#### SIX MONTHLY COMPLIANCE REPORT

OF

### ENVIRONMENTAL CLEARANCE FOR

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

#### At

Plot No. 1, GIDC Industrial Area, Vilayat,

Taluka: Vagra, District: Bharuch (Gujarat)



#### 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 (Grasim Cellulosic Division)** 

Plot No. 1, GIDC Industrial Area, Vilayat,

Taluka: Vagra, District: Bharuch (Gujarat)

Period: 15/01/18 – 15/07/18

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

### List of Annexure

#### Annexure No. / Title

- 1. EC Name change application for CA plant
- 2. MoEF&CC EC compliance certification for EC, dated 30.11.17
- 3. EIA & EMP
- 4. CSR report of Grasim, Vilayat
- 5. Organization chart of Environmental Management
- 6. Acknowledgement of last EC compliance report submitted
- 7. Form-V, Environmental Statement submitted to GPCB
- 8. Advertisement of EC in news papers
- 9. CC&A compliance report

### 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 25<sup>th</sup> 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 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. We has received EC for an expansion of Viscose Staple Fibre (1,27,750 to 2,55,500 TPA), Sulphuric Acid (1,38,700 to 2,19,000 TPA), Carbon-Disulphide (54,750 to 65,700 TPA) along with Proposed Solvent Spun Cellulosic Fibre (Excel Fibre) (36,500 TPA) and Captive Power Plant (55 MW) within the existing plant premises.
- 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 H2SO4 acid plant for regular monitoring of CS2, SO2 etc.
- 9. Online TOC, pH & flow meters installed at the outlet of ETP, before discharging treated effluent to GIDC pipeline.
- 10. A vast green belt as per the CPCB guidelines is being developed 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 & CC For Grasim Cellulosic Division (GCD), Vilayat

#### 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
	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- bottnecking for Viscose Staple Fibre & Sod. Sulphate after receiving EC, CTE & CTO.
	Product (TPA) Existing Additional Total	(Production from Jan-Jun-18)
	Viscose Staple Fibre 1,27,750 1,27,750 2,55,500 (De-bottnecking; 36,500, New Machines; 91,250)	Viscose Staple Fibre : 65812.8 MT
	Solvent Spun Cell Fibre Nil 36,500 36,500 (Excel Fibre)	Nil
	Sulphuric Acid 1,02,200 80,300 1,82,500	Sulphuric Acid: 44,776.14 MT
	Carbon Di-sulphide 23,725 10,950 34,675	Carbon Di-sulphide : 9612.26 MT
	Anhydrous Sod. Sul. 83,038 1,27,750 2,10,788	Anhyd. Sod. Sulphate: 45,638 MT
	Captive Power plant 25 MW 30 MW 55 MW	Nil
		Copy of CTE & CTO is attached.

4.	The existing land area is 222.63 ha and no additional land will be 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.	Green belt development is under progress to cover 33% area.
	The estimated project cost is Rs.2560 Crores.	Noted
	Employment will be provided to 1300 persons as direct & 1200 persons indirectly after expansion.	Shall Implement
	Industry proposes to allocate Rs.64.04 Crores towards enterprise social commitment	Noted
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	
6.	The total fresh water requirement is 35,000 m <sup>3</sup> /day, which will be met from Gujarat Industrial Development Cooperation (GIDC) water supply	We shall met fresh water requirement through GIDC as being done for existing plant
	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	Shall Comply on commissioning of project as done for existing production capacity also
	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.	Shall Comply the condition on commissioning of plant
	Multi cyclone separator/ bag filter with a stack of height of 125 m will be installed to control the particulate emissions within prescribed norms	Shall Comply the condition on commissioning of plant
	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
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	
8.	Expert Appraisal Committee (EAC) in the Ministry 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	l
	placed before the EAC (Industry-2) in its 25 <sup>1</sup> h	
	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 '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	
	<b>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	We have applied for the 'Chlor-alkali		
	letter dated 30 <sup>1</sup> May, 2011 for the project 'Chlor-	unit with value added products,		
	alkali unit with value added products (as a backward	to be rectified to reflect M/s		
	integration of VSF plant)' at the same premises,	Grasim Industries Ltd (Grasim		
	Industries Ltd (Grasim Chemical Division) as the project proponent in place of M/s Grasim	Chemical Division)   Ill the hame as		
		Grasim Chemical Division, pl. refer		
		attached <b>Annexure-1</b>		
ii.	The Monitoring report on compliance status of	The monitoring report on		
	the conditions stipulated by SEIAA in the	compliance status of the		
	environmental clearance dated 30 <sup>th</sup> May, 2011,	conditions stipulated by SEIAA in		
	shall be submitted to the Ministry through the	the environmental clearance		
	Regional Office, for further review of the project,	dated 30th May, 2011 has		
	if so required.	already submitted to ministry. Pl. refer		
		Annexure-2		
iii.	Effluent shall be treated properly before	Being done for existing capacity, shall		
	discharging to Bay of Kambhat through GIDC	follow for additional too.		
	pipeline.			
iv.	Atleast, 50 % of the fuel requirement shall be met	Condition has amended for use of		
	from natural gas and the rest 50 % may be met	100% coal with ETP bio mass. We shall		

	from briquette/coal (with sulphur content less than 0.5%).	ensure to use coal of < 0.5% sulphur contents.
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	Condition has amended for 28,000 KLD water after reusing/recycling of 7,350 KLD through RO plant.
vi.	Smart energy conservation equipments (like LED/solar light) shall be installed in the factory and premises.	Being done
vii.	As assured, 5 MW power (of the total power requirement) shall be generated from solar power/renewable energy sources.	Shall install by our corporate solar division.
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	Shall develop the green belt accordingly to cover 33% of plot area with 10m width along with periphery.
ix.	The proponent shall plant and maintain at least 1 lakh native trees for five year in the nearby villages.	Being planned, under financial approval and discussion with nearby villages. Shall be done based on area availability and agreement with Panchayats.
x.	Enterprises social commitment (ESC) plan shall be implemented with atleast 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 nearby village	Shall plan accordingly
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 statutoryauthority	All stipulations made by GPCB are strictly complied.
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 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.
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 installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated	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 AAQ inside plant periphery.

•	The National Ambient Air Coults Fusinging	Daine fallen	l		
iv.	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No.	Being followed			
	826(E) dated 16 <sup>1</sup> November, 2009 shall be				
	followed				
V.	The overall noise levels in and around the plant	The Noise level (dBA) at workroom for last 6 months is tabulated as under :			
	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,				
		Area	Max.	Min.	Avg.
		Hospital	45	40	43
		School	50	45	47
	1989 viz. 75 dBA (day time) and 70 dBA (night time)	Derol	50	45	47
		Vilayat	56	50	53
		Sarnar	52	47	49
		Argama	54	46	50
		• Acou	e level: ision of S ustic Encl	ilencers	rotating
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			
vii.	Training shall be imparted to all employees on safety and health aspects of chemicals handling.	Training is regularly provided for safe and health aspect.		or safety	
	Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.	Pre-employn all employee		•	done fo
	Training to all employees on handling of chemicals shall be imparted.	Training is d		all emplo	oyees or
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 EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented	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-3</b>			
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	All relevant measures for improving the socio-economic conditions are done in surrounding area under CSR initiatives as attached in <b>Annexure-4</b>			
х.	The company shall undertake eco-developmental measures including community welfare measures in	Eco development measures are being			

	the project area for the overall improvement of the environment	taken under CSR for community welfare & improvement of Environment
xi.	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoringfunctions	Environment Management Cell comprising team member from process, maintenance, civil, safety and CSR team and Lab is formed under leadership of Unit Head
		Detailed organization chart, attached as <b>Annexure-5</b>
xii.	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;
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 has 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	Being complied regularly, pl. refer Annexure-6 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 status of compliance of environmental clearance conditions and shall also be sent to the respective Regional offices by email	Being followed, pl. find herewith attached Form-V for FY-17.  Annexure-7
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	EC issued on 15.01.2018, and advertisement released on 18.01.2018.

	SPCB/Committee and may also be seen at Website of the Ministry at http://moef.nic.in. 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	Copy attached Annexure-8
xvii.	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	Shall submit the desired information on project completion.
11.	The Ministry may revoke or suspend the clearance, at subsequent stages, if implementation of any of the above conditions is not satisfactory	Noted & will abide
12.	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions	
13.	The above conditions will be enforced, <i>inter alia</i> under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & 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	We are following terms & conditions GPCB CC&A compliance is attached as Annexure-9