

# Six Monthly Compliance Report of Environmental Clearance

For

**Viscose Staple Fibre, Sulphuric Acid and Carbon-Di-sulphide**

Expansion of Viscose Staple Fibre Unit, Captive Power Plant and Setting up Solvent Spun Cellulosic Fibre



## Submitted to:-

**Ministry of Environment Forest & Climate**

Change, (WR Office) Bhopal Ministry of Environment

Forest & Climate Change, New Delhi

Central Pollution Control Board, Zonal Office

(Vadodara) Gujarat Pollution Control Board-Bharuch

## Submitted By:-

**Grasim Industries Limited**

(Unit: - Grasim Cellulosic Division)

Plot No. 1 GIDC Vilayat Industrial Estate,

PO-Vilayat, Taluka-Vagra, Dist: - Bharuch-

392012, Gujarat, India

**Period: -01.01.2019 to 31.03.2019**

**Compliance Status Report for “Environmental Clearance” Accorded by the MoEF**  
**For**  
**Grasim Cellulosic Division (GCD), Vilayat Project**

**List of Annexure**

<b>Sr. No.</b>	<b>Title</b>	<b>Annexure No.</b>
1	Copy of Water Agreement	Annexure-01
2	GIDC Approval for Water Effluent	Annexure-1A
3	Effluent Treatment - Monthly Monitoring Report from Unistar	Annexure-02
4	NABL Certificate : Unistar	Annexure-03
5	Chlor Alkali : Application for Change in Name	Annexure-04
6	MoEF EC Compliance letter - CA plant	Annexure-05
7	EC Amendment	Annexure-06
8	Ambient Air Quality Report : Unistar	Annexure-07
9	Rain Water Harvesting Report	Annexure-08
10	Training Details	Annexure-09
11	Status of EIA/EMP	Annexure-10
12	Six monthly EC Compliance Report – (Jan-18 to June-18)	Annexure-11
13	Form-V : Environmental Statement	Annexure-12
14	Advertisement Details	Annexure-13
15	BEIL membership	Annexure-14
16	GPCB Monthly Patrak	Annexure-15
17	Chemical Division Consent	Annexure-16

# **Compliance Status Report for “Environmental Clearance” Accorded by the MoEF**

## **For**

### **Grasim Cellulosic Division (GCD), Vilayat Project**

#### **-: Introduction: -**

1. Grasim Industries Limited (GIL), incorporated on 25th Aug., 1947; is a flagship company of the Aditya Birla Group and India's pioneer in manufacturing of Viscose Staple Fibre (VSF) a man-made, biodegradable fibre with characteristics akin to cotton.
2. M/s. Grasim Industries Ltd. has four VSF Plants in India which are located at Nagda (Madhya Pradesh), Harihar (Karnataka), Kharach & Vilayat (Gujarat).
3. Grasim Cellulosic Division, Vilayat is a latest plant in the Pulp & Fibre business, commissioned in Apr-2014 which produces both grey VSF and specialty fibre. This is the company's first plant producing specialty grade fibre.
4. The Company's main production is Viscose Staple Fibre, Sulphuric Acid, Carbon-Disulphide.
5. All the operation related permits, including Environmental Clearance, Forest Clearance from MOEF&CC and Consents to Establish (CTE) & Consent to Operate (CTO) has obtained from Gujarat Pollution Control Board, are in place.
6. Environmental quality monitoring in & around the project site is being carried out by GPCB & NABL approved Laboratory on a regular basis.
7. 04 No. of Ambient Air Quality Monitoring Stations (AAQMS) along with Environmental Parameter Display Board at main gate have been established.
8. Continuous Emission Monitoring System has installed in process stacks of Rayon (Fibre) plant and H<sub>2</sub>SO<sub>4</sub> acid plant for regular monitoring of CS<sub>2</sub>, SO<sub>2</sub> etc.
9. Online TOC, pH & flow meters installed at the outlet of ETP, before discharging treated effluent to GIDC pipeline.
10. Green belt is being developed as per the CPCB guidelines to curb the emission and also to provide an aesthetic look.
11. Point wise compliance status of Environmental Clearance for GCD, Vilayat is furnished herewith.

**Compliance Status Report for “Environmental Clearance” Accorded by the MoEF**  
**For**  
**Grasim Cellulosic Division (GCD), Vilayat Project**

**Compliance status on Environmental Clearance**

**MOEF Ref. Letter No.: J-11011/321/2016-IA II(I)Pt, dated 15-01-18**

**General Profile: -**

Sr. No.	Stipulation	Compliance Status
1	This has reference to your proposal no. IA / GJ / IND2 /58913 /2016, dated 23rd January, 2017, submitting the EIA/EMP report on the above subject matter	---
2.	The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for expansion of Viscose Staple Fibre from 1,27,750 TPA to 2,55,500 TPA, Captive Power Plant from 25 MW to 55 MW and setting up Solvent Spun Cellulosic Fibre unit of 36,500 TPA by M/s Grasim Industries Ltd (Grasim Cellulosic Division) at Plot No. 1, GIDC Industrial Area Vilayat, Tehsil Vagra, District Bharuch (Gujarat)	Latitude : 21 deg 46'8" and 21 deg 47'11"North Longitude : 72 deg 53'18"and 72 deg 54'49"East
3.	The Existing & proposed Production capacity:	Production increased under de-bottlenecking for Viscose Staple Fibre & Sod. Sulphate after receiving EC, CTE & CTO. <b>Following will be the products &amp; production capacity, refer in Table No.01 :-</b>

Table No. 01					
Products=➔	Viscose Staple Fibre	Carbon Di sulphide	Sulfuric Acid	Sodium Sulphate (Byproduct)	Power Generation
EC Amendment As per EC No. F. No. J-11011/321/2016-IA-II(I) Pt Dated – 15.01.2018	<b>255500</b> (36500 by De bottle necking & 91250 by new lines)	<b>34675</b>	<b>182500</b>	<b>166076 to 210788</b>	<b>55 MW</b> Copy of CTE & CTO is attached. (New lines yet to be installed.)
Total Production (Tons) - Jan-19 to Mar-19	40043	7125	22222	27352	-
Total Production (Tons) - Jul-18 to Dec-18	81142	12803	62776	55040	-
Total Production (Tons) - Jan-18 to Jun-18	65813	9612	44776	45638	-

Sr. No.	Stipulation	Compliance Status
4	The existing land area is 222.63 ha and no additional land will be required for the proposed expansion.	The existing land area is 222.63 ha and no additional land is required for the proposed expansion.
	Industry will develop greenbelt in an area of 33 % i.e., 73.46 ha out of 222.63 ha area of the project.	<b>Total Plant Area – 567Acre</b> <b>Cellulosic Division – 300 Acre</b> (132-Open Area+168Acre- Const. Area) <b>Chemical + Epoxy Division – 267 Acre</b> Out of 567 Acres, Grasim Cellulosic division has 300 Acre and out of 300 Acre 168 Acre is construction area. We have developed greenbelt in our factory complex along the boundary wall and open space area of 55.4 acre area to achieve target of 33% green belt of construction area. Total 55,000 nos. tree have been planted till Mar-2019. We are planning to plant > 15,000 trees in FY-20 and to cover 33% of total plant area the detail action plan are Tabulated in <b>Table No. 02</b>

		We have developed greenbelt along with boundary wall & planted different plant species in campus area. Following are the list of plant species. Plant species were selected as per the directives of CPCB & DFO. Photograph of green belts is attached below.																																						
	<table><tr><th colspan="4">Table No. 02</th></tr><tr><th>Sr. No</th><th>Duration</th><th>Area (Acre.) for Plantation</th><th>Number of Plant</th></tr><tr><td>1</td><td>Existing (Till FY; 2017-18)</td><td>60</td><td>37,500 Plants</td></tr><tr><td>2</td><td>2018-19</td><td>25</td><td>15,000 Plants</td></tr><tr><td>3</td><td>2019-20</td><td>25</td><td>15,000 Plant</td></tr><tr><td>4</td><td>2020-21</td><td>25</td><td>15,000 Plant</td></tr><tr><td>5</td><td>2021-223</td><td>25</td><td>15,000 Plant</td></tr><tr><td>6</td><td>2022-23</td><td>25</td><td>15,000 Plant</td></tr><tr><td colspan="2">Total=&gt;</td><td>185</td><td>1,12,500 Plant</td></tr></table>	Table No. 02				Sr. No	Duration	Area (Acre.) for Plantation	Number of Plant	1	Existing (Till FY; 2017-18)	60	37,500 Plants	2	2018-19	25	15,000 Plants	3	2019-20	25	15,000 Plant	4	2020-21	25	15,000 Plant	5	2021-223	25	15,000 Plant	6	2022-23	25	15,000 Plant	Total=>		185	1,12,500 Plant	<p><b>Existing Plantation Species:</b></p> <p>Neem (<i>Azadirachta indica</i>), Kasood (<i>Cassia siamea</i>), Pine/Junglisaru (<i>Casuarina equisetifolia</i>), Orchid tree (<i>Bauhinia blakeana</i>), Gulmohar (<i>Delonix regia</i>), Rain tree (<i>Samanea saman</i>), Yellow Gulmohar (<i>Peltophorum ferrugineum</i>), Bottle brush (<i>Callistemon sp.</i>), Earleaf Acacia (<i>Acacia auriculiformis</i>), Kadamb (<i>Neolamarckia cadamba</i>), Basant Rani (<i>Tabebuia rosea</i>), Safeda (<i>Eucalyptus</i>), <i>Bougainvillea spectabilis</i>, Lawn Plantation and Shrubbery.</p> <p>The Existing Spices for plantation are Selected by following CPCB guidelines</p>		
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	<p><b>Proposed Plantation Species:</b> Neem (<i>Azadirachta indica</i>), Kasood (<i>Cassia siamea</i>), Pine/Junglisaru (<i>Casuarina equisetifolia</i>), Orchid tree (<i>Bauhinia blakeana</i>), Saptparni (<i>Alstonia scholaris</i>), Gulmohar (<i>Delonix regia</i>), Rain tree (<i>Samanea saman</i>), Shisham (<i>Dalbergia sissoo</i>), Bel (<i>Aegle marmelos</i>), Arjun tree (<i>Terminalia arjuna</i>), Cassia fistula (<i>Amaltas</i>), Yellow Gulmohar (<i>Peltophorum ferrugineum</i>), Bottle brush (<i>Callistemon sp.</i>), Kadamb (<i>Neolamarckia cadamba</i>), Semal/Kapok (<i>Bombax ceiba</i>), Jamun (<i>Syzygium cumini</i>), Apple blossom tree (<i>Cassia javanica</i>), Sausage tree (<i>Kigelia pinnata</i>), Basant Rani (<i>Tabebuia rosea</i>), Morpankhi (<i>Thuja occidentalis</i>), Safeda (<i>Eucalyptus</i>), Guh babool (<i>Acacia farnesiana</i>), Kaner (<i>Nerium indicum</i>), Champa (<i>Plumeria rubra</i>), Holy basil (<i>Ocimum tenuiflorum</i>), Jarul (<i>Lagerstroemia speciosa</i>), <i>Bougainvillea spectabilis</i>, Lemon (<i>Citrus lemon</i>), Sankuppi (<i>Clerodendrum inerme</i>), Lawn Plantation and Shrubbery etc.</p> <p><b>Plant species for Odor management :</b> Neem (<i>Azadirachta indica</i>), Saptparni (<i>Alstonia scholaris</i>), Guh babool (<i>Acacia farnesiana</i>), Morpankhi (<i>Thuja occidentalis</i>), <i>Bougainvillea spectabilis</i>, Lemon (<i>Citrus lemon</i>), Kaner (<i>Nerium indicum</i>), Mehndi (<i>Lawsonia inermis</i>), Champa (<i>Plumeria rubra</i>), Holy basil (<i>Ocimum tenuiflorum</i>), Tulsi (<i>Ocimum sanctum</i>), Sankuppi (<i>Clerodendrum inerme</i>), Jasmine tree (<i>Plumeria alba</i>), Jarul (<i>Lagerstroemia speciosa</i>), Gurhal (<i>Hibiscus rosa sinensis</i>), Bunchgrass (<i>Vetiveria zizanioides</i>) etc.</p> <p><b>Gaseous emission (SO2 &amp; NOx) tolerant species:</b> Neem (<i>Azadirachta indica</i>), Bel (<i>Aegle marmelos</i>), Kasood (<i>Cassia siamea</i>), Earleaf Acacia (<i>Acacia auriculiformis</i>), Saptparni (<i>Alstonia scholaris</i>), Aldu (<i>Ailanthus excelsa</i>), Siris (<i>Albizia lebbeck</i>), Shisham (<i>Dalbergia sissoo</i>), Pipal (<i>Ficus religiosa</i>), White fig (<i>Ficus infectoria</i>), Maulsari (<i>Mimusops elengi</i>), Kaner (<i>Nerium indicum</i>), Jarul (<i>Lagerstroemia speciosa</i>) etc.</p>																																							

	
	<div>The estimated project cost is Rs.2560 Crores.</div> <div>The estimated project cost will be Rs.2560 Crores.</div>
	<div>Employment will be provided to 1300 persons as direct &amp; 1200 persons indirectly after expansion.</div> <div>After Expansion Noted to provide the Employment: - 1300 persons as direct &amp; 1200 persons as indirect.</div>
	<div>Industry proposes to allocate Rs.64.04 Crores towards enterprise social commitment</div> <div>We have plan to allocate Rs.64.04 Crores towards enterprise social commitment Please refer <b>Table No.03</b> for detailed ESC plan</div>

Table No. 03								
Sector	Activity	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> to 10 <sup>th</sup> Year	Total Amount (in Crores)
Entry Point Activities	Village level meeting for repo building and initial discussion for the community development needs in villages	0.02	0	0	0	0	0	0.02
	Baseline / Household survey in 10 villages	0.1	0	0	0	0	0	0.1
	Participatory Rural Appraisal (PRA) exercise in 10 villages	0.03	0	0	0	0	0	0.03

	Exposure visit to Village Representative	0.02	0	0	0	0	0	0.02
Educational Programmes	Career Counseling & Educational Camp/Skills based Individual training program etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Merit Scholarship to girl's students for higher education / Prize Distribution to Merit Holders in Govt. Schools.	0.1	0.12	0.14	0.16	0.18	0.9	1.6
	Distribution of School uniform and Books to needy children	0.15	0.15	0.15	0.15	0.15	0.75	1.5
	Celebration of National & International days: Independent & Republic Day, yoga day, women day etc.	0.03	0.03	0.03	0.03	0.03	0.15	0.3
	Village Knowledge center/school library etc.	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Assistance in School/ AWC Infrastructure	0.05	0.05	0.05	0.05	0.05	0.35	0.6
	Knowledge Program (Creative Competition-Sciences exhibition, Children's Sports activities, Education tour etc.)	0.05	0.05	0.05	0.05	0.05	0.35	0.6
	Quality of Education/Specialized Coaching	0.01	0.01	0.01	0.01	0.01	0.06	0.11
	Provision of School Faculty& educational supports	0.01	0.01	0.01	0.01	0.01	0.06	0.11
	Science Lab Equipments to schools	0.04	0.05	0.05	0.06	0.06	0.33	0.59
	School Furnisher (Benches, Black board, Fan, Cupboard &Computer etc.)	0.03	0.03	0.03	0.03	0.03	0.15	0.3
	Providing sports kit and organizing sports meet in nearby villages	0.02	0.02	0.02	0.02	0.02	0.1	0.2







vocational skill training center: computer course/mobile repairing/TV repairing com/Electrical / welder/fitter/ Wireman /Plumber/ handicraft/ beautician,/Masala making/ vermi compost/ nadep etc.	0.04	0.04	0.04	0.04	0.04	0.2	0.4
Support to SHGs for entrepreneurial activities& capacity building of rural women and men for programmes like –saving & credit linkages with bank ,	0.1	0.1	0.1	0.1	0.1	0.5	1
Livelihood infrastructure/ Enhancement etc.	0.1	0.1	0.1	0.1	0.1	0.5	1
Support to Rural Enterprise development & Income Generation etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.5
Natural Resource conservation programs/Plantation / Green Belt Development /Roadside Plantation& Tree guard provided to protect Trees etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.5
Integrated Livestock development: cattle breed improvement/ Innovative Cattle Feeding System/ Dairy development /Distribution Green founder seed for cattle etc.	0.08	0.08	0.08	0.08	0.8	0.3	1.42
Integrated agricultural Development Program: Hi-yield Varity Seed Distribution/Saplings Planted - fruits & forest species etc.	0.08	0.08	0.08	0.08	0.08	0.4	0.8
Promotion of Agricultural Equipment – Drip irrigation etc.	0.1	0.1	0.1	0.1	0.1	0.5	1

	Farmer's club Training centers / Agriculture & Horticulture productivity improvement programmes/ field exposure visit Training etc.	0.1	0.1	0.06	0.06	0.06	0.3	0.68
	Bacteriological Water testing in well, Hadpump Etc	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	De-silting & Renovation of Farm Pond/Anicut	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Construction of Rain Water Harvesting Structures / Roof top water harvesting / Pond deepening etc.	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Farm Bunding with masonry waste weir / Catchment Area Treatments	0.02	0.02	0.02	0.02	0.02	0.1	0.2
<b>Social Issues Intervention</b>	Organizing & supporting rural socio-cultural programme with villagers & with District Administration	0.06	0.06	0.06	0.09	0.06	0.3	0.63
	Other community welfare works i.e. widow / dowry less marriage, awareness camps on social issues etc.	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Donation in Sports tournaments	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Marathon Race for social abuse Early marriage or HIV Prevention	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Impact assessment study / Household survey in 10 villages	0	0	0	0.05	0.05	0.25	0.35
<b>TOTAL (In Crores)</b>		<b>10.16</b>	<b>9.79</b>	<b>7.62</b>	<b>7.63</b>	<b>8.34</b>	<b>20.5</b>	<b>64.04</b>

5	There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife corridors etc. within 10 km from the project site. Narmada River (estuarine region) is at a distance of 9.0 km in SSW direction from the project site	We have noted & There are no National parks, Wildlife sanctuaries, Biosphere reserves, Tiger/Elephant reserves, Wildlife corridors etc. within 10 km from the project site. Narmada River (estuarine region) is at a distance of 9.0 km in SSW direction from the project site.
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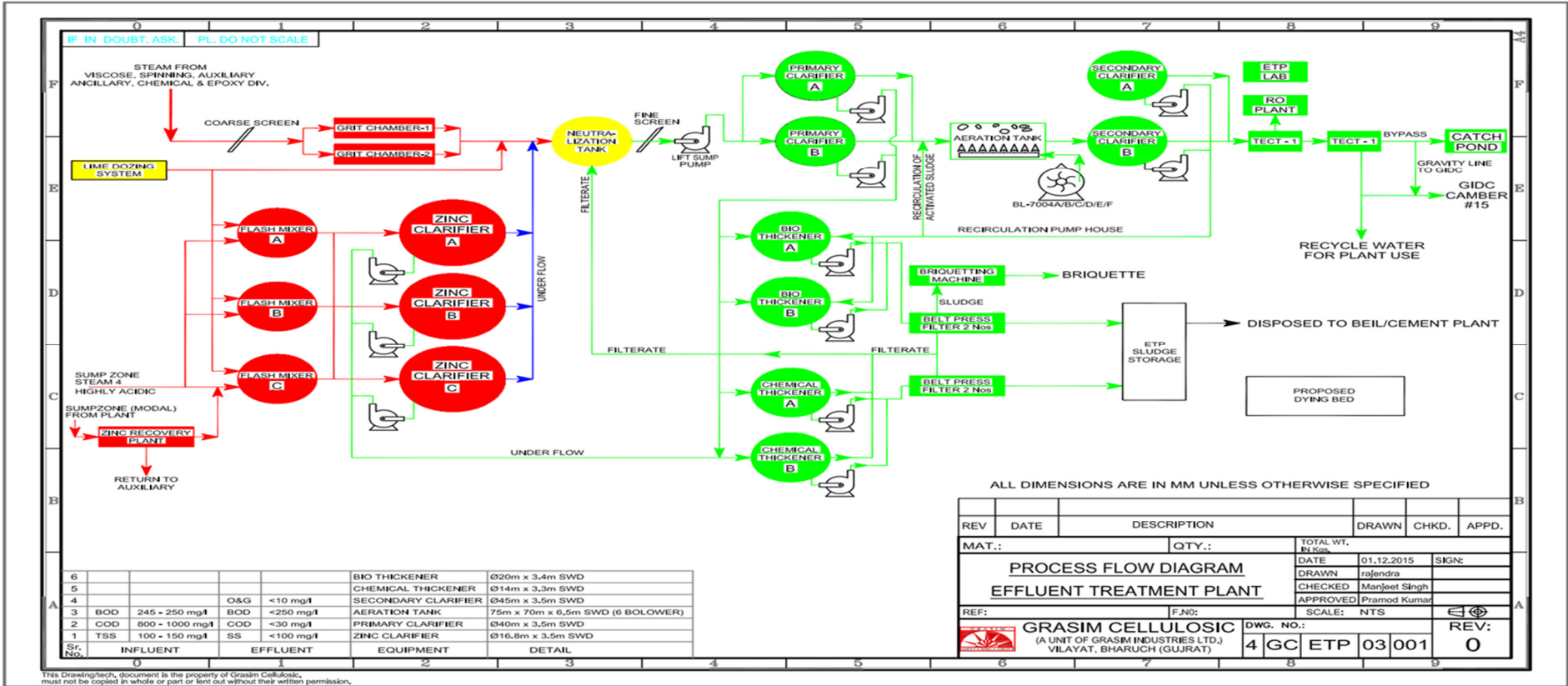
6	<p>The total fresh water requirement is 35,000 m3/day, which will be met from Gujarat Industrial Development Cooperation (GIDC) water supply</p>	<p>We shall met fresh water requirement through GIDC as being done for existing plant.</p> <p>Average Water consumption for last six months (Jul’18-Dec’18) - <b>13,608</b> m3/day (for VSF plant only), sourced from Narmada River, supplied by GIDC (Except Power plant), following are the tabulated water Consumption details in <b>Table No.04</b></p>																																			
	<table><tr><th colspan="4">Table No.04</th></tr><tr><th rowspan="2">Month</th><th colspan="3">Water Consumption (m3/day)</th></tr><tr><th>Average</th><th>Minimum</th><th>Maximum</th></tr><tr><td>Jan-19</td><td>12654</td><td>9770</td><td>13830</td></tr><tr><td>Feb-19</td><td>12238</td><td>9812</td><td>14422</td></tr><tr><td>Mar-19</td><td>13791</td><td>12542</td><td>15206</td></tr><tr><td><b>Avg.</b></td><td><b>12894</b></td><td>-</td><td>-</td></tr></table>	Table No.04				Month	Water Consumption (m3/day)			Average	Minimum	Maximum	Jan-19	12654	9770	13830	Feb-19	12238	9812	14422	Mar-19	13791	12542	15206	<b>Avg.</b>	<b>12894</b>	-	-	<p>Following are the GIDC offer cum allotment letter details;</p> <table><tr><td>1) Letter No.</td><td>GIDC/POJ/MKT/GRASIM/575 Dated 06<sup>th</sup> December-2006</td></tr><tr><td>Agreement for Water Supply</td><td>15.60 MLD</td></tr></table> <table><tr><td>2) Letter No.</td><td>GIDC/SE/CG//BRH/1236 Dated 29<sup>th</sup> December-2016</td></tr><tr><td>Agreement for Water Supply</td><td>25.00 MLD</td></tr></table>	1) Letter No.	GIDC/POJ/MKT/GRASIM/575 Dated 06 <sup>th</sup> December-2006	Agreement for Water Supply	15.60 MLD	2) Letter No.	GIDC/SE/CG//BRH/1236 Dated 29 <sup>th</sup> December-2016	Agreement for Water Supply	25.00 MLD
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	<p>Necessary agreement of water supply is made with GIDC</p>	<p>Agreement of water supply is made with GIDC on <b>06.12.2006</b>, details as per <b>Annexure-01 &amp; 1A.</b></p>																																			
	<p>Effluent generated from the project will be treated in the existing effluent treatment plant, and the treated effluent will be discharged into Bay of Kambhat through GIDC pipeline</p>	<p>The Effluent generated from the project will be treated in the existing effluent treatment plant, and the treated effluent will be discharged into Bay of Kambhat through GIDC pipeline</p> <p>Existing TP Details are as below, Full Fledged ETP installed, which comprises of;</p> <ol style="list-style-type: none"><li><b>Primary Treatment:</b> -Grit Chambers, Equalization tank, Neutralization tank &amp; Primary Clarifier with sludge dewatering system installed.</li><li><b>Extended aeration activated sludge process:</b> -Diffused aeration system.</li><li><b>Secondary treatment:</b> - Biological reactor with secondary clarifier &amp; settling tanks.</li></ol>																																			

Treated effluent quality for the period of Jan-18 to June-18 is summarized as under **Table no. 05**  
Monthly Test Report from Unistar Refer as **Annexure – 02**

<div>Third Party Lab Details: -</div> <div>Agency: - Unistar Environment &amp; Research lab Pvt. Ltd</div> <div>Address: -GIDC, Char Rasta, Vapi</div> <div>NABL : - NABL Certificate Number TC-7753</div> <div>NABL Certificate Issue Date &amp; Expiry Date: - 15.09.2018 to 14.09.2020</div> <div>(Copy of NABL Certificate is attached with Test Report (Annexure-03))</div>																														
		Month & Date of Sampling	FINAL TREATED EFFLUENT																											
			pH	Temp.	TSS	Oil & Grease	Fluoride	Sulphide	TKN	Amm. N as N	Copper	Zinc	BOD	COD	Total Res Cl2	Arsenic	Mercury	Hexavalent Chromium	Trivalent Chromium	Lead	Cadmium	Nickel	Cyanide	Phenolic Comp	Selenium	Manganese	Iron	Vanadium	Nitrate Nitrogen	Bio Assay Test
			Unit	-	deg C	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	mg/lit	90% Survival of fish after 96hrs.
			GPCB limit	6.0 – 9.0	Not Exceed more than 35 deg C	100	10	15	5	50	50	3	15	100	250	1	0.2	0.01	0.1	2	0.1	0.05	3	0.2	5	0.05	2	3	0.2	
Jan-19	7.60	29	5	BDL	1.4	BDL		4.1	BDL	2.5	48	155	BDL	BDL	BDL	BDL	0.07	0.10	0.05	0.03	BDL	0.37	BDL	BDL	0.24	BDL	-			
Feb-19	7.60	31	10	BDL	1.2	BDL	14.3	8.6	BDL	2.2	44	142.5	BDL	BDL	BDL	BDL	0.11	BDL	0.04	0.04	BDL	0.05	BDL	BDL	0.31	BDL	6.50	Complied		
Mar-19	7.69	32	40	BDL	6.7	BDL	29.0	24.1	BDL	2.3	54	174.5	BDL	BDL	BDL	BDL	0.12	BDL	0.06	0.06	BDL	0.63	BDL	BDL	0.43	BDL	7.70	Complied		
Min	7.60	29.00	5.00	BDL	1.24	BDL	14.30	4.05	BDL	2.24	44.00	142.50	BDL	BDL	BDL	BDL	0.07	0.10	0.04	0.03	BDL	0.05	BDL	BDL	0.24	BDL	6.50			
Max	7.69	32.00	40.00	BDL	6.70	BDL	29.00	24.10	BDL	2.46	54.00	174.50	BDL	BDL	BDL	BDL	0.12	0.10	0.06	0.06	BDL	0.63	BDL	BDL	0.43	BDL	7.70			
Average	7.63	30.67	18.33	BDL	3.10	BDL	21.65	12.25	BDL	2.33	48.67	157.33	BDL	BDL	BDL	BDL	0.10	0.10	0.05	0.04	BDL	0.35	BDL	BDL	0.33	BDL	7.10			

**Please Refer Effluent Treatment Plant PFD & Details of Equipments on Next Page**

ETP PFD: -



	Total power requirement of 55 MW will be met from the captive power plant. Three 175 TPH coal/petcoke fired boilers will be installed for the proposed CPP.	We Have installed 25 MW CPP under CA plant. Shall Install 30 MW Captive Power Plant, one 175TPH Coal fired boiler will be installed for 30 MW capacity.
	Multi cyclone separator/ bag filter with a stack of height of 125 m will be installed to control the particulate emissions within prescribed norms	We Shall Comply the condition on commissioning of plant to install the Multi Cyclone Separator/bag filter with a stack height of 125m to control the particulate emission within prescribe norms.
	Existing unit has 2 DG sets of 1250 KVA capacity, that are used as standby during power failure. Stack height of 30 m has been provided as per CPCB norms for the existing DG sets	Existing DG sets will be used for standby power requirement, in case any power failure. Stack height of 30 m has been provided as per CPCB norms for the existing DG sets
7	All Manmade Fibres Manufacturing (Rayon) projects are listed at 5(d) of Schedule to the Environment Impact Assessment (EIA) Notification, 2006, under Category 'A' and requires appraisal at central level by Expert Appraisal Committee (EAC) in the Ministry	---
8	The terms of references (ToR) was granted on 2nd February, 2017 with the exemption from public consultation in terms of para 7 (i), Point III, Stage (3)(i)(b) of EIA Notification, 2006	---
9	The proposal for environmental clearance (EC) was placed before the EAC (Industry-2) in its 251h meeting held during 5-7 July, 2017 in the Ministry. The project proponent and their consultant M/s J. M. EnviroNet Pvt Ltd, presented the EIA/EMP report as per the ToR. The EAC, found the EIA/EMP report satisfactory and in consonance with the ToR, and recommended the proposal for environmental clearance with certain conditions	---
10	Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project ' <b>Expansion of Viscose Staple Fibre from 1,27,750 TPA to 2,55,500 TPA, Captive Power Plant from 25 MW to 55 MW and setting up Solvent Spun Cellulosic Fibre unit of 36,500 TPA</b> ' by M/s Grasim Industries Ltd (Grasim Cellulosic Division) at Plot No. 1, GIDC Industrial Area Vilayat, Tehsil Vagra, District Bharuch (Gujarat), under the provisions of EIA Notification, 2006 and the amendments made therein, subject to the compliance of terms and conditions, as under:	---



## 10.Terms & Conditions

i)	The environmental clearance issued by SEIAA vide letter dated 30th May, 2011 for the project 'Chlor-alkali unit with value added products (as a backward integration of VSF plant)' at the same premises, should be rectified to reflect M/s Grasim Industries Ltd (Grasim Chemical Division) as the project proponent in place of M/s Grasim Cellulosic (A Unit of Grasim Industries Ltd)	The Amendment in Name has been done on 04 <sup>th</sup> May 2019; Now the industry shall be read as M/S. Grasim Industries Limited(Chemical Division) instead of M/S. Grasim Cellulosic Division. Please refer attached <b>Annexure-04</b>					
ii)	The Monitoring report on compliance status of the conditions stipulated by SEIAA in the environmental clearance dated 30 <sup>th</sup> May, 2011, shall be submitted to the Ministry through the Regional Office, for further review of the project, if so required.	The monitoring report on compliance status of the conditions stipulated by SEIAA in the environmental clearance dated 30th May, 2011 has already submitted to ministry. Please refer <b>Annexure-05</b>					
iii)	Effluent shall be treated properly before discharging to Bay of Kambhat through GIDC pipeline.	The effluent is treated & the quality of effluent is verified before its discharge to Bay of Kambhat through GIDC pipeline which is being done for existing capacity& shall follow for additional too.					
iv)	Atleast, 50 % of the fuel requirement shall be met from natural gas and the rest 50 % may be met from briquette/coal (with Sulphur content less than 0.5%).	Condition has amended for use of 100% coal with ETP bio mass. We shall ensure to use coal of < 0.5% Sulphur contents. Pl. refer attached <b>Annexure-06</b>					
v)	Proposed effluent generation (27160 KLD) shall be reused after treating/processing through RO, etc. and fresh water requirement shall accordingly be restricted to 22,000 KLD	The Condition is amended for 28,000 KLD water after reusing/recycling of 7,350 KLD through RO plant. Please refer <b>Annexure-06</b>					
vi)	Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.	<div>Smart energy conservation equipments (like LED/solar light) is started to install.</div> <table><tr><td><b>New LED Fittings changed in place of conventional in FY-2019 (Nos.)</b></td><td><b>Planned LED fittings in FY-2020 (Nos.)</b></td></tr><tr><td>1650</td><td>2400</td></tr></table>		<b>New LED Fittings changed in place of conventional in FY-2019 (Nos.)</b>	<b>Planned LED fittings in FY-2020 (Nos.)</b>	1650	2400
<b>New LED Fittings changed in place of conventional in FY-2019 (Nos.)</b>	<b>Planned LED fittings in FY-2020 (Nos.)</b>						
1650	2400						
vii)	As assured, 5 MW power (of the total power requirement) shall be generated from solar power/renewable energy sources.	Scheme is under review & to be implemented in further Financial years					
viii)	Green belt of 10 m width shall be developed along the periphery of the plant with three layers of trees. At least 33 % of the area shall be developed as green area with trees	<b>Total Plant Area – 567Acre</b> <b>Cellulosic Division – 300 Acre</b> (132-Open Area+168Acre- Const. Area) <b>Chemical + Epoxy Division – 267 Acre</b> Out of 567 Acres, Grasim Cellulosic division has 300 Acre and out of 300 Acre 168 Acre is construction area. We have developed greenbelt in our factory complex along the boundary wall and open space area of 55.4 acre area to achieve target of 33% green belt of construction area. Total 55,000 nos. tree					

		have been planted till Jan-2019. We are planning to plant > 15,000 trees in FY-19 and to cover 33% of total plant area the detail action plan are Tabulated in <b>Table No. 06</b>  We have developed greenbelt along with boundary wall & planted different plant species in campus area. Following are the list of plant species. Plant species were selected as per the directives of CPCB & DFO. Photograph of green belts is attached below.																																				
	<table><tr><th colspan="4">Table No. 06</th></tr><tr><th>Sr. No</th><th>Duration</th><th>Area (Acre.) for Plantation</th><th>Number of Plant</th></tr><tr><td>1</td><td>Existing (Till FY; 2017-18)</td><td>60</td><td>37,500 Plants</td></tr><tr><td>2</td><td>2018-19</td><td>25</td><td>15,000 Plants</td></tr><tr><td>3</td><td>2019-20</td><td>25</td><td>15,000 Plant</td></tr><tr><td>4</td><td>2020-21</td><td>25</td><td>15,000 Plant</td></tr><tr><td>5</td><td>2021-22</td><td>25</td><td>15,000 Plant</td></tr><tr><td>6</td><td>2022-23</td><td>25</td><td>15,000 Plant</td></tr><tr><td colspan="2">Total=&gt;</td><td>185</td><td>1,12,500 Plant</td></tr></table>	Table No. 06				Sr. No	Duration	Area (Acre.) for Plantation	Number of Plant	1	Existing (Till FY; 2017-18)	60	37,500 Plants	2	2018-19	25	15,000 Plants	3	2019-20	25	15,000 Plant	4	2020-21	25	15,000 Plant	5	2021-22	25	15,000 Plant	6	2022-23	25	15,000 Plant	Total=>		185	1,12,500 Plant	<b>Existing Plantation Species:</b> Neem ( <i>Azadirachta indica</i> ), Kasood ( <i>Cassia siamea</i> ), Pine/Junglisaru ( <i>Casuarina equisetifolia</i> ), Orchid tree ( <i>Bauhinia blakeana</i> ), Gulmohar ( <i>Delonix regia</i> ), Rain tree ( <i>Samanea saman</i> ), Yellow Gulmohar ( <i>Peltophorum ferrugineum</i> ), Bottle brush ( <i>Callistemon sp.</i> ), Earleaf Acacia ( <i>Acacia auriculiformis</i> ), Kadamb ( <i>Neolamarckia cadamba</i> ), Basant Rani ( <i>Tabebuia rosea</i> ), Safeda ( <i>Eucalyptus</i> ), <i>Bougainvillea spectabilis</i> , Lawn Plantation and Shrubbery.  The Existing Spices for plantation are Selected by following CPCB guidelines
Table No. 06																																						
Sr. No	Duration	Area (Acre.) for Plantation	Number of Plant																																			
1	Existing (Till FY; 2017-18)	60	37,500 Plants																																			
2	2018-19	25	15,000 Plants																																			
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6	2022-23	25	15,000 Plant																																			
Total=>		185	1,12,500 Plant																																			
	<b>Proposed Plantation Species:</b> Neem ( <i>Azadirachta indica</i> ), Kasood ( <i>Cassia siamea</i> ), Pine/Junglisaru ( <i>Casuarina equisetifolia</i> ), Orchid tree ( <i>Bauhinia blakeana</i> ), Saptarni ( <i>Alstonia scholaris</i> ), Gulmohar ( <i>Delonix regia</i> ), Rain tree ( <i>Samanea saman</i> ), Shisham ( <i>Dalbergia sissoo</i> ), Bel ( <i>Aegle marmelos</i> ), Arjun tree ( <i>Terminalia arjuna</i> ), Cassia fistula ( <i>Amaltas</i> ), Yellow Gulmohar ( <i>Peltophorum ferrugineum</i> ), Bottle brush ( <i>Callistemon sp.</i> ), Kadamb ( <i>Neolamarckia cadamba</i> ), Semal/Kapok ( <i>Bombax ceiba</i> ), Jamun ( <i>Syzygium cumini</i> ), Apple blossom tree ( <i>Cassia javanica</i> ), Sausage tree ( <i>Kigelia pinnata</i> ), Basant Rani ( <i>Tabebuia rosea</i> ), Morpankhi ( <i>Thuja occidentalis</i> ), Safeda ( <i>Eucalyptus</i> ), Guh babool ( <i>Acacia farnesiana</i> ), Kaner ( <i>Nerium indicum</i> ), Champa ( <i>Plumeria rubra</i> ), Holy basil ( <i>Ocimum tenuiflorum</i> ), Jarul ( <i>Lagerstroemia speciosa</i> ), <i>Bougainvillea spectabilis</i> , Lemon ( <i>Citrus lemon</i> ), Sankuppi ( <i>Clerodendrum inerme</i> ), Lawn Plantation and Shrubbery etc.  <b>Plant species for Odor management :</b> Neem ( <i>Azadirachta indica</i> ), Saptarni ( <i>Alstonia scholaris</i> ), Guh babool ( <i>Acacia farnesiana</i> ), Morpankhi ( <i>Thuja occidentalis</i> ), <i>Bougainvillea spectabilis</i> , Lemon ( <i>Citrus lemon</i> ), Kaner ( <i>Nerium indicum</i> ), Mehndi ( <i>Lawsonia inermis</i> ), Champa ( <i>Plumeria rubra</i> ), Holy basil ( <i>Ocimum tenuiflorum</i> ), Tulsi ( <i>Ocimum sanctum</i> ), Sankuppi ( <i>Clerodendrum inerme</i> ), Jasmine tree ( <i>Plumeria alba</i> ), Jarul ( <i>Lagerstroemia speciosa</i> ), Gurhal ( <i>Hibiscus rosa sinensis</i> ), Bunchgrass ( <i>Vetiveria zizanioides</i> ) etc.  <b>Gaseous emission (SO2 &amp; NOx) tolerant species:</b> Neem ( <i>Azadirachta indica</i> ), Bel ( <i>Aegle marmelos</i> ), Kasood ( <i>Cassia siamea</i> ), Earleaf Acacia ( <i>Acacia auriculiformis</i> ), Saptarni ( <i>Alstonia scholaris</i> ), Aldu ( <i>Ailanthus excelsa</i> ), Siris ( <i>Albizia lebbbeck</i> ), Shisham ( <i>Dalbergia sissoo</i> ), Pipal ( <i>Ficus religiosa</i> ), White fig ( <i>Ficus infectoria</i> ), Maulsari ( <i>Mimusops elengi</i> ),																																					

	Kaner ( <i>Nerium indicum</i> ), Jarul ( <i>Lagerstroemia speciosa</i> ) etc.	
	<b><u>Green Belt Development Photographs are as under :-</u></b> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>	

ix)	The proponent shall plant and maintain at least 1 lakh native trees for five year in the nearby villages.	In FY- 19, We have planted more 6041 trees in the nearby villages & 10,000 trees to be planted in FY-20. (Total Plantation done as on 24742 nos.)
x)	Enterprises social commitment (ESC) plan shall be implemented with at least 2.5 % of the project cost. As proposed, Hospital (with modern facilities) may be constructed/ maintained, and also construct and maintain modern RO drinking water facility in the five nearbyvillage	Enterprises social commitment (ESC) is planned with at least 2.5 % of the project cost, Please refer following <b>Table No.:-07</b> for detailed Plan As proposed, Hospital (with modern facilities) may be constructed/ maintained, and also construct and maintain modern RO drinking water facility in the five nearbyvillage

Table No. 07

Sector	Activity	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> to 10 <sup>th</sup> Year	Total Amount (in Crores)
Entry Point Activities	Village level meeting for repo building and initial discussion for the community development needs in villages	0.02	0	0	0	0	0	0.02
	Baseline / Household survey in 10 villages	0.1	0	0	0	0	0	0.1
	Participatory Rural Appraisal (PRA) exercise in 10 villages	0.03	0	0	0	0	0	0.03
	Exposure visit to Village Representative	0.02	0	0	0	0	0	0.02
Educational Programmes	Career Counseling & Educational Camp/Skills based Individual training program etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Merit Scholarship to girl's students for higher education / Prize Distribution to Merit Holders in Govt. Schools.	0.1	0.12	0.14	0.16	0.18	0.9	1.6
	Distribution of School uniform and Books to needy children	0.15	0.15	0.15	0.15	0.15	0.75	1.5
	Celebration of National & International days: Independent & Republic Day, yoga day, women day etc.	0.03	0.03	0.03	0.03	0.03	0.15	0.3
	Village Knowledge center/school library etc.	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Assistance in School/ AWC Infrastructure	0.05	0.05	0.05	0.05	0.05	0.35	0.6
	Knowledge Program (Creative Competition-Sciences exhibition, Children's Sports activities, Education tour etc.)	0.05	0.05	0.05	0.05	0.05	0.35	0.6
	Quality of Education/Specialized Coaching	0.01	0.01	0.01	0.01	0.01	0.06	0.11
	Provision of School Faculty& educational supports	0.01	0.01	0.01	0.01	0.01	0.06	0.11
	Science Lab Equipments to schools	0.04	0.05	0.05	0.06	0.06	0.33	0.59

	School Furnisher (Benches, Black board, Fan, Cupboard & Computer etc.)	0.03	0.03	0.03	0.03	0.03	0.15	0.3
	Providing sports kit and organizing sports meet in nearby villages	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Reducing drop-out and continuing Education	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Balwadi Centers/ day care centers development	0.01	0.01	0.01	0.01	0.01	0.05	0.1
<b>Health and Family Welfare Programme</b>	Mother and Child care program, Malnutrition etc.	0.06	0.06	0.06	0.06	0.06	0.3	0.6
	Preventive & Curative Health Care / Mega Eye Check-Up and Operation Camp/ general health camp/Specialized Health Camps / Blood Donation Camp / Support in Pulse Polio Camp etc.	0.05	0.05	0.05	0.05	0.05	0.3	0.55
	Adolescent health care-promoting the use of sanitary napkins etc.	0.08	0.08	0.03	0.03	0.03	0.35	0.6
	Health & Sanitation Awareness Camp / Trainings (IEC Programme,	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Healthy Baby Competition	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Treatment of BPL, Old age or needy patient	0.04	0.04	0.04	0.04	0.04	0.2	0.4
	Separate toilets constructed and to BPL families	0.1	0.1	0.1	0	0	0	0.3
	Mobile Dispensary Programme	0.15	0.06	0.06	0.06	0.06	0.3	0.69
	Support to Primary Health Centers/ sub centers etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.45
	Ambulance	0.15	0.06	0.06	0.06	0.06	0.3	0.69
<b>Infrastructure Development</b>	C:C Road/ Paver Block Development/ Drainage System Development	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Community Pasture Land Development/ Orchard Development etc.	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Renovation of Temple	0	0	0	0	0	0	0
	Construction of Community centre	0.15	0.15	0	0	0	0	0.3

	Construction of School building up gradation/ New etc.	0.15	0.15	0.15	0.15	0.15	0.75	1.5
	Low cost housing facilities etc.	0.1	0.1	0.1	0.1	0.1	0.5	1
	New/ Up-gradation of washing platform- specially women's	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Development of the Drinking Water Facility i.e. Hand Pump/Bore Well/Water Tank/ Pipe line etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Village Sanitation Equipment & Construction / Drainage System etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Repair the School / AWC Building etc.	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Non-Conventional energy system viz. Solar Light ,Low smoke wood stoves, Biogas etc.	0.03	0.03	0.03	0.03	0.03	0.15	0.3
	Construction of Public Pyau	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Construction of Hospital	7	7	5	5	5	7	36
	Construction of Public Sanitation Complex in the nearby villages	0.05	0.05	0.05	0.05	0.05	0.25	0.5
	Construction of Funeral Shed in the nearby villages	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Sewing & Tailoring Center/ garment production center etc.	0.04	0.04	0.04	0.04	0.04	0.2	0.4
	vocational skill training center: computer course/mobile repairing/TV repairing com/Electrical / welder/fitter/ Wireman /Plumber/ handicraft/ beautician,/Masala making/ vermi compost/ nadep etc.	0.04	0.04	0.04	0.04	0.04	0.2	0.4
	Support to SHGs for entrepreneurial activities& capacity building of rural women and men for programmes like – saving & credit linkages with bank ,	0.1	0.1	0.1	0.1	0.1	0.5	1



	Farm Bunding with masonry waste weir / Catchment Area Treatments	0.02	0.02	0.02	0.02	0.02	0.1	0.2
Social Issues Intervention	Organizing & supporting rural socio-cultural programme with villagers & with District Administration	0.06	0.06	0.06	0.09	0.06	0.3	0.63
	Other community welfare works i.e. widow / dowry less marriage, awareness camps on social issues etc.	0.02	0.02	0.02	0.02	0.02	0.1	0.2
	Donation in Sports tournaments	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Marathon Race for social abuse Early marriage or HIV Prevention	0.01	0.01	0.01	0.01	0.01	0.05	0.1
	Impact assessment study / Household survey in 10 villages	0	0	0	0.05	0.05	0.25	0.35
<b>TOTAL (In Crores)</b>		<b>10.16</b>	<b>9.79</b>	<b>7.62</b>	<b>7.63</b>	<b>8.34</b>	<b>20.5</b>	<b>64.04</b>

#### 10.1 General Conditions: -

i.	The project authorities must strictly adhere to the stipulations made by the Central Pollution Control Board, State Pollution Control Board, State Government and any other statutory authority	We strictly adhere to the stipulations made by the Central Pollution Control Board, State Pollution Control Board, State Government and any other statutory authority. CPCB – Six monthly EC Compliance GPCB – Monthly Patrak
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any	Noted, We will not do any further expansion or modifications in the plant without prior approval of the Ministry of Environment, Forest and Climate Change. Presently We have applied for amendment in EC for increasing the production capacity of Viscose staple fibre (VSF) from 2,55,500 to 4,38,000 TPA.  <b>Application No. : F. No. J-11011/321/2016-IA-II(I)Pt, Dated 15.01.18</b>
iii.	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is	There are 4 nos. AAQ monitoring stations installed in consultation with GPCB in nearby 4 villages, at Derol, Vilayat, Sranar and Argama within 2-3 kms radius. Also monitoring



installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated	AAQ inside plant periphery.
There are 4 nos. of Ambient air quality monitoring stations covering all directions in nearby villages. Monthly monitoring is being done on monthly by NABL accredited Lab. The Ambient Air quality results for the period of Jul-18 to Dec-18 is tabulated as under <b>Table No. 08</b> <b>Monthly Report from Unistar Refer as <u>Annexure-07</u></b>	
<b>Agency :</b> - Unistar Environment & Research Lab Pvt. Ltd	
<b>Instrument ID &amp; Name:</b> -1) UERL/AIR/RDS/02 –1) Respirable Dust Sampler (Calibration Period: - 10.08.2018 – 09.08.2019) 2) UERL/AIR/FPS/08 – Fine Particulate Sampler (Calibration Period: - 10.08.2018 – 09.08.2019)	
<b>Table No. 08</b>	

Month	SARNAR						DEROL						ARGAMA						VILAYAT					
	SPM PM10	SPM PM2.5	SO2	NO2	H2S	CS2	SPM PM10	SPM PM2.5	SO2	NO2	H2S	CS2	SPM PM10	SPM PM2.5	SO2	NO2	H2S	CS2	SPM PM10	SPM PM2.5	SO2	NO2	H2S	CS2
	µg/m3						µg/m3						µg/m3						µg/m3					
Norms -->	100	60	80	80	150	100	100	60	80	80	150	100	100	60	80	80	150	100	100	60	80	80	150	100
Jan-19	76	28	21	25	BDL	BDL	78	26	22.0	28	BDL	BDL	74	24	22.0	28	BDL	BDL	78	27	20	26	BDL	BDL
Feb-19	79	26	23	28	BDL	BDL	76	24	20	24	BDL	BDL	72	21	19	24	BDL	BDL	77	25	22	26	BDL	BDL
Mar-19	78	25	18	24	BDL	BDL	83	28	19	23	BDL	BDL	87	29	23	27	BDL	BDL	84	33	20	25	BDL	BDL
Min	76	25	18	24	BDL	BDL	76	24	19	23	BDL	BDL	72	21	19	24	BDL	BDL	77	25	20	25	BDL	BDL
Max	79	28	23	28	BDL	BDL	83	28	22	28	BDL	BDL	87	29	23	28	BDL	BDL	84	33	22	26	BDL	BDL
Average	77.7	26.3	20.7	25.7	BDL	BDL	79.0	26.0	20.3	25.0	BDL	BDL	77.7	24.7	21.3	26.3	BDL	BDL	79.7	28.3	20.7	25.7	BDL	BDL

iv.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 shall be followed	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 are being followed.
v.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70	Following measures are taken to control noise level: <ul style="list-style-type: none"> <li>• Provision of Silencers</li> <li>• Acoustic Enclosures</li> <li>• Rubber pads for rotating equipment</li> </ul>

dB(A)(night time)	
<b>The Noise level (dB) at workroom for last 6 months is tabulated as under Table No. 09:</b> <b>Calibration Period:</b> - 17.01.18 – 17.01.19 <b>dB Meter:</b> - <b>Make:</b> - Lutron SL-4010 <b>Certification Agency:</b> - Tools MRO Safety / <b>Address:</b> - 806 – 808, Abhinandan Royale, Opp. Rajhans Olympia, Bhatar Road, Surat – 395007, Gujarat, India <b>Reference Standard :</b> - Sound Level Calibrator, <b>Sr. No.</b> 348982, <b>Calibration Validity Up to :</b> - 08.01.2020	

Area	Jan-19		Feb-19		Mar-19	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
<b>Norms=&gt;</b>	75	70	75	70	75	70
Main Gate	62	59	60	55	65	54
Material Gate	57	51	62	59	68	53
OHC	68	61	63	62	66	59
Derol	56	52	65	56	59	56
Vilayat	57	56	58	55	62	57
Sarnar	54	51	56	55	67	54
Argama	54	52	57	54	62	53

vi.	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water	Scheme is being developed to collect rooftop rain water of major buildings in a pond for recycle / reuse. We have assigned job to experts M/s Allegiance Enterprises, Vadodara in the field of rain water harvesting. They have surveyed our plant site and submitted final proposal. Pl. refer <b>Annexure-08</b> , The Proposal to implement the scheme is considered in GCI of FY-20.
vii.	Training shall be imparted to all employees on safety and health aspects of chemicals handling.	Trainings are imparted to all employees on safety and health aspects of chemicals handling. Please refer <b>Annexure-09</b> for training details
	Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.	Pre-employment and routine periodical medical examinations for all employees are undertaken on regular basis.
	Training to all employees on handling of chemicals shall be imparted.	Training is done for all employees on chemical handling.
viii.	The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the	All conditions as prescribed in EC, NOC and CC&A is maintained and monitored regularly. Detailed status of EIA/EMP is attached as <b>Annexure-10</b>

	EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	
ix.	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villages and administration.	We have been undertaking various community development measures in and around 25 Villages and 61,515 nos. of beneficiaries covered in FY'19 (April'18 to March'19) Unit has proposed Eco development plan yearly basis through CSR activities and submitting CSR activities update in Annual Environment Audit Report to GPCB on yearly basis.
x.	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment	Eco development measures including community welfare being done under CSR initiatives as attached in Annexure-16 & its expenditure details are in below <b>Table No.10</b>

Table No. 10					
Financial Year	Average Net Profit (in Crore) of the company (As per 135(S) company's Act)	Allocate CSR Amount (2%)	Actual Spent in CSR (Amount in Crore)	% Spent CSR against Net Profit	
2015-2016	791	15.82	15.05		
2016-2017	790	15.80	18.06		
2017-2018	1107	22.14	29.84		
<b>Total=&gt;</b>	<b>2688</b>		<b>62.95</b>	<b>2.34%</b>	

xi.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions	We have personnel within Environment Management/ Engineering, Chemical, botany & water resources and also from Process & Engineering. Pl. refer below Organization chart.
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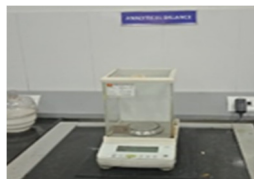
**Conductivity & TDS Meter**



**pH Meter**



**High Volume Sampler**



**Analytical Balance**



**BOD Incubator**



**Oven & Muffle Furnace**



**Spectro photo Meter**



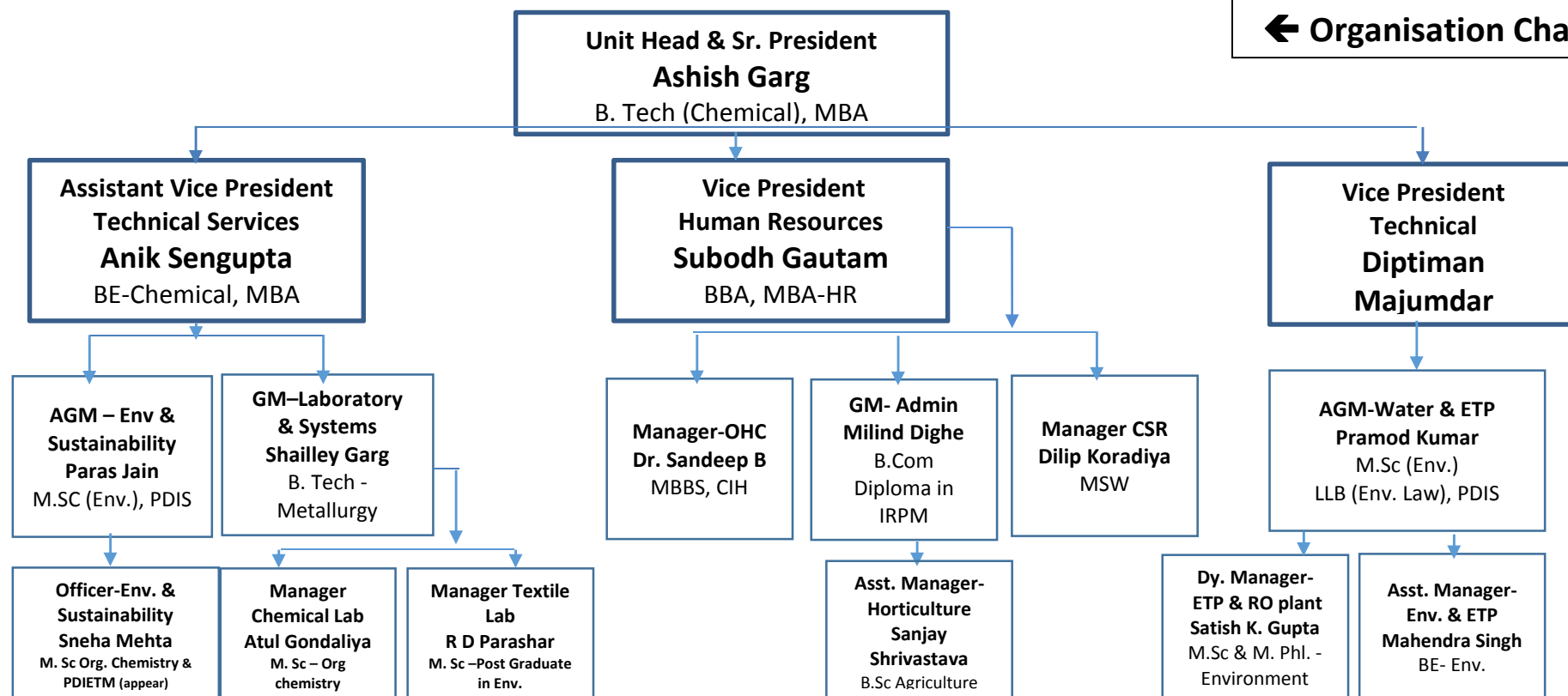
**COD Digester**

**Available Facilities  
In  
Laboratory**

<i>Name of Parameter</i>	<i>Testing Facility Available Yes or Not</i>	<i>Name of Instrument</i>
pH	Yes	pH Meter
Colour	Yes	Physically
Temperature	Yes	Thermometer
TSS	Yes	Filtration method
Oil & Grease	Yes	Extraction Method
Fluoride	No	-
Sulphide	Yes	Resin Method
Ammonical Nitrogen as N	No	-
Copper	No	-
Zinc	Yes	EDTA Method
COD	Yes	COD Digestion Method
BOD	Yes	3 Days Incubation Method
Total Residual Chlorine	Yes	Titrimetric Method
Arsenic	No	-
Mercury	No	-
Hexavalent Chromium	Yes	UV Spectrophotometer
Total Chromium	No	-
Lead	No	-
Cadmium	No	-
Nickel	No	-
Cyanide	No	-

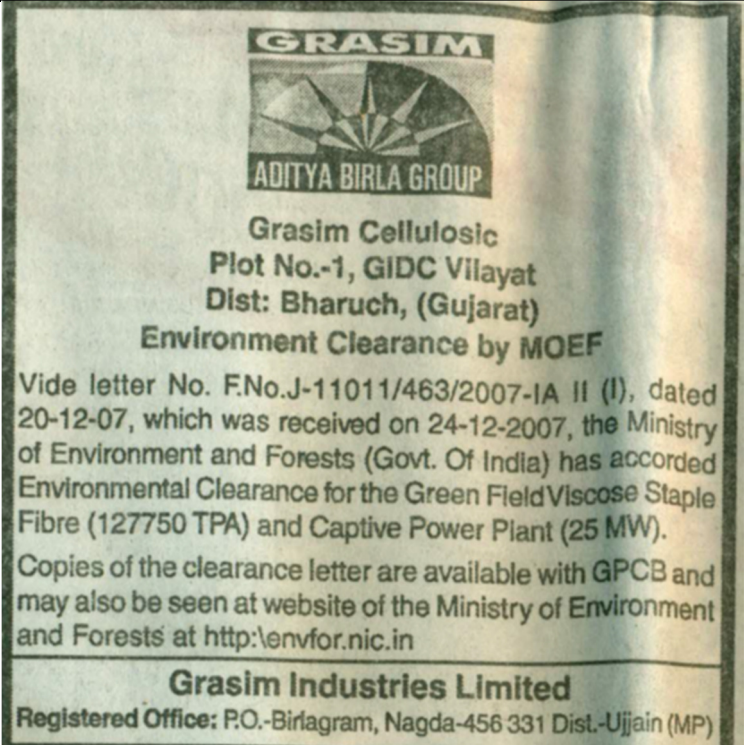
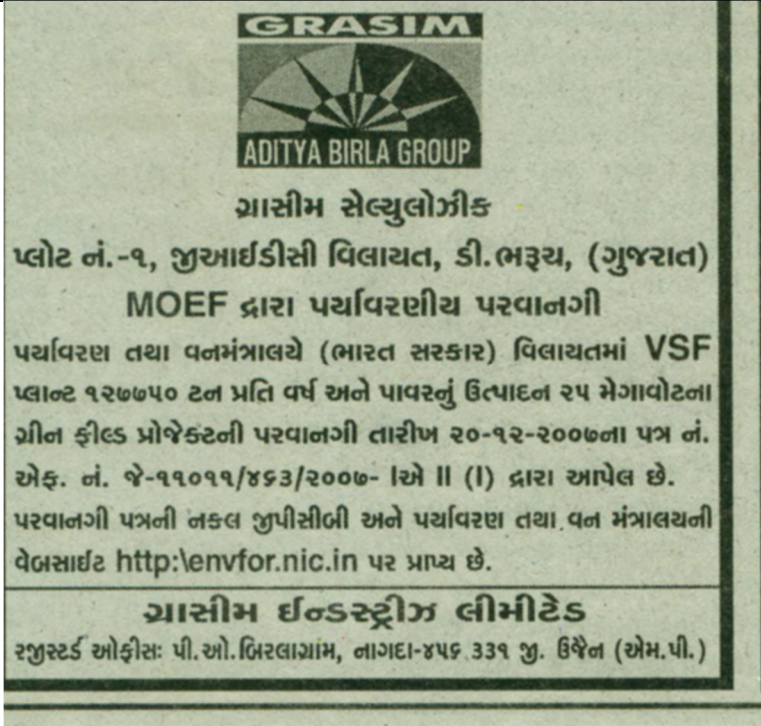
Phenolic Compound	No	-
Selenium	No	-
Mn	No	-
Iron	Yes	Comparison Method
Vanadium	No	-
Ambient Air Monitoring	Yes	-
Stack Monitoring Kit	Yes	-
dB Meter	Yes	Sound Meter
MLSS, MLVSS, MLRSS	Yes	Filtration, Oven, Muffle furnace

## ← Organisation Chart


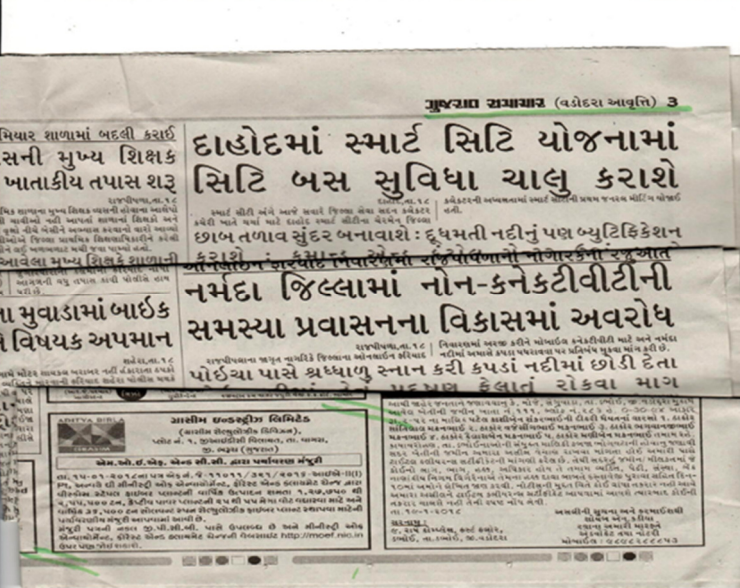


xi.	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose				Separate funds is earmarks on annual basis for Environmental management Please refer <b>Table No.11</b> for fund Utilization details.			
		<b>Sl.</b>	<b>Particular</b>	<b>Capex</b>	<b>Opex FY-17</b>	<b>Opex FY-18</b>	<b>Opex FY-19</b>	
		1	Effluent treatment Plant	79.00	11.50	10.56	11.0	
		2	Air Pollution Control	91.00	03.50	04.00	3.3	
		3	Green belt development	00.50	00.50	00.55	1.3	
		4	Waste Management	01.50	00.50	00.60	1.6	
		<b>Amount=&gt;</b>		<b>172.00</b>	<b>16.00</b>	<b>15.71</b>	<b>17.2</b>	
		<b>In FY-19 (EDTA for H2S Recovery)</b>		<b>35.0</b>	-	-	-	
		<b>Total Amount=&gt;</b>		<b>210.0</b>	-	-	-	

xiii.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal	A copy of clearance letter is submitted to Panchayat & GIDC authorities.
xiv.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e- mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company	Regularly submitted six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e- mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report are posted on the website of the company Please refer <b>Annexure-11</b> of last EC's six monthly compliance submitted.
xv.	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the	The environmental statement for each financial year ending 31st March in Form-V as is submitted to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of

	status of compliance of environmental clearance conditions and shall also be sent to the respective Regional offices by e-mail	environmental clearance conditions and also sent to the respective Regional offices by e-mail Please refer attached Form-V for FY-18. <b>Annexure-12</b>
xvi.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry	EC issued on 15.01.2018, and advertisement released on 18.01.2018. Copy attached as <b>Annexure-13</b>
	<b>Name of Paper :</b> - Indian Express <b>Date of Issue:</b> - 28.12.2007 <b>In :</b> - English language	<b>Name of Paper :</b> - Gujarati Loksatta <b>Date of Issue:</b> - 28.12.2007 <b>In :</b> - Gujarati language
	 <p><b>GRASIM</b> <b>ADITYA BIRLA GROUP</b></p> <p>Grasim Cellulosic Plot No.-1, GIDC Vilayat Dist: Bharuch, (Gujarat) <b>Environment Clearance by MOEF</b></p> <p>Vide letter No. F.No.J-11011/463/2007-IA II (I), dated 20-12-07, which was received on 24-12-2007, the Ministry of Environment and Forests (Govt. Of India) has accorded Environmental Clearance for the Green Field Viscose Staple Fibre (127750 TPA) and Captive Power Plant (25 MW).</p> <p>Copies of the clearance letter are available with GPCB and may also be seen at website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a></p> <p><b>Grasim Industries Limited</b> Registered Office: P.O.-Birlagram, Nagda-456 331 Dist.-Ujjain (MP)</p>	 <p><b>GRASIM</b> <b>ADITYA BIRLA GROUP</b></p> <p>ગ્રાસીમ સેલ્યુલોઝીક પ્લોટ નં.-૧, જુઆઈડીસી વિલાયત, ડી.ભરૂચ, (ગુજરાત) <b>MOEF દ્વારા પર્યાવરણીય પરવાનગી</b> પર્યાવરણ તથા વનમંત્રાલયે (ભારત સરકાર) વિલાયતમાં VSF પ્લાન્ટ ૧૨૭૭૫૦ ટન પ્રતિ વર્ષ અને પાવરનું ઉત્પાદન ૨૫ મેગાવોટના ગ્રીન ફીલ્ડ પ્રોજેક્ટની પરવાનગી તારીખ ૨૦-૧૨-૨૦૦૭ના પત્ર નં. એફ. નં. જે-૧૧૦૧૧/૪૬૩/૨૦૦૭- Iએ II (I) દ્વારા આપેલ છે. પરવાનગી પત્રની નકલ જીપીસીબી અને પર્યાવરણ તથા વન મંત્રાલયની વેબસાઈટ <a href="http://envfor.nic.in">http://envfor.nic.in</a> પર પ્રાપ્ય છે.</p> <p><b>ગ્રાસીમ ઇન્ડસ્ટ્રીઝ લીમીટેડ</b> રજીસ્ટર્ડ ઓફીસ: પી.ઓ.ભિરલાગ્રામ, નાગદા-૪૫૬ ૩૩૧ જી. ઉજ્જૈન (એમ.પી.)</p>



	<p><b>EC Amendment on 15.01.2018 &amp; following are the advertisement details.</b></p> <p><b>Name of Paper : - Times of India</b>  <b>Date of Issue: - 19.01.2018</b>  <b>In : - English language</b></p>	<p><b>Name of Paper : - Gujarat Samachar</b>  <b>Date of Issue: - 19.01.2018</b>  <b>In : - Gujarati language</b></p>
		
xvii.	<p>The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project</p>	<p>We will submitted the desired information on project completion to the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.</p>
11.	<p>The Ministry may revoke or suspend the clearance, at subsequent stages, if implementation of any of the above conditions is not satisfactory</p>	<p>We have noted &amp; will abide above conditions satisfactorily</p>
12.	<p>The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions</p>	<p>----</p>
13.	<p>The above conditions will be enforced, <i>inter alia</i> under the provisions of the Water (Prevention &amp; Control of Pollution) Act, 1974, Air (Prevention &amp; Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules</p>	<p>We are following terms &amp; conditions GPCB CC&amp;A compliance, Please refer attached detailed CCA Report as <b>Annexure-14</b></p>



