAL BY MCIROSCOPY)		
Leucocytes (Pus Cells)	1 - 5/hpf	
Erythrocytes (Red Cells)	Nil	
Epithelial Cells	2-3/hpf	
Amorphous Material	Nil	
Casts	Nil	
Crystals	Nil	
Bacteria	Nil	
Monilia	Nil	
T. Vaginalis	Nil	
Spermatozoa	Nil	

---------- End Of Report ----------

This is an electronically authenticated report.
* Denotes Test not in NABL Scope.

Approved On : 08-Dec-2022 16:18
Generated On : 12-Dec-2022 11:12
Test done from collected sample

Approved by: DR. VIPUL PATEL M.D
(Pathologist)
Regd No. G - 8725

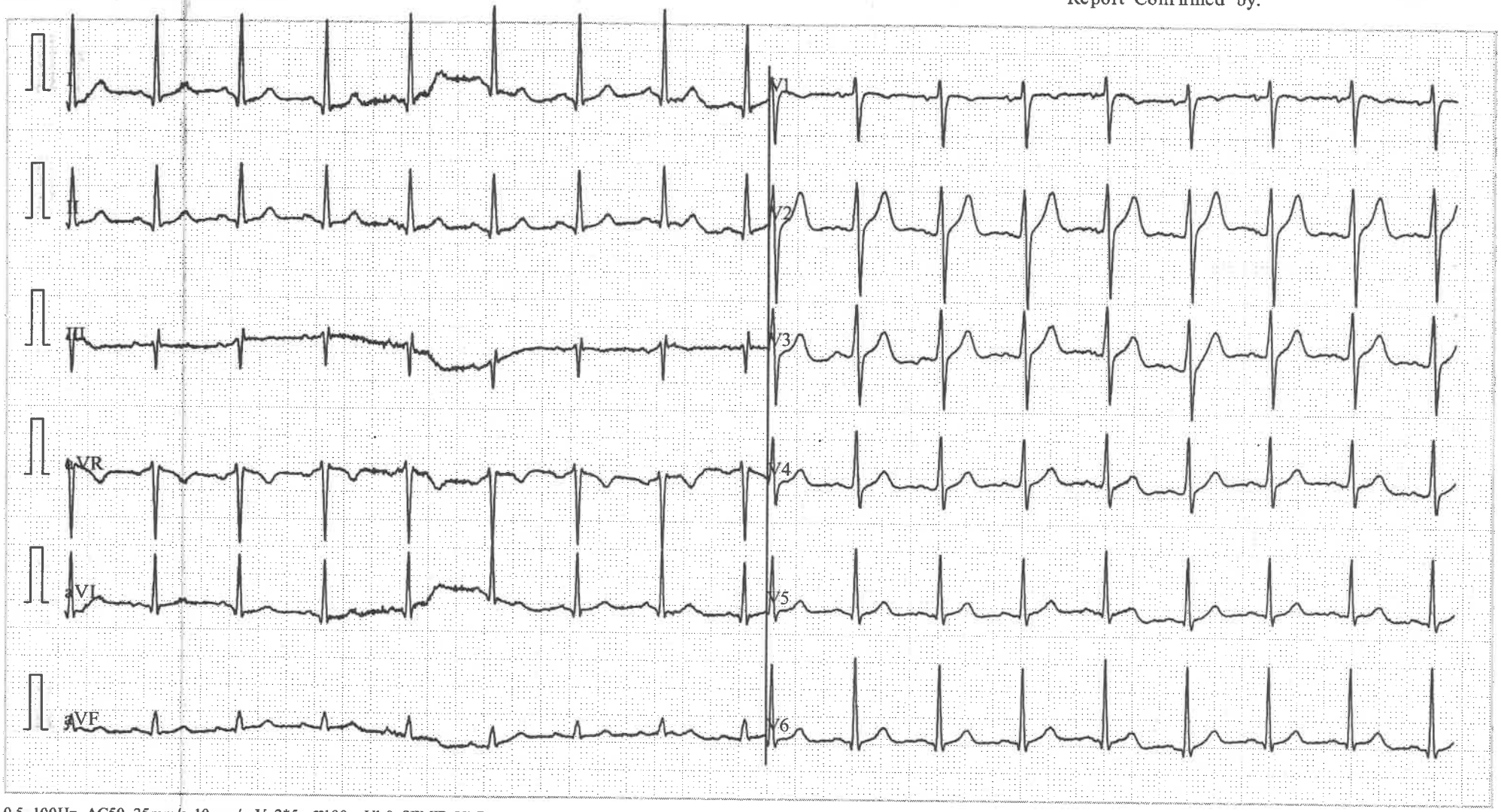
*The test results are subject to variation due to technical limitations and hence should be interpreted in correlation with clinical findings and other investigations.

AMAX_MEDICAL_CENTER ECG REPORT

ID : 316 37Years Male cm kg / mmHg Race:Unknown Room No.:
Department: Exam.Room: Medication:

HR	: 100 bpm	Diagnosis Information:
P	: 99 ms	Sinus Rhythm
PR	: 135 ms	***Normal ECG***
QRS	: 89 ms	
QT/QTc	: 321/414 ms	
P/QRS/T	: 32/21/27 °	
RV5/SV1	: 1.075/0.874 mV	

Technician :
Ref-Phys. :
Report Confirmed by:



0.5~100Hz AC50 25mm/s 10mm/mV 2*5s ♥100 V1.0 SEMIP V1.7

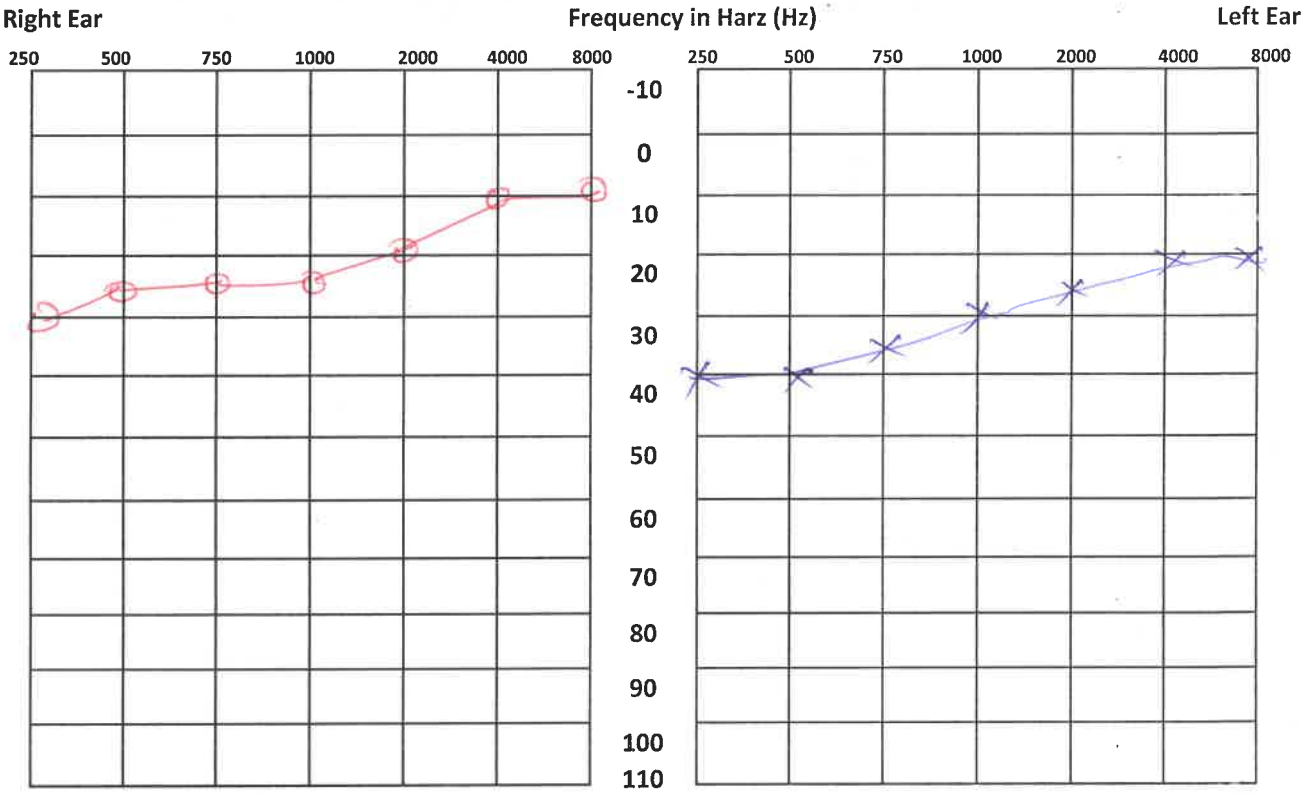
07-12-2022 14:29:35

amax MEDICAL CENTER

1st Floor,Bhurugu Complex,Rahiyad Chokdi,Ta-Vagra, Dist-Bharuch, Gujrat , CONT NO.:-7041274129

AUDIOGRAM

Employee Name	RAKESH K. RANA	**Age:**	37 MALE
Employee Code	10878	**Sr No.**	316
Company Name	GRASSIM CHEMICAL DIVISION, VILAYAT	**Date:**	07.12.2022



Air Conduction X=Left Ear
O=Right Ear

Bone Conduction >=Left Ear
<=Right Ear

Remark: B/L WITH NORMAL LIMIT

DR. MAHINATH MISHRA
M.B.B.S., C.I.H.
Reg. No.- G-16014
Family Physician & Industrial Health Consultant

Sign & Stamp

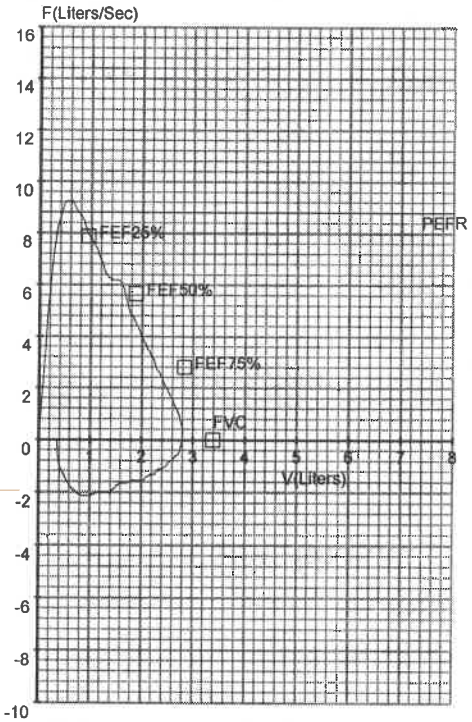
Clarity
Clarity Medical Pvt. Ltd.

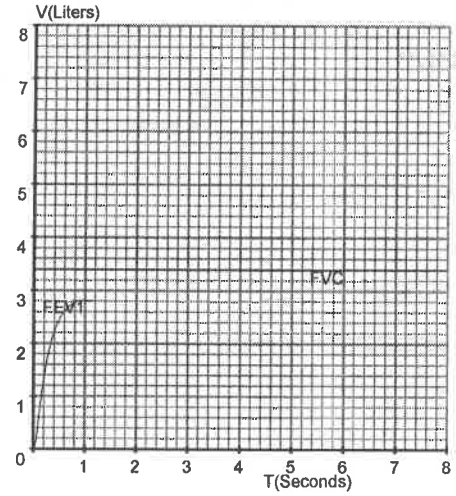
AMAX MEDICAL CENTER
BHARUCH .GUJRAT.(INDIA)

GRCD-316 - RAKESH K RANA
37 Years / Male / Ht 168 Cms /90 Kgs / Non-Smoker

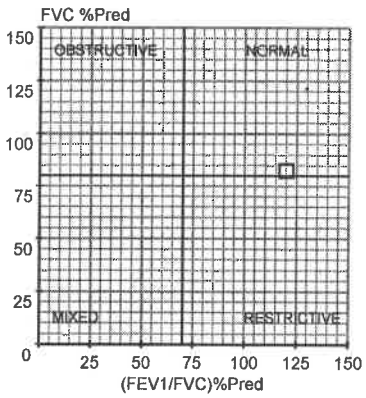
FVC TEST
Date: 07-12-2022 (T1)

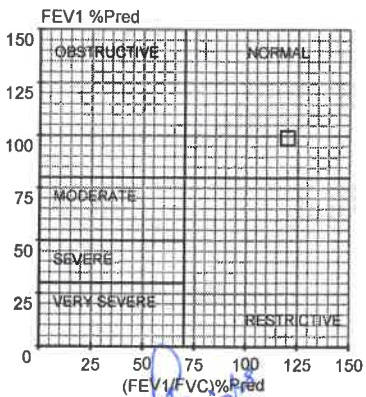
Pred Eqn : CLARITY Eth.Corr : 100 Temp : 0°C
Ref By : NONE





Parameter		Pred	Pre	Pre%	Post	Post%	Imp%
FVC	[L]	3.39	2.80	82	--	--	--
FEV1	[L]	2.81	2.78	99	--	--	--
FEV.5	[L]	--	2.53	--	--	--	--
FEV3	[L]	3.29	--	--	--	--	--
FEV6	[L]	--	--	--	--	--	--
PEFR	[L/s]	8.81	9.26	105	--	--	--
FEF25-75	[L/s]	4.04	6.35	157	--	--	--
FEF75-85	[L/s]	--	3.10	--	--	--	--
FEF.2-1.2	[L/s]	6.99	7.99	114	--	--	--
FEF25%	[L/s]	7.87	10.10	128	--	--	--
FEF50%	[L/s]	5.66	7.04	124	--	--	--
FEF75%	[L/s]	2.82	3.76	133	--	--	--
FEV.5/FVC	[%]	--	90.64	--	--	--	--
FEV1/FVC	[%]	82.93	99.44	120	--	--	--
FEV3/FVC	[%]	97.00	--	--	--	--	--
FEV6/FVC	[%]	--	--	--	--	--	--
FEV1/FEV6	[%]	--	--	--	--	--	--
FET	[S]	--	1.13	--	--	--	--
ExplTime	[S]	--	0.09	--	--	--	--
LungAge	[Y]	37.00	37.00	100	--	--	--
FIVC	[L]	--	2.43	--	--	--	--
PIFR	[L/s]	--	2.15	--	--	--	--
FIF25%	[L/s]	--	10.43	--	--	--	--
FIF50%	[L/s]	--	8.42	--	--	--	--
FIF75%	[L/s]	--	6.48	--	--	--	--
FIV.5	[L]	--	0.06	--	--	--	--
FIV1	[L]	--	0.56	--	--	--	--
FIV3	[L]	--	--	--	--	--	--
FIV.5/FIVC	[%]	--	2.55	--	--	--	--
FIV1/FIVC	[%]	--	23.13	--	--	--	--
FIV3/FIVC	[%]	--	--	--	--	--	--





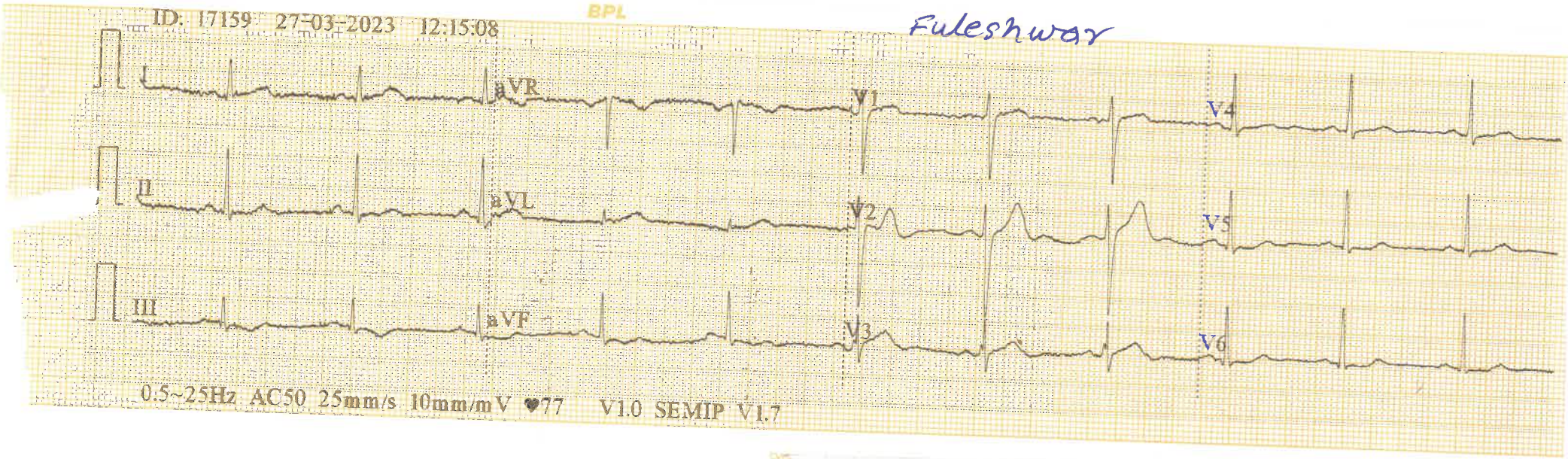
- Pre Medication Report :
Spirometery within Normal range as FVC% >= 80 And FEV1/FVC% > 70

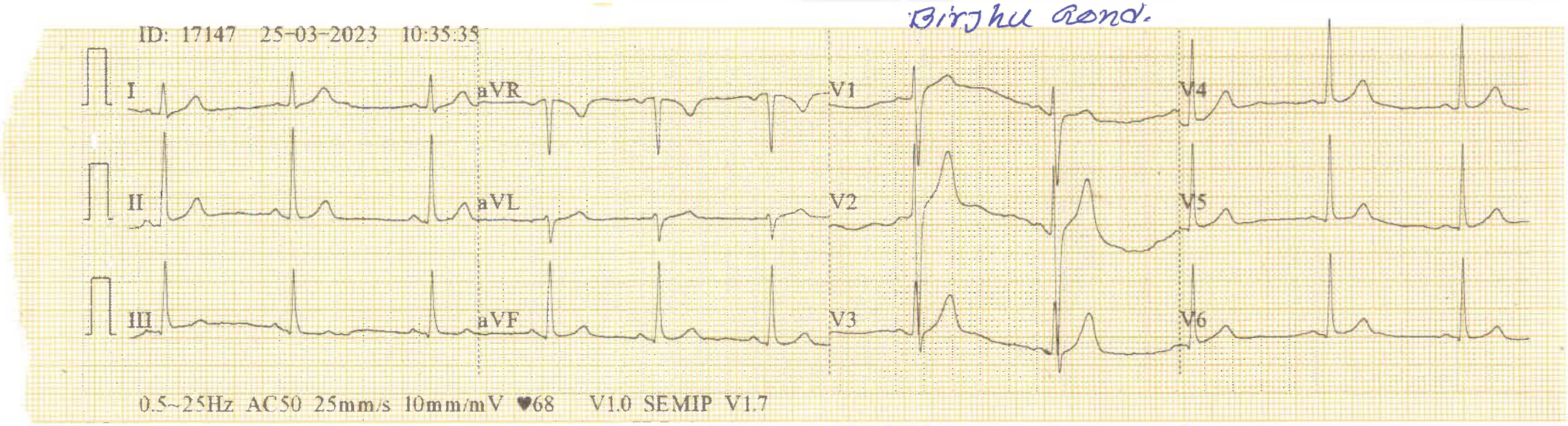
- Pre COPD Severity Report:
COPD Severity within Normal range

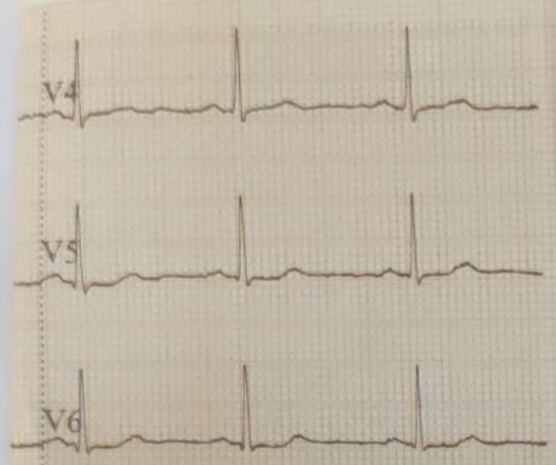
- Doctor's Comments :

DR. MAHINATH MISHRA
M.B.B.S., C.I.H.
Reg. No.- G-16014
Family Physician & Industrial Health Consultant

DR MAHINATH MISHRA


BPL
ID: 17159 27-03-2023 12:15:08
Fuleshwar
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
0.5~25Hz AC50 25mm/s 10mm/mV ♥77 V1.0 SEMIP V1.7


Birjhu Rond.
ID: 17147 25-03-2023 10:35:35
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
0.5~25Hz AC50 25mm/s 10mm/mV ♥68 V1.0 SEMIP V1.7
CARDIART



ID: 17159

Male / mmHg
Years (/ /)
cm kg

Diagnosis Information:
Sinus Rhythm
Normal ECG

Fuleshwar

HR	: 68	bpm
P	: 111	ms
PR	: 148	ms
QRS	: 82	ms
QT/QTc	: 393/420	ms
P/QRS/T	: 48/44/-20	°
RV5/SV1	: 1.012/1.046	mV

Report Confirmed by:

CARDIART

BPL

ID: 17147

Male / mmHg
Years (/ /)
cm kg

Diagnosis Information:
Sinus Arrhythmia
Normal ECG

Bijay Thu

HR	: 63	bpm
P	: 94	ms
PR	: 126	ms
QRS	: 90	ms
QT/QTc	: 360/369	ms
P/QRS/T	: 67/72/46	°
RV5/SV1	: 1.516/1.167	mV

Report Confirmed by:

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.

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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)
EXISTING PRODUCTS				
	Caustic Soda Lye	365000	**00**	365000
	Hydrogen	102200000(Nm^3)	**00**	102200000(Nm^3)
	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
Chloromethanes				
	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)			

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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)
PROPOSED PRODUCT				
	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 MATIRIALS 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		Na2CO3	1825
3		BaCO3	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

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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
Chloromethanes Plant			
26	Methyl Chloride Methylene Chloride Chloroform Carbon Tetra Chloride	Liquid Chlorine	57600
27		Methanol	21600

Raw materials for proposed products

Sr. No	Name of Raw Materia	Existing Quantity (MT/Month)	Proposed Extra (MT/Month)	Total proposed for AMENDED CCA (MT/Month)
45 MW Captive Power Plant				
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
Sodium Sulphate				
4.	Lean Brine	0	32704	32704
5.	HCl	0	5.05	5.05

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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**

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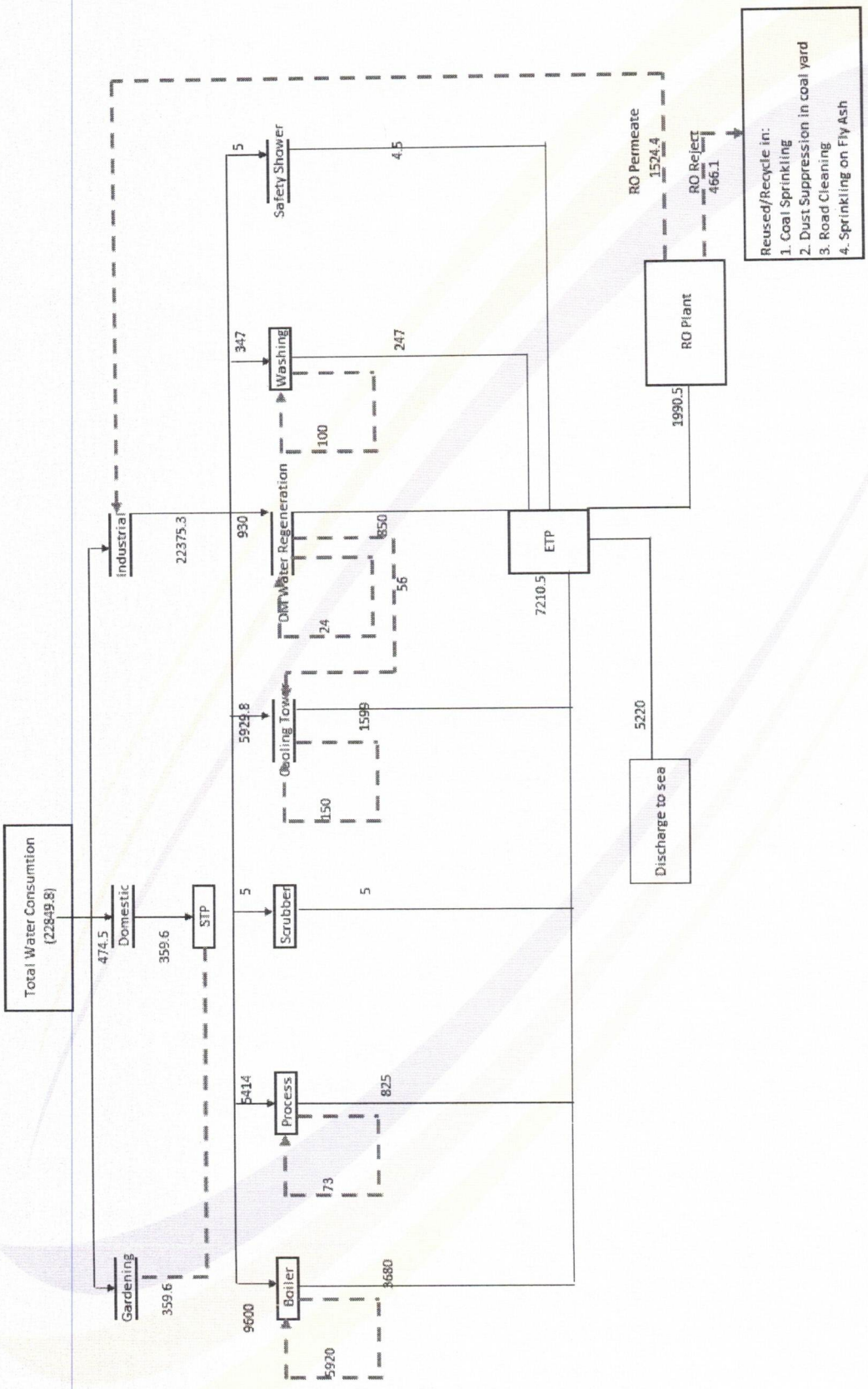
Total Water Consumtion (22849.8)
Domestic
474.5
359.6
STP
Gardening
359.6
Industrial
22375.3
Safety Shower
5
4.5
Washing
347
247
100
930
DM Water Regeneration
850
56
24
Cooling Tower
5924.8
1599
150
Scrubber
5
5
Process
5414
825
73
Boiler
9600
5920
3680
ETP
7210.5
RO Plant
1990.5
RO Permeate
1524.4
RO Reject
466.1
Reused/Recycle in:
1. Coal Sprinkling
2. Dust Suppression in coal yard
3. Road Cleaning
4. Sprinkling on Fly Ash
5220
Discharge to sea

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

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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 Wasewater: 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 expnsion 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
1	**Sump Zone (Zinc) Clarifier**		
A	No. of Units	3	Adequate
B	Diemension of each Clarifier	16.8 m (D) x 2.4 m (SWD)	Adequate
C	Hold up Volume	531 m3 (each)	Adequate
2	**Flash Mixer**		
A	No. of Units	3	Adequate
B	Diemension of each Clarifier	5.0 m (D) x 3.0 m (SWD)	Adequate
C	Hold up Volume	60 m3 (each)	Adequate
3	**Lime Slurry Preparation System**	**1**	
	Blower & Bag filter for lime preon. Tanks	1 Set	Adequate
4	**Grit Chamber with mechanical cleaning arrangement**		
A	No. of Units	2	Adequate
B	Size No. 1 & No. 2	50m(L), 9m(W) & 5m(D)	Adequate
C	Hold up Volume	2250 m3 (each)	Adequate
5	**Automatic Bar Screens**		
A	No. of Units	2	Adequate
6	**Neutralization/Equalization Tanks**		
A	No. of Units	1	Adequate
B	Tak Size	12.0m(D) x 3.0m(SWD)	Adequate
C	Hold up Volume	339 m3	Adequate
7	**Lift Sump Pit**		
A	No. of Units	1	Adequate
B	Tank Size	9.0m(D) x 4.0m(SWD)	Adequate
C	Hold up Volume	254 m3	Adequate
8	**Primary Clarifier**		
A	No. of Units	2	Adequate
B	Diemension of each clarifier	40m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	3768 m3 (Each)	Adequate
9	**Biological reactor/Aeration system**		
A	No. of Units	4	Adequate

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Sr. No.	Unit Name	Equipment Details	Remarks
B	Diemension of each clarifier	73m (L) x 15m (W) x 5.5m (D)	Adequate
C	Hold up Volume	6022 m3 (Each)	Adequate
D	Aerators	Diffused Aeration system	Adequate
10	**Secondary Clarifier**		
A	No. of Units	2	Adequate
B	Diemension of each clarifier	45.0m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	4770 m3 (Each)	Adequate
11	**Chemical Sludge Thickener**		
A	No. of Units	2	Adequate
B	Diemension of each thickener	14.0m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	940 m3 (Each)	Adequate
12	**Bio Sludge Thickener**		
A	No. of Units	2	Adequate
B	Diemension of each thickener	20.0m (D) x 3.0m (SWD)	Adequate
C	Hold up Volume	940 m3 (Each)	Adequate
13	**Belt Press for Chemical Sludge**		
A	No. of Units	2	Adequate
B	Capacity	9 TPD on dry basis	Adequate
14	**Belt press for Bio Sludge**		
A	No. of Units	2	Adequate
B	Capacity	9 TPD on dry basis	Adequate
15	**Biological Reactor / Aeration System**		
A	No. of Units	3	Adequate
B	Tank Size	73m (L) x 15m (W) x 5.5m (D)	Adequate
C	Hold up Volume	6022 m3	Adequate
D	Aerators	Diffused Aeration system	Adequate
E	Total Capacity of Aeration system	6022 x 7 = 42,000 m3	Adequate
16	**Filter Press for Chemical Sludge**		
A	No. of Units	3	Adequate
B	Capacity	25 TPD on dry basis	Adequate
17	**Automated Lime Slurry Preparation & dosing system**		
A	No. of lime storage silo	3	Adequate
B	Capacity	25 TPD on dry basis	Adequate
C	Automatic pH controllers	1 Set	Adequate
18	**Cooling Towers**		
A	No. of units	1	Adequate
B	Type	Mist	Adequate
C	Capacity	1500 m3/Hr	Adequate
D	Purpose	Cooling of BR inlet effluent for better efficieny of Biological reactor	Adequate
19	**RO Plant capacity**	**40 m3/hr**	
A	Cartridge filter housing	40 m3/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

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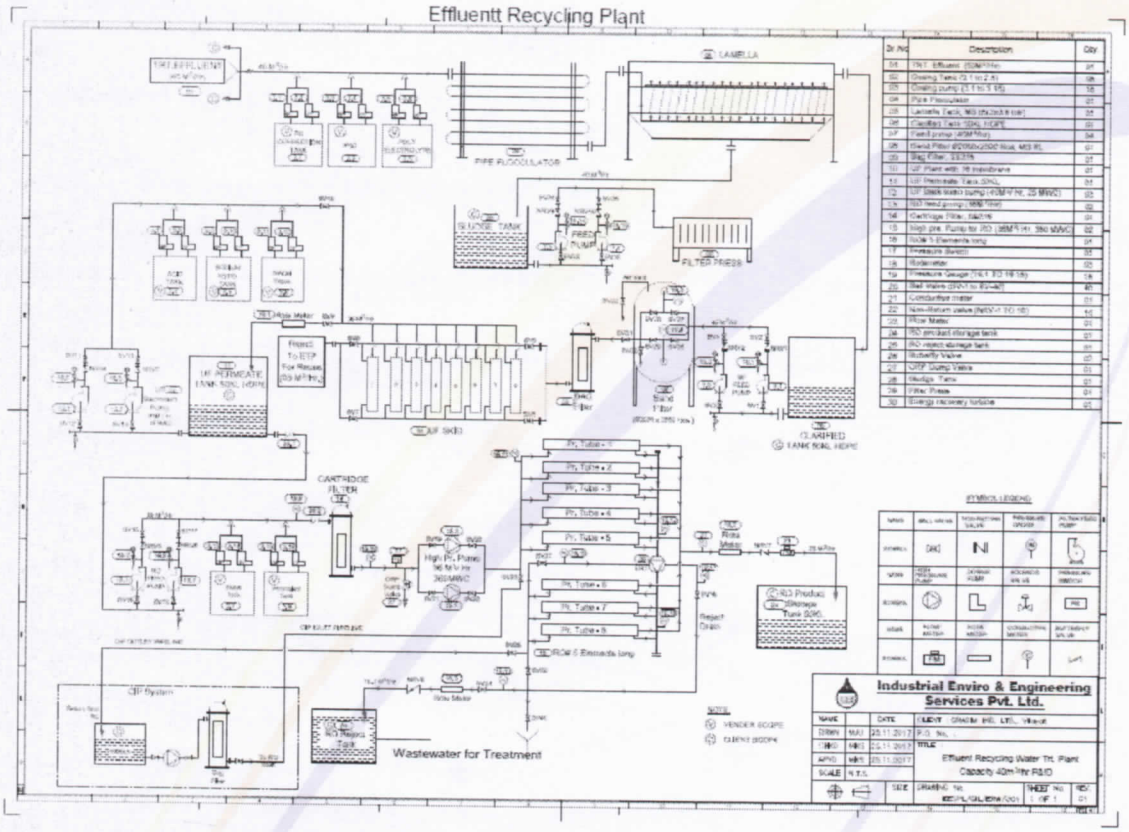

ETP Design Consideration (Table no. 6A)

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

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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^3 SO_2 < 100 ppm NO_2< 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^3
6)	Stack attached to primary coal crusher-1	Bag Filter	--	30.3	PM <150 mg/Nm^3
7)	D.G. Set (750 kVA x 1 Nos.)	Not Applicable	HSD 200 Lit/hr	10	PM <150 mg/Nm^3 SO_2 < 100 ppm NO_2< 50 ppm
8)	Volatile Reduction Chamber (VRC)	Water and Caustic Scrubber	Hydrogen 200 Nm3/Hr	35	NOx<50 ppm HCl<20 mg/Nm3 Cl2<9 mg/Nm3

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^3 SO_2 <100ppm NO_2<50ppm

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❖ **Details of Fuel Consumption: (Table No. 8)**

Sr. No	Name of Raw Materia	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 Nm3/Hr	0	200 Nm3/Hr
4.	Lime for desulphurization of coal	1920	560	2480
5.	LDO (for cold start-up) (KL)	17	8	25

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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_2 - 9 mg/Nm^3
2.	HCl stack 1 (Caustic Plant)	Water scrubber having bubble cap tray absorption system.	35	HCl - 35 mg/Nm^3
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	HCl - 20 mg/Nm^3 Cl_2 - 9 mg/Nm^3
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^3 Cl_2 - 9 mg/Nm^3
11.	Aluminum Chloride -1	Alkali scrubbing system	35	HCl - 20 mg/Nm^3 Cl_2 - 9 mg/Nm^3
12.	Aluminum Chloride -2	Alkali scrubbing system	35	HCl - 20 mg/Nm^3 Cl_2 - 9 mg/Nm^3
13.	Stable Bleaching Powder -1	Alkali scrubbing system	35	HCl - 20 mg/Nm^3 Cl_2 - 9 mg/Nm^3
14.	Stable Bleaching Powder -2	Alkali scrubbing system	35	
15.	Phosphoric Acid Plant	Water scrubber	35	HCl - 20 mg/Nm^3 Cl_2 - 9 mg/Nm^3
16.	Calcium Chloride	Water scrubber	35	HCl - 20 mg/Nm^3
17.	Sodium Hypo stack-2 (Caustic plant)	Alkali scrubber	35	Cl_2 - 9 mg/Nm^3
18.	Vent attached to reactor	--	35	H_2 gas *
19.	Vent attached to dryer-1 (HSBP)	Bag filter	21	PM< 150 mg/Nm^3
20.	Vent attached to dryer-2 (HSBP)	Bag filter	21	PM< 150 mg/Nm^3
21.	Vent attached to reaction vessel -1 (HSBP)	Water/caustic scrubber	21	Cl_2< 5 mg/m^3
22.	Vent attached to reaction vessel -2 (HSBP)	Water/caustic scrubber	21	Cl_2< 5 mg/m^3
23.	Hydro Chlorinator – CMS plant	Alkali Scrubber	35	HCl<20 mg/Nm^3

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24.	Crude CMS Distillation - CMS Plant	Condenser and guard condenser with cooling water circulation & chilled circulation	35	VOC< 1µg/m^3
25.	Heavies CMS Distillation - CMS Plant	Condenser and guard condenser with cooling water circulation & chilled circulation	35	VOC <1µg/m3

No new process gas stacks are proposed

D. <u>DETAILS OF HAZARDOUS WASTE MANAGEMENT SYSTEM</u>:(Table No. 10)

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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 Ploy 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.

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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% $CaCl_2$, 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 Dross Waste	--	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.

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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.

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- 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

Dr. Jivraj Mehta Institute of Technology
Mogar
Anand

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CCA Compliance Report

CCA of the board vide order no. AWH-98281 dated 29/12/2018 valid upto 02/03/2024

- **1st amendment letter no. GPCB/BRCH-B/CCA-70-A(5)/ID-41279/506831 dated 16/05/2019,**
- **2nd amendment vide letter no. GPCB/BRCH-B/CCA-70-A(6)/ID-41279/526734 dated 13/11/2019,**
- **3rd CCA amendment No. AWH-118058 vide letter no. GPCB/BRCH-B/CCA-70(8)A/ID-41279/675546 dated 18/06/2022 and**
- **4th Amendment No. AWH-125264 vide letter no. GPCB/BRCH-B/CCA-70(9)(A)/ID-41279/743273 issued dated 29/05/2023.**

<table>
<tr><th>Sr. No.</th><th>CCA Conditions</th><th>Compliance</th></tr>
<tr><td>1</td><td>Consent Order No. AWH-98281 dated 29/12/2018</td><td>Noted</td></tr>
<tr><td>2</td><td>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.
<table>
<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>
<tr><td>1</td><td>Caustic Soda Lye</td><td>365000</td><td>-</td><td>365000</td></tr>
<tr><td>2</td><td>Hydrogen</td><td>102200000 (Nm3)</td><td>-</td><td>102200000 (Nm3)</td></tr>
<tr><td>3</td><td>Liq Cl2/Sodium Hypochlorite/HCl</td><td>328500</td><td>-</td><td>328500</td></tr>
<tr><td>4</td><td>Poly Alluminium Chloride</td><td>250000</td><td>-</td><td>250000</td></tr>
<tr><td>5</td><td>Chlorinated Paraffin Wax</td><td>70000</td><td>-</td><td>70000</td></tr>
<tr><td>6</td><td>Alluminium Chloride</td><td>25000</td><td>-</td><td>25000</td></tr>
<tr><td>7</td><td>Stable Bleaching Chloride</td><td>61000</td><td>-</td><td>61000</td></tr>
<tr><td>8</td><td>Phosphoric Acid</td><td>35000</td><td>-</td><td>35000</td></tr>
<tr><td>9</td><td>Calcium Chloride</td><td>87600</td><td>-</td><td>87600</td></tr>
<tr><td>10</td><td>Captive Power Plant</td><td>96 MW</td><td>-</td><td>96 MW</td></tr>
<tr><td>11</td><td>Alluminium Chlorohydrate (Super Coagulant)</td><td>5000</td><td>-</td><td>5000</td></tr>
<tr><td>12</td><td>Calcium Hypochlorite</td><td>24000</td><td>-</td><td>24000</td></tr>
<tr><td>13</td><td>Sodium Sulphate</td><td>-</td><td>2672</td><td>2672</td></tr>
<tr><td colspan="5">Proposed</td></tr>
<tr><td>14</td><td>Methyl Chloride</td><td rowspan="4">-</td><td rowspan="4">54000</td><td rowspan="4">54000</td></tr>
<tr><td>15</td><td>Methylene Chloride (50-80% of total Production)</td></tr>
<tr><td>16</td><td>Chloroform (15-40% of total production)</td></tr>
<tr><td>17</td><td>Carbon Tetra Chloride (5-10% of total Production)</td></tr>
</table>
</td><td>Complied
We are manufacturing products as per granted CCA by Board.
Production data from Apr, 23 to Sept, 23 is given in below table.</td></tr>
<tr><td></td><td>
<table>
<tr><th rowspan="2">Sr. No.</th><th rowspan="2">Name of Product</th><th colspan="6">Production Qty. (MT)</th></tr>
<tr><th>Apr, 23</th><th>May, 23</th><th>Jun, 23</th><th>Jul, 23</th><th>Aug, 23</th><th>Sept, 23</th></tr>
</table>
</td><td></td></tr>
</table>

	1	Caustic Soda Lye	28502	29906	28309	28285	31699	28966
	2	Hydrogen	1327767	1390929	1296016	1327621	1411371	1288194
	3	Liq Cl2/Sodium Hypochlorite/HCl	26216	27494	26047	26063	29188	26596
	4	Poly Alluminium Chloride	15889	16791	15938	17017	18630	17998
	5	Chlorinated Paraffin Wax	3366	2791	3352	2904	3541	3369
	6	Alluminium Chloride	1354	1745	1695	1805	1818	1681
	7	Stable Bleaching Chloride	2355	2163	2329	2063	2381	1928
	8	Phosphoric Acid	1095	1225	1005	413	428	176
	9	Calcium Chloride	1876	2223	1557	888	1674	1313
	10	CPP	80	89	81	70	71	69
	11	Alluminium Chlorohydrate (Super Coagulant)	601	377	234	460	491	461
	12	Calcium Hypochlorite	533	554	441	342	450	494
	13	Sodium Sulphate	2	15	20	36	32	58
	14	Methylene Chloride	2097	2216	2454	1786	2929	2804
	15	Chloroform	1187	1179	1212	967	1359	1378
	16	Carbon Tetra Chloride	124	144	137	107	177	169

3	**SPECIFIC CONDITIONS**	
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 distillation units, if any. Also submit the prescribed forms as per guideline.	**Not Applicable** 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 farmed 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.
3.12	Unit shall dispose / manage Phosphogypsum as per guidelines /directions of CPCB published from time to time and maintain complete record of its generation & disposal/management.	**Complied** The Phosphogypsum sludge has been disposed as per guidelines of CPCB published from time to time and

		maintaining complete record of its generation & disposal.
3.13	Unit shall have to ensure that generated Phosphogypsum waste is disposed/manage in Environmentally sound manner.	**Complied** The Phosphogypsum sludge has been managed in Environmentally Sound manner only.
4	**CONDITIONS UNDER WATER ACT**	
4.1	The quantity of the Total Water consumption shall not exceed 19222.3 KL/Day (Existing 19069.5 KLD + Proposed 152.8 KLD). (Break up as below) (a) Domestic: 472 KLD (Existing 471 KLD + Proposed 1 KLD) (b) Industrial: 18750.3 KLD (Existing 18598.5 KLD + Proposed 151.8 KLD)	**Complied** The quantity of total water consumption is as per prescribed limit only.
4.2	The quantity of total wastewater generation shall not exceed 6266.1 KL/day (Existing 6241.3 KLD + Proposed 24.8 KLD) (Break up as below) a) Domestic: 357.6 KLD (Existing 356.8 KLD + Proposed 0.8 KLD) b) Industrial: 5908.5 KLD (Existing 5884.5 KLD + Proposed 24 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.	**Complied** The quantity of total wastewater generation is as per prescribed limit only.
4.3	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.	**Complied** The quantity of total wastewater generation is as per prescribed limit. The quantity of domestic wastewater (sewage) is as per prescribed limit only.
4.4	5620 KLD of biodegradable industrial effluent shall be sent to ETP for primary, secondary & 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.	**Complied** After primary treatment, our industrial effluent is sent for secondary & tertiary treatment to Fiber division and then sent for final disposal into GIDC underground drainage-Dahej Vilayat pipeline / common disposal system upto the sea. Treated effluent is reused/recycled/reduced in different plant operations.

<table>
<tr><td>4.5</td><td>@ 3 KLD additional wastewater generated from the process shall be taken to PAC (Poly Aluminum Chloride) plant for reuse.</td><td>Complied
@ 3 KLD of wastewater generated from the Aluminum Chloro Hydrate process is reused into PAC (Poly Aluminum Chloride) plant for reuse.</td></tr>
<tr><td>4.6</td><td>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.</td><td>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.</td></tr>
<tr><td>4.7</td><td>Additional wastewater 24.8 KLD generated due to proposed amendment shall be treated in ETP and then treated wastewater shall be recycled/reused.</td><td>Complied.
Additional wastewater generated from Sodium Sulphate plant has been treated in existing ETP and then recycled back into process.</td></tr>
<tr><td>4.8</td><td>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.
<table>
<tr><td>Parameters</td><td>GPCB Norms</td></tr>
<tr><td>pH</td><td>6.5 to 9</td></tr>
<tr><td>TSS</td><td><100 mg/l</td></tr>
<tr><td>Fecal Coliform (Most Probable Number per 100 milliliter, MPN/100ml)</td><td><1000 MPN/100 ml</td></tr>
<tr><td>BOD (3 days 27° degree C)</td><td>30 mg/l</td></tr>
</table></td><td>Complied
Domestic wastewater sewage treated in existing STP and treated wastewater used for gardening purpose after confirming norms.</td></tr>
<tr><td>4.9</td><td>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.
<table>
<tr><th>Parameters</th><th>Permissible Limit</th></tr>
<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>
</table></td><td>Complied
We are confirming the GPCB prescribed standards for treated effluent prior to disposal.</td></tr>
</table>

	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
	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

4.10	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.
5	**SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS UNDER WATER ACT:**	
5.1	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.
5.2	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.
5.3	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.
5.4	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.
5.5	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	**Complied** Online Monitoring System for parameters of

<table>
<tr><td></td><td>maintained invariably by the unit and shall be submitted to GPCB every month.</td><td>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.</td></tr>
<tr><td>5.6</td><td>Applicant shall ensure & undertake on Rs. 100 stamp paper that it has one & only one outlet in GIDC U/G drain.</td><td>Complied
We have taken undertaking for one & only one outlet in GIDC U/G drain.</td></tr>
<tr><td>5.7</td><td>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.</td><td>Complied
We have displayed the unit & technical relevant details on mouth of pipeline into GIDC U/G drain.</td></tr>
<tr><td>6.</td><td colspan="2">CONDITIONS UNDER AIR ACT:</td></tr>
<tr><td>6.1</td><td>The following shall be used as fuel in Boiler/ D. G. Set respectively.
<table>
<tr><th rowspan="2">Sr. No.</th><th rowspan="2">Fuel</th><th colspan="3">Quantity</th></tr>
<tr><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>1</td><td>Coal</td><td>72000 MT/Month</td><td>-</td><td>72000 MT/Month</td></tr>
<tr><td>2</td><td>HSD</td><td>2200 Lit/ Hr</td><td>200 Lit/Hr</td><td>2400 Lit/Hr</td></tr>
<tr><td>3</td><td>Hydrogen</td><td>-</td><td>200 NM3/hr</td><td>200 NM3/hr</td></tr>
</table></td><td>Complied
Fuel consumption is as per prescribed limit.</td></tr>
<tr><td>6.2</td><td>The flue gas emission through stack attached to Boiler/ D. G. Set shall conform to the following standards.
<table>
<tr><th rowspan="2">Sr. No.</th><th rowspan="2">Stack attached to</th><th rowspan="2">Stack height in meters</th><th rowspan="2">APCM</th><th>Air emission</th></tr>
<tr><th>Parameter & Permissible limit</th></tr>
<tr><td colspan="5">Existing</td></tr>
<tr><td>1.</td><td>Boiler 1 & 2</td><td>125</td><td rowspan="2">ESP & Low NO_X burner</td><td rowspan="4">PM - 150 mg/Nm^3
SO_X - 100 ppm
NO_X - 50 ppm</td></tr>
<tr><td>2.</td><td>Boiler 3 & 4</td><td>125</td></tr>
<tr><td>3.</td><td>D. G. Sets (1875 KVA - 4 Nos.)</td><td>36</td><td rowspan="2">--</td></tr>
<tr><td>4.</td><td>D. G. Sets (750 KVA - 3 Nos.)</td><td>11</td></tr>
<tr><td>5.</td><td>Stack attached to primary coal crusher-1</td><td>22.4</td><td>Bag Filter</td><td>PM < 150 mg/Nm^3</td></tr>
<tr><td>6.</td><td>Stack attached to primary coal crusher-2</td><td>30.3</td><td>Bag Filter</td><td>PM < 150 mg/Nm^3</td></tr>
<tr><td colspan="5">Proposed</td></tr>
<tr><td>7.</td><td>DG Set (750 KVA - 1 Nos.)</td><td>11</td><td>-</td><td>PM- 150 mg/Nm3
SOx- 100 ppm
NOx- 50 ppm</td></tr>
</table></td><td>Complied
We are conforming the GPCB prescribed standards for flue gas emission.
Also please note that Online Monitoring facility has been provided for Boiler 1 & 2 and 3&4 which are also connected with GPCB & CPCB server.</td></tr>
</table>

	8.	Volatile Reduction Chamber (VRC)	35	Water & Caustic Scrubber	NOx- 50 ppm HCl- 20 mg/m3 Cl2- 9 mg/m3		

6.3 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
Existing				
1	Sodium Hypo stack 1 (Caustic Plant)	35	Alkali Scrubber	Cl2 - 9 mg/Nm3
2	HCl stack 1 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system.	HCl - 35 mg/Nm3
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/Nm3 Cl2 - 9 mg/Nm3
5	Chlorinated Paraffin Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm3 Cl2 - 9 mg/Nm3
6	Aluminium Chloride	35	Alkali scrubbing system	HCl - 20 mg/Nm3 Cl2 - 9 mg/Nm3
7	Stable Bleaching Powder Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm3 Cl2 - 9 mg/Nm3
8	Phosphoric Acid	35	Water Scrubber	HCl - 20 mg/Nm3 HF - 6 mg/Nm3
9	Calcium Chloride	35	Water Scrubber	HCl - 20 mg/Nm3
10	Sodium Hypo stack 2 (Caustic Plant)	35	Alkali Scrubber	Cl2 - 9 mg/Nm3
11	HCl stack 3 (Caustic Plant)	35	Water Scrubber having bubble cap tray absorption system.	HCl - 35 mg/Nm3
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/Nm3 Cl2 - 9 mg/Nm3
14	Poly Aluminium Chloride powder	35	3 stage Water Scrubber	HCl - 20 mg/Nm3 Cl2 - 9 mg/Nm3
15	Chlorinated Paraffin Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm3 Cl2 - 9 mg/Nm3
16	Aluminium Chloride	35	Alkali scrubbing system	HCl - 20 mg/Nm3 Cl2 - 9 mg/Nm3

- **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.

	17	Stable Bleaching Powder Plant	35	Alkali scrubbing system	HCl - 20 mg/Nm3 Cl2 - 9 mg/Nm3
	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
	Proposed				
	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_2 gas.				
6.4	The applicant shall install and operate a comprehensive adequate air pollution control measures in order to achieve prescribed below.				• **Complied** • Adequate Air Pollution Control Equipment are installed to achieve prescribed standards. • Air Pollution Control Equipment are installed as per CC&A.
6.5	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.
6.6	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:-				**Complied** There are 4 nos. of ambient air quality monitoring stations covering all directions in nearby villages (Derol, Sarnar, Argama & Vilayat).

Sr. no.	Parameter	Permissible Limit (microgram/m3)	
		Annual	24 Hours Avearge
1	Particulate matter (PM10)	60	100
2	Particulate matter (PM2.5)	40	60

	<table><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></table> *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 year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring. 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.	Also there are 4 nos. of ambient air quality monitoring stations inside the premises.
6.7	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.
6.8	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**
6.9	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.
6.10	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.
7	**SUBJECT TO THE FOLLOWING SPECIFIC CONDITIONS UNDER AIR ACT:**	
7.1	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.
7.2	The applicant shall install continuous/ online monitoring system on the stacks for the parameters such as SO_2, NO_X, PM, HCl, Cl_2 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

<table>
<tr><td></td><td></td><td>nos. HCl Stacks of Caustic Soda plant and all the stacks are connected to GPCB & CPCB server.</td></tr>
<tr><td>8.</td><td colspan="2">AUTHORISATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTES Form-2 (see rule 6(2))</td></tr>
<tr><td>8.1</td><td>Number of Authorization: AWH-98281, Date of Issue- 29/12/2018</td><td>Noted</td></tr>
<tr><td>8.2</td><td>Unit shall comply with provisions of Hazardous & Other wastes (Management & Transboundary Movement) Rules-2016.</td><td>Noted & Complied</td></tr>
<tr><td>8.3</td><td>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.
<table>
<tr><th rowspan="2">Sr. No.</th><th rowspan="2">Type of Waste</th><th rowspan="2">Category</th><th colspan="3">Qty. MT/Year</th><th rowspan="2">Disposal</th></tr>
<tr><th>E</th><th>P</th><th>T</th></tr>
<tr><td>1</td><td>Chemical sludge from Waste water treatment</td><td>35.3</td><td>40215</td><td>(-30215+5)</td><td>10005</td><td>Collection, storage, transportation & disposal at approved TSDF Site.</td></tr>
<tr><td>2</td><td>Spent Carbon</td><td>36.2</td><td>40.33</td><td>0</td><td>40.33</td><td>Collection, storage, transportation & disposal at approved TSDF Site.</td></tr>
<tr><td>3</td><td>Used Spent Oil</td><td>5.1</td><td>101 kL</td><td>29 KL</td><td>130 KL</td><td>Collection, storage, transportation & disposal by selling to registered re-refiners</td></tr>
<tr><td>4</td><td>Spent ion exchange resin</td><td>35.2</td><td>1</td><td>4</td><td>5</td><td>Collection, storage, transportation & disposal at approved TSDF Site.</td></tr>
<tr><td rowspan="2">5</td><td>Discarded container /</td><td>33.1</td><td>2000 nos.</td><td>500 Nos</td><td>2500 Nos</td><td rowspan="2">Collection storage, Decontamination/Detoxification, reuse, transportation and disposal by sending to authorised recyclers/refiners</td></tr>
<tr><td>Bags / Liners</td><td></td><td>25</td><td>525</td><td>550</td></tr>
<tr><td>6</td><td>Incinerable Waste</td><td>36.1</td><td>142</td><td>0</td><td>142</td><td>Collection, storage, transportation, disposal at CHWIF site</td></tr>
<tr><td>7</td><td>Spent Acid* (HCl)</td><td>B15</td><td>142500</td><td>0</td><td>142500</td><td>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.</td></tr>
<tr><td>8</td><td>Spent Acid** (Dilute Sulphuric Acid)</td><td>B15</td><td>15500</td><td>0</td><td>15500</td><td>Collection, storage, transportation and disposal by sending to authorised actual users/end user having rule-9 Permission & valid CCA after making MOU.</td></tr>
<tr><td>9</td><td>Bleaching Liquid (consists of 3% Hypo, 10% CaCl2, 65% to 75% water)</td><td>--</td><td>60000</td><td>0</td><td>60000</td><td>Collection, storage, transportation and disposal by sending to authorised actual users/end user having rule-9 Permission & valid CCA after making MOU.</td></tr>
<tr><td>10</td><td>Sodium Chloride (consist of 90% NaCl)</td><td>--</td><td>6000</td><td>0</td><td>6000</td><td>Collection, storage, transportation & disposal at approved TSDF Site.</td></tr>
</table></td><td>Complied
Collection, Storage, Transportation and disposal of wastes is being carried out as per granted CC&A.</td></tr>
</table>

	11	Residue/ sludge & filter cake	16.2	6066	0	6066	Collection, storage, transportation & disposal at approved TSDF Site.	
	12	Spent Catalyst	17.2	25	0	25	Collection, storage, transportation & disposal at approved TSDF Site.	
	13	Alluminium Dross Waste	-	50	0	50	Collection, storage, transportation & disposal at approved TSDF Site.	
	14	Batteries	-	100 Nos.	0	100 Nos.	Collection, storage, transportation & disposal as per the batteries Management and Handling Rules, 2010.	
	15	E-Waste	-	1	0	1	Collection, storage, transportation & disposal as per the E-Waste management Rules-2016	
	16	Insulating Material	-	25	0	25	Collection, storage, reuse, transportation and disposal at approved TSDF.	
	Non-Hazardous Waste							
	17	Fly Ash	-	86400	-	86400	Collection, storage, transportation, disposal by selling to brick manufacturing as per fly ash notifications/rules.	
	18	Phosphogypsum (generated from Phosphoric Acid plant)	-	0	30215	30215	Collection, Storage, transportation and disposal in Environmentally Sound manner as per the guidelines/directions of CPCB published from time to time.	
8.4	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.
8.5	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.
8.6	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**
8.7	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.
8.8	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.
9	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:

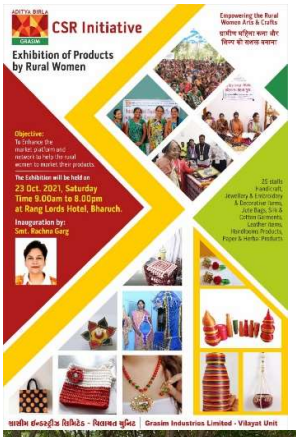
		GPCB/BRCH-B-CCA-70A(4)/ID-41279/478307 dated 10/12/2018 and subsequent amendments under the provisions under the provisions of various Environmental Act/ Rules.
10	All other conditions of CCA order AWH-98281 issued vide letter no. GPCB/BRCH-B-CCA-70A(5)/ID-41279/492673 dated 29/12/2018 and subsequent amendments under the provisions of various Environmental act/ rules shall remain unchanged.	**Noted**.
11	**TERMS AND CONDITIONS OF AUTHORISATION:**	
11.1	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.
11.2	The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.	**Noted**
11.3	The persons authorized shall not rent, lend, sell, transfer of otherwise transport the hazardous and other wastes except what is permitted through authorization.	**Noted**
11.4	Any unauthorized change in personnel, equipment or working conditions as mentioned in the authorization is being granted constitute a breach of this authorization.	**Noted**
11.5	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 impacts also carry out mock drill in this regard at regular interval of time.	**Complied** We have developed Onsite Emergency Plan and implemented mitigation measures accordingly.
11.6	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**
11.7	It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.	**Noted**
11.8	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**
11.9	The record of consumption and fate of the imported hazardous and other wastes shall be maintained.	**Not Applicable**
11.10	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**
11.11	The importer or exporter shall bear the cost of import or export and mitigation of damages if any.	**Not Applicable**
11.12	An application for the renewal of an authorization shall be made as laid down under these rules.	**Noted**
11.13	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**

11.14	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.
12	**GENERAL CONDITIONS:**	
12.1	Any change in personnel, equipment or working conditions as mentioned in the consents form/ order should immediately be intimated to this Board.	**Noted**
12.2	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.
12.3	The applicant shall not carry out any activities for which required clearances are not obtained.	**Noted**
12.4	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**
12.5	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.
12.6	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.
12.7	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.

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 Orthopedic 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

૬ ૧૪-૧૨-૨૦૨૧ મંગળવાર

વિલાયત ગામે ગ્રાસીમ કંપની દ્વારા વિનામૂલ્યે ચામડીના રોગોનો કેમ્પ યોજાયો

૧૫૦થી વધુ દર્દીઓએ કેમ્પનો લાભ લીધો

ધબકાર પ્રતિનિધિ, વાગરા, તા. ૧૩

ગ્રાસીમ કંપની દ્વારા વિલાયત ગામે ચર્મ રોગ ના નિવારણ અર્થે મેડિકલ કેમ્પ નું આયોજન કરવામાં આવ્યુ હતુ.જેમાં ૧૫૦ થી વધુ દર્દીઓએ લાભ લીધો હતો.ભરૂચ ના જાણીતા ડો. દામોદર બંગ એ સેવા આપી હતી.

વિલાયત જી.આઇ.ડી.સી. માં આવેલ ગ્રાસીમ કંપની દ્વારા આરોગ્ય, શિક્ષણ અને સામાજિક ક્ષેત્રે કાર્ય કરી રહી છે. ગ્રાસીમ કંપની સી.એસ.આર વિભાગે વિલાયત ગામે ચર્મ રોગોના નિવારણ અર્થે ગતરોજ વિના મુલ્યે મેડિકલ કેમ્પનું આયોજન કરવામાં આવ્યુ હતુ.જેમાં ૧૫૦ થી વધુ દર્દીઓની તપાસ કરી વિના મુલ્યે દવા આપવામાં આવી હતી.કંપની ના સી.એસ.આર વિભાગ ના પ્રકાશ ચૌહાણ,ડો. ઉર્વેશ,કંપની ના મેડીકલ ઓફિસર ડો. કુનાલ ચૌહાણ, સી.એસ.આર. કોઓર્ડીનેટર આશિષ પટેલ ખાસ ઉપસ્થિત રહ્યા હતા.ભરૂચ ના જાણીતા ડો. દામોદર બંગ દ્વારા દર્દીઓની તપાસ કરવામાં આવી હતી. કેમ્પમાં ઉપસ્થિત ગામ લોકોને ચામડીના રોગોના રક્ષણ માટે કઈ રીતે બચી શકાય તેની વિશેષ સમજ પણ તેમણે આપી હતી.

(તસવીર : ઝફર ગડીમલ, પ્રભુભાઈ પટેલ)

વિલાયત ગામે ગ્રાસીમ કંપની દ્વારા વિનામૂલ્યે ચામડીના રોગોનો કેમ્પ યોજાયો હતો.

ઔદ્યોગિક તાલીમ સંસ્થા અંકલેશ્વરમાં

ગ્રાસીમ ઈન્ડસ્ટ્રીઝ દ્વારા વિલાયત ગામે આરોગ્ય નિદાન કેમ્પ યોજાયો

બિરલા ગ્રાસીમ કંપનીએ યોજેલ મફત ચર્મરોગ શિબિરમાં સેંકડો લોકોએ ભાગ લીધો હતો. (તસ્વીર. રસીદ અમજદ, વાગરા)

(પ્રતિનિધિ) વાગરા,તા.૧૩

આદિત્ય બિરલા ગ્રુપ સંચાલિત ગ્રાસીમ કંપની દ્વારા લોક કલ્યાણ પ્રવૃત્તિના ભાગ હેઠળ વાગરાના વિલાયત ગામ ખાતે ચામડીના વિવિધ રોગોના નિદાન માટે વિના મુલ્યે આરોગ્ય નિદાન કેમ્પ યોજવામાં આવ્યો હતો. જેમાં વિલાયત સહિત નજીકના ગામોમાંથી પધારેલા ૧૫૬ જેટલા દર્દીઓનું તપાસણી કાર્ય હાથ ધરી વિના મુલ્યે દવાઓ વિતરિત કરાઈ હતી. ગ્રાસીમ કંપનીના સી.એસ.આર અધિકારી પ્રકાશ ચૌહાણ,ડૉ. ઉર્વેશ તેમજ ફેક્ટરીના મેડિકલ ઓફિસર ડૉ.કુણાલ ચૌહાણના સહયોગથી આશિષ પટેલ સીએસઆર કો ઓર્ડિનેટર અને ટીમ દ્વારા આ શિબિરનું આયોજન કરવામાં આવ્યુ હતું. વિલાયત ગામના અનેક લોકોએ ચામડીના રોગોની તપાસ કરાવી હતી. અત્રે નોંધનીય છે કે ભરૂચના જાણીતા તબીબ ડૉ. દામોદર બંગ દ્વારા ઉક્ત કેમ્પમાં સેવા આપવા મા આવી હતી. વધુમાં શિબિર દરમિયાન ગ્રામજનોએ ચામડીના રોગોથી રક્ષણ માટે કઈ બાબતોની તકેદારી રાખવી જોઈએ અને કઈ રીતે ચર્મરોગોથી બચી શકાય તે વિશે વિશેષ જાણકારી પ્રદાન કરવામાંવામાં આવી હતી.

દિવ્ય ભાસ્કર ભરૂચ-અંકલેશ્વર 03-12-2021

વિશ્વ એઈડ્સ દિવસની આદિત્ય બિરલા ગ્રાસીમ કંપનીમાં ઉજવણી કરવામાં આવી

ભરૂચ | આદિત્ય બિરલા ગ્રાસીમ કંપનીમાં 1 ડિસેમ્બરના રોજ વીશ્વ એઈડ્સ દિવસની ઉજવણી કરાઈ હતી.જેમાં 50 થી વધુ લોકોને જનજાગૃતિના ભાગરૂપે HIV-એઈડ્સ વિશે સંપુર્ણ માહીતી આપવામાં આવી હતી. જ્યારે NLRDF Team & Creation group દ્વાર નાટક ભજવીને એઈડ્સ વિષે હાજર લોકોને સમજાવવામાં આવ્યા હતા.આ કાર્યક્રમમાં ગ્રાસીમ કંપનીના ફેકટરી મેડિકલ ઓફિસર ડો.કૃણાલ ચૌહાણ અને એચઆર વિભાગના મિતેશ સુરતીના સહયોગથી આશિષ પટેલ અને ટીમ દ્વારા આ પ્રોગ્રામનુ આયોજન કરવામા આવ્યુ હતું.

વિશ્વ એઈડ્સ દિવસની આદિત્ય બિરલા ગ્રાસીમ કંપનીમાં ઉજવણી કરવામાં આવી

(તસવીર : પ્રભુભાઈ પટેલ)

ધબકાર પ્રતિનિધિ, વાત્સલ્યધામ-મઢી,તા.૦૪

આદિત્ય બિરલા ગ્રાસીમ કંપની (જિ.ભરૂચ)માં તા.૧ ડિસેમ્બરના રોજ વિશ્વ એઈડ્સ દિવસની ઉજવણી કરાઈ હતી. આ પ્રસંગે ૮૫૦થી વધુ લોકોને જનજાગૃતિના ભાગરૂપે એચઆઈવી એઈડ્સ વિશે સંપૂર્ણ માહિતી આપવામાં આવી હતી. આ ઉપરાંત એનએલઆરડીએફની ટીમ અને ક્રીએશન ગૃપ દ્વારા નુક્કડ નાટક રજૂ કરીને પણ એચઆઈવી એઈડ્સ વિશે માહિતી આપવામાં આવી હતી. ગ્રાસીમ કંપનીના ફેકટરીના મેડિકલ ઓફિસર ડૉ. કૃણાલ ચૌહાણ અને એચઆર વિભાગના મિતેશ સુરતીના સહયોગથી સીએસઆર કો.ઓર્ડિનેટર આશિષ પટેલ અને ટીમ દ્વારા પ્રોગ્રામનું આયોજન કરવામાં આવ્યું હતું. ગ્રાસીમ કંપનીના કારીગરો અને કામદારોને પણ એચઆઈવી એઈડ્સ વિશે માહિતગાર કરવામાં આવ્યા હતાં.

C E R T I F I C A T E

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

TUV India Pvt. Ltd., 801, Raheja Plaza – 1, L.B.S. Marg, Ghatkopar (W), Mumbai - 400 086, India www.tuv-nord.com/in

DAkkS Deutsche Akkreditierungsstelle D-ZM-12007-01-00