ADITYA BIRLA

GRASIM

Dated: 21.05.2026

ID: 14989
Birla Cellulosic- Kharach

To,

Mr. Yogesh Kumar (IRO),
Ministry of Environment, Forest and Climate Change
Aaranya Bhavan, Gandhingar.

Subject: Half Yearly Environmental Clearance Compliance Report for period of "Oct-25 to Mar-26".

Respected Sir,

With reference to above-mentioned subject and in accordance with conditions stipulated in EC-2018 (Amend) granted, vide **Letter No. J. 11011/320/2006-IA II (I) dtd. 31.12.2018**, we hereby submit Half Yearly Environmental Clearance Compliance Report for the reporting period "**Oct-25 to Mar-26".**

We trust that submission is in order.

Yours Faithfully,
(For Birla Cellulosic)

Dharmesh Patel
GM – Environment & Sustainability

Encl. :

1. **EC Copy**
2. **EC-2018- Amendment Compliance report (Oct-25 to Mar-26)**

CC To:

1. **GPCB Regional office** - Gujarat pollution control board, Plot No. 1501, GIDC, Ankleshwar
2. **GPCB Head office** - Gujarat pollution control board, Paryavaran Bhavan, CHH Road, Sector 10A, Gandhinagar, Gujarat 382010
3. **MOEFCC office** - Ministry of Environment, Forest & Climate Change, New Delhi.

Birla Cellulose
Fibres from nature

Grasim Industries Limited
Unit – Birla Cellulosic

Works : Birladham, Kharach Kosamba R.S.
Dist. Bharuch (Gujarat) – 394 120 INDIA
CIN : L17124MP1947PLC000410

Telephone +91 2646 270001-005, 270301-305
Fax +91 2646 270010, 270130
Email bc-kharach.info@adityabirla.com

Liaison Office : 11th Floor – 1101 & 1102 OCEAN, Opposite Vadodara Central Mall, Vikram Sarabhai Marg, Vadiwadi, Vadodara – 390023, Gujarat – India
Regd. Office : P.O. Birlagram, Nagda (MP) – 456 331. Phone : (07366) 246760-66, Fax : 255198, Website : www.grasim.com

F.No. J-11011/320/2016-IA-II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Section)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi -3

Dated: 31st December, 2018

To

M/s Birla Cellulosic
(A Unit of M/s Grasim Industries Ltd)
Birladham, Village Kharach, Tehsil Hansot
District **Bharuch** (Gujarat)

Sub: Expansion of Viscose Staple Fiber Unit and Coal based CPP at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat) by M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) - Amendment in EC- reg.

Sir,

This refers to your proposal No. IA/GJ/IND2/59092/2016 dated 22nd March, 2018 for amendment in environmental clearance to the above project.

2. The Ministry of Environment, Forest and Climate Change has granted environmental clearance vide letter dated 22nd February, 2018 in favour of M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) to the project for expansion of Viscose Staple Fiber Unit and Coal based CPP located at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat).

3. Now, amendment in the said environmental clearance has been sought in respect of the specific conditions at para 12 (s) relating to storage of raw materials and that at para 12(t) for power requirement to be met from non-conventional energy resources/solar power.

4. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 27-29 August, 2018. The Committee has recommended for amendment *in specific condition 12 (s) stipulated in the* environmental clearance dated 22nd February, 2018, *to be read as under:*

'Storage of raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. In case of raw materials identified as the hazardous one under the MSIHC Rules, 1989, the statutory provisions contained therein shall continue to be followed. For the remaining raw materials, storage shall not exceed 30 days at any point of time'.

5. Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval to the amendment in environmental clearance dated 22nd February, 2018, **as stated in para 4 above**, with all other terms and conditions stipulated therein remain unchanged.

6. This issues with approval of the competent authority.

31/12/2018

(S. K. Srivastava)
Scientist E

Copy to: -

1. The Additional PCCF(C), MoEF&CC Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, Bhopal -16

2. The Secretary, Forests and Environment Department, Government of Gujarat, Block 14, 8th Floor, Sachivalaya, Gandhinagar (Gujarat) -10
3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Gujarat Pollution Control Board, Paryavaran Bhavan, Sector-10A, Gandhinagar (Gujarat) - 10
5. Guard File/Monitoring File/Website/Record File

SKS
31/12/2018

(S. K. Srivastava)
Scientist E

'Expansion of Viscose Staple Fibre unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW'
Compliance of Environmental Clearance Conditions by M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) At Kharach, Hansot, Bharuch, Gujarat

Name of Project : Expansion of Viscose Staple Fibre unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW

EC letter no. & Date : F.No.J-11011/320/2016-IA II (I) DATED 31.12.2018

Address for Correspondence : M/s. Birla Cellulosic (A Unit of Grasim Industries Ltd.) Birladham, Village: Kharach, Kosamba (R.S.), Tehsil: Hansot,: Bharuch (Gujarat) – 394120

Duration/Reporting period : **Oct-25 to Mar-26**

S.No.	Compliance Conditions by MoEF & CC	Action taken by Birla Cellulosic
1.	This refer to your proposal no. IA/GJ/IND2/59092/2016 dated 22nd March,2018 for amendment in environmental clearance to the above project.	○ **Noted.**
2.	The Ministry of Environment, Forest & Climate Change has granted environmental clearance vide letter dated 22nd February, 2018 in favor of M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) to the project for expansion of viscose Staple Fibre unit & Coal based CPP located in Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat).	○ **Noted.**
3.	Now, amendment in the said environmental clearance has been sought in respect of the specific conditions at para 12(s) relating to storage of raw materials and that at para 12(t) for power requirement to be met from non-conventional energy resources/solar power.	○ **Noted.**
4.	The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 27-29 August,2018. The Committee has recommended for amendment in specific condition 12 (s) stipulated in the environmental clearance dated 22nd February,2018, to be read as under: 'Storage of raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. In case of raw material identified as their hazardous one under the MSIHC Rules, 1989, the statutory provisions contained therein shall continue to be followed. For the remaining raw materials, storage shall not exceed 30 days at any point of time.'	○ **Noted & Complied.** ○ Covered Storage yards, warehouses, tanks etc. has been provided for individual Raw material storage.

5.	Based on recommendation of their EAC, the Ministry of Environment, Forest & Climate Change hereby accords approval to the amendment in environmental clearance dated 22nd February, 2018, as stated in para 4 above, with all other terms and conditions stipulated therein remain unchanged.	○ **Noted & shall be abide.**
6.	This issue with approval of the competent authority.	○ **Noted.**

ADITYA BIRLA

GRASIM

Dated:21.05.2026

ID: 14989
Birla Cellulosic- Kharach

To,

Mr. Yogesh Kumar (IRO),
Ministry of Environment, Forest and Climate Change
Aaranya Bhavan, Gandhingar.

Subject: Half Yearly Compliance Report of Environmental Clearance for period of "Oct-25 to Mar-26".

Respected Sir,

With reference to above-mentioned subject and in accordance with conditions stipulated in EC granted, vide **Letter No. J.11011/320/2006-IA II (I) dated 22.02.2018**, we hereby submit Half Yearly Environmental Clearance Compliance Report for the reporting period **"Oct-25 to Mar-26".**

We trust that submission is in order.

Yours Faithfully,
(For Birla Cellulosic)

Dharmesh Patel
GM – Environment & Sustainability Cell

Encl. :

1. **EC Copy**
2. **EC-2018 Compliance report (Oct-25 to Mar-26)**

CC To:

1. **GPCB Regional office** - Gujarat pollution control board, Plot No. 1501, GIDC, Ankleshwar
2. **GPCB Head office** - Gujarat pollution control board, Paryavaran Bhavan, CHH Road, Sector 10A, Gandhinagar, Gujarat 382010
3. **MOEFCC office** - Ministry of Environment, Forest & Climate Change, New Delhi.

Birla Cellulose
Fibres from nature

Grasim Industries Limited
Unit – Birla Cellulosic

Works : Birladham, Kharach Kosamba R.S.
Dist. Bharuch (Gujarat) – 394 120 INDIA
CIN : L17124MP1947PLC000410

Telephone +91 2646 270001-005, 270301-305
Fax +91 2646 270010, 270130
Email bc-kharach.info@adityabirla.com

Liaison Office : 11th Floor – 1101 & 1102 OCEAN, Opposite Vadodara Central Mall, Vikram Sarabhai Marg, Vadiwadi, Vadodara – 390023, Gujarat – India
Regd. Office : P.O. Birlagram, Nagda (MP) – 456 331. Phone : (07366) 246760-66, Fax : 255198, Website : www.grasim.com

F.No. J-11011/320/2016-IA II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Division)

Indira Paryavaran Bhawan
Jorbagh Road, New Delhi - 3
Dated: 22nd February, 2018

To,

M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd)
Birladham, Village Kharach,
Taluka Hansot,
District **Bharuch** (Gujarat)

Sub: Expansion of Viscose Staple Fibre Unit and Coal based CPP by M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat) - Environmental Clearance - reg.

Ref.: Online proposal no. IA/GJ/IND2/59092/2016 dated 18th September, 2017

Sir,

This has reference to your online proposal no. IA/GJ/IND2/59092/2016 dated 18th September, 2017 for environmental clearance to the above project, along with the documents including Form-1, Terms of Reference (ToR), EIA/ EMP report containing the Public hearing proceedings/details.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for Environmental Clearance to the project 'Expansion of Viscose Staple Fibre Unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW' by M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) in a total area of 242.81 ha, at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat). The details of existing and proposed products are as under: -

S.No.	Product /Unit	Existing Capacity	Additional Capacity	Total capacity after expansion
1.	Viscose Staple Fibre	127750 TPA	105850 TPA (Debottlenecking: 14600; New Machine: 91250)	233600 TPA
2.	Captive Power Plant	25 MW	20 MW	45 MW

The other products (intermediates/raw materials) presently manufactured include Sulphuric Acid (146000 TPA), Carbon Disulphide (21600 TPA) and Sodium Sulphate (96000 TPA). The Solvent spun cellulosic fibre unit of capacity 109500 TPA and coal based CPP of 71 MW are yet to be commissioned.

3. Existing plant area is 242.81 ha and no additional land shall be required for proposed expansion project. It is proposed to develop greenbelt in an area of 80 ha, thus covering an area of 33% of total project area. Presently, 70 ha area has been developed under greenbelt. Greenbelt planned for 10 ha in next three years. As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc within 10 km from the project site. Kim river is flowing at 0.5 km in the South.

4. The estimated project cost is Rs.1800 crores (debottlenecking: Rs.12 crores & new machines: Rs.1788 crores). Total capital cost earmarked for pollution control measures is Rs.90 crores and the recurring cost (operation and maintenance) shall be about Rs.11 crores per annum. It has been proposed to allocate Rs.45 crores (debottlenecking: Rs.0.3 Crores, new machines: Rs.44.7 crores) @ 2.5% towards Enterprise Social Commitment.

5. Total fresh water requirement after the proposed expansion will be 22,286 cum/day (existing - 18600 cum/day, additional - 3686 cum/day) to be sourced through from Kim River. Narmada Water Resources Water Supply and Kalpsar Department of the State Government of Gujarat, has already made an allocation for 7 MGD of water from Kim river to meet the total water requirement.

Total effluent generation would be reduced from the present of 11580 cum/day to 11535 cum/day, which is proposed to be treated in the ETP of capacity 24000 cum/day. Treated effluent is to be discharged into Kim Estuary through 23 km long pipeline falling in CRZ area. The unit has already obtained the CRZ clearance from the Ministry vide letter dated 17th January, 2007 for the said pipeline. The domestic effluent of 1500 KLD shall be treated in the STP and then recycled for greenbelt development.

6. Total power requirement after expansion shall be 45 MW. Existing requirement of 25 MW is being met through Captive Thermal Power Plant. After expansion total requirement shall be met from Captive Thermal Power Plant.

Existing unit has 2x100 & 1x120 TPH coal fired boiler. Electrostatics Precipitators with a stack of height of 100 m will be installed for controlling the Particulate emissions (within prescribed norms) for proposed 3x100 TPH coal fired boilers respectively.

7. Details of process emissions along with the control measures are as under:

Emissions	Source	Management Measures
CS_2	VSF Plant-spinning	• CS_2 Recovery System (46.55% recovery). • Powerful Exhaust System for spinning off gases (CS_2 and H_2S) • Air dilution with adequate stack height. • Shutters for spinning machine.
	CS_2 Plant	• Oil Scrubbing system for recovery of CS_2 • Alkali Scrubber • Klaus kiln for recovery of sulphur • Dust extraction cum Ventury Scrubbing system for Furnaces.
SO_2	H_2SO_4 Plant	• Alkali scrubber
	CPP boiler	• Lime dozing in boiler • Adequate stack height (as per CPCB guidelines).
Acid Mist	H_2SO_4 Plant	• Mist eliminator
PM	CPP boiler	• ESPs
Fugitive Emission	CPP-handling & Storage	• Covered storage yard to store coal at the plant site. • Silos to store fly ash at the plant site. • Transportation of Fly ash through closed tankers / bulkers. • Dust collection system to control dust emission. • Water sprinkling to reduce dust generation. • Greenbelt / plantation done along the plant boundary to attenuate air pollution.

Emissions	Source	Management Measures
	CS_2 Plant-Sulphur handling	• Covered storage yard for storage of sulphur. • Sulphur melting in closed system

8. Details of solid/hazardous waste generation and its management are as under:

Plant Unit	Waste	Treatment / Disposal
Acid Plant	Sulphur Filter Residue	TSDF
	Spent Catalyst (V_2O_5)	
ETP	ETP Inorganic Sludge (Gypsum)	Sold to cement industries
Plant Maintenance-Different sections	Oil soaked Cotton Waste & cotton waste	TSDF
	Used Oil	Sent to Authorized Recycler
	Used Resin	Sent to TSDF for disposal
STP	STP Sludge	Used as manure in greenbelt development/ plantation
Proposed CPP	Fly Ash	Will be supplied to Brick manufacturers, Cement industries

9. The project/activity is covered under category A of item 5(d) 'Manmade fibres manufacturing Rayon' of the Schedule to the Environmental Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.

10. The ToR for the project was granted by Ministry vide letter dated 13th February, 2017 and the public hearing was conducted by the SPCB on 30th August, 2017.

11. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 31st meeting held during 23-24 November, 2017. The project proponent and their accredited consultant M/s J.M. EnviroNet Pvt Ltd, presented the EIA / EMP report as per the ToR. The Committee found the EIA / EMP report as satisfactory and complying with the ToR. The Committee has recommended the proposal for grant of environmental clearance.

12. Based on the proposal submitted by the project proponent and subsequent 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 Unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW'*** by M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) in a total area of 242.81 ha, at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat), under the provisions of EIA Notification, 2006, subject to the compliance of terms and conditions as below:-

(a) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.

(b) Total fresh water requirement shall not exceed 22,286 KLD proposed to be met from Kim River water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.

(c) Total effluent discharge after treatment shall not exceed 11535 cum/day to be discharged to the Kim Estuary through 23 km long pipeline. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.

(d) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.

(e) National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.

(f) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers (2x100 & 1x120 TPH) to control particulate emissions within permissible limits. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.

(g) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.

(h) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.

(i) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

(j) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

(k) The company shall undertake waste minimization measures as below:-
   (i) Metering and control of quantities of active ingredients to minimize waste.
   (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
   (iii) Use of automated filling to minimize spillage.
   (iv) Use of Close Feed system into batch reactors.
   (v) Venting equipment through vapour recovery system.
   (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.

(l) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

(m) All the commitments made regarding issues raised during the public hearing/consultation meeting held on 30th August, 2017 shall be satisfactorily implemented.

(n) At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.

(o) The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.

(p) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.

(q) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

(r) Continuous online (24X7) monitoring system for stack emissions and the effluent, shall be installed for measurement of flow/discharge and the pollutants concentration, and the emission and effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.

(s) Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Raw material storage should not exceed 3 days at any point of time.

(t) The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply

12.1 The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-

(i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.

(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.

(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 stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

(iv) 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.

(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 dBA (night time).

(vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

(vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

(viii) The company shall 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, risk mitigation measures and public hearing shall be implemented.

(ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.

(x) A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

(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.

(xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.

(xiii) 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.

(xiv) 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 of MoEF&CC by e-mail.

(xv) 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 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.

13. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

14. The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

15. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

22/2/2018

(S. K. Srivastava)
Scientist E

Copy to: -

1. The Secretary, Forests & Environment department, Government of Gujarat, Sachivalaya, **Gandhinagar** (Gujarat)
2. The Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road-3, Ravishankar Nagar, **Bhopal** – 462016 (Madhya Pradesh)
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, East Arjun Nagar, **Delhi** - 32
4. The Member Secretary, Gujarat Pollution Control Board, 'Parishram', Mahavir Society, Shanala Road, **Morbi** (Gujarat)
5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, **New Delhi**
6. Guard File/Monitoring File/Record File

22/2/2018

(S. K. Srivastava)
Scientist E

'Expansion of Viscose Staple Fibre unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW'
Compliance of Environmental Clearance Conditions by M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) At Kharach, Hansot, Bharuch, Gujarat

Name of Project	:	Expansion of Viscose Staple Fibre unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW
Environment Clearance letter no. & Date	:	F.No.J-11011/320/2016-IA II (I) Dated: 22.02.2018
Address for Correspondence	:	M/s. Birla Cellulosic (A Unit of Grasim Industries Ltd.) Birladham, Village: Kharach, Kosamba (R.S.),
	:	Tehsil: Hansot, Bharuch (Gujarat) – 394120
Duration/Reporting period	:	**Oct-25 to Mar-26**

S.No.	Compliance Conditions by MoEF & CC	Action taken by Birla Cellulosic
1.	This has reference to your online proposal no. IA/GJ/IND2/59092/2016 dated 18th September, 2017 for environmental clearance to the above project, along with the Documents including Form-1, Terms of Reference (ToR), EIA/EMP report containing the Public hearing proceeding/details.	○ **Noted.**
2.	The Ministry of Environment and Forest and Climate Change has examined the proposal for Environmental Clearance to the project 'Expansion of Viscose Staple Fibre unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW' by M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) in a total area of 242.81 ha, at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat). The details of existing and proposed products are as under:	○ **Complied.** ○ Unit has obtained EC for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 22.02.2018, which was amended on 31.12.2018. ○ Unit has obtained EC to CTE for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 06.09.2019. ○ Unit has obtained CCA-Renewal for VSF capacity upto 1,73,375 TPA and Sodium sulphate recovery max up to 1,73,375 TPA having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029.

	<table><tr><th>S. No.</th><th>Product / Unit</th><th>Existing</th><th>Additional</th><th>Total capacity</th></tr><tr><td>1</td><td>Viscose Staple Fibre</td><td>127750 TPA</td><td>105850 TPA(Debottlenecking: 14600; New m/c: 91250)</td><td>233600 TPA</td></tr><tr><td>2</td><td>Captive Power Plant</td><td>25 MW</td><td>20 MW</td><td>45 MW</td></tr></table> The other products (intermediate/ raw materials) presently manufactured include Sulphuric Acid (146000 TPA), Carbon Disulphide (21600 TPA) and Sodium Sulphate (96000 TPA). The Solvent spun cellulosic fibre unit of capacity 109500 TPA and coal based CPP of 71 MW are yet to be commissioned.	
3.	Existing plant area is 242.81 ha. and no land shall be required for proposed expansion project. It is proposed to develop greenbelt in an area of 80 ha, thus covering an area of 33% of total project area. Presently, 70 ha area has been developed under greenbelt. Greenbelt planned for 10 ha in next three years. As per Form-1, there are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc within 10 km from the project site. Kim river is flowing at 0.5 km in the South.	○ **Complied.** ○ Adequate Green belt has developed in the campus along the boundary wall and open spaces. ○ There are no National Parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife Corridors etc within 10 km from the project site. Kim river is flowing at 0.5 km in the South.
4.	The estimated project cost is Rs. 1800 crores (debottlenecking: Rs. 12 crores & new machines: Rs. 1788 crores). Total capital cost earmarked for pollution control measures is Rs. 90 crores and the recurring cost (operation and maintenance) shall be about Rs. 11 crores per annum.	○ **Being complied**. ○ Unit is going for production increase quantity phase wise. ○ The funds earmarked for the environmental protection measures are being maintained and not diverted for other purpose. ○ Unit has kept separate budget to meet the capital & recurring cost for maintaining the environment - Cost for all Environment related instrument, pipe-line and ETP.

<table>
<tr>
<td></td>
<td>It has been proposed to allocate Rs. 45 crores (debottlenecking: Rs. 0.3 crores, new machines: Rs. 44.7 crores) @2.5% towards Enterprise Social Commitment.</td>
<td>o A year wise expenditure on environment safeguards & towards Enterprise Social commitment is being submit to MOEF&CC at the end of each FY along with EC compliance report. In FY'26, 54.55 Crores spent towards Environmental protection measures.

o As per total project the unit has taken cost; various community development measures in and around 32 villages. A separate budget allocated for the same.</td>
</tr>
<tr>
<td>5.</td>
<td>"Total fresh water requirement after the proposed expansion will be 22,286 cum/day (existing- 18600 cum/day, additional- 3686 cum/day) to be sourced through from Kim river. Narmada water Resources Water Supply and Kalpsar Department of the State Government of Gujarat, has already made an allocation for 7 MGD of water from Kim river to meet the total water requirement.

Total effluent generation would be reduced from the present of 11580 cum/day to 11535 cum/day, which is proposed to be treated in the ETP of capacity 24000 cum/day. Treated effluent is to be discharged into Kim Estuary through 24 km long pipeline falling in CRZ area. The unit has already obtained the CRZ clearance from the Ministry vide letter dated 17th January, 2007 for the said pipeline.</td>
<td>o <u>Noted & Complied.</u>
o A Summary of water Consumption for the reporting period is given below:
<table>
<tr><th>Month</th><th>Quantity (M3/Month)</th></tr>
<tr><td>Oct-25</td><td>392868</td></tr>
<tr><td>Nov-25</td><td>339409</td></tr>
<tr><td>Dec-25</td><td>385554</td></tr>
<tr><td>Jan-26</td><td>375235</td></tr>
<tr><td>Feb-26</td><td>332828</td></tr>
<tr><td>Mar-26</td><td>389865</td></tr>
<tr><td>Total</td><td>2215759</td></tr>
<tr><td>Average (M3/day)</td><td>12175</td></tr>
</table>
o The Half- yearly average water Consumption is 12175 M3/day, which is less than the quantity mentioned in Agreement.
o A Summary of treated effluent for the reporting period is given below:
<table>
<tr><th>Month</th><th>Quantity (M3/Month)</th></tr>
<tr><td>Oct-25</td><td>221937</td></tr>
<tr><td>Nov-25</td><td>218677</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr>
<td></td>
<td>The domestic effluent of 1500 KLD shall be treated in the STP and then recycled for greenbelt development."</td>
<td>
<table>
<tr><td>Dec-25</td><td>207720</td></tr>
<tr><td>Jan-26</td><td>188108</td></tr>
<tr><td>Feb-26</td><td>164597</td></tr>
<tr><td>Mar-26</td><td>181691</td></tr>
<tr><td>Total</td><td>1182730</td></tr>
<tr><td>Average (M3/day)</td><td>6499</td></tr>
</table>
o The Sewage water from the plant and township is being treat in the well-established STP and recycled for green belt development.
</td>
</tr>
<tr>
<td>6.</td>
<td>"Total power requirement after expansion shall be 45 MW. Existing requirement of 25 MW is being met through Captive Thermal Power Plant. After expansion total requirement shall be met from Captive Thermal Power Plant.
Existing unit has 2x100 & 1x120 TPH coal fired boiler. Electrostatics Precipitators with a stack of height of 100 m will be installed for controlling the Particulate emissions (within prescribed norms) for proposed 3x100 TPH coal fired boilers respectively."</td>
<td>o <u>Being complied.</u>
o Unit has 2x100 & 1x120 TPH coal fired boiler, these boilers are sufficient to meet power requirement of unit at present.
o Unit has installed 3 No. of ESP having three fields with boiler 1 & 2, four fields with boiler 3 having 99.9% efficiency to control particulate matter emission from flue gas.</td>
</tr>
<tr>
<td>7.</td>
<td>Details of process emissions along with the control measures are as under:
<table>
<tr><th>Emission</th><th>Source</th><th>Management Measures</th></tr>
<tr><td rowspan="2">CS_2</td><td>VSF Plant spinning</td><td>o CS2 Recovery System (46.55% recovery).
o Powerful Exhaust System for spinning off gases (CS2 and H2S).
o Air Dilution with adequate stack height.
o Shutters for spinning machine.</td></tr>
<tr><td>CS_2 Plant</td><td>o Oil Scrubbing system for recovery of</td></tr>
</table>
</td>
<td>o <u>Complied.</u>
o Unit has adopted all the control measures to control emissions.
o Unit has taken additional control measures like EDTA scrubbing system for recovering Sulphur from H2S gas and CAP system for CS2 recovery are being operated effectively.</td>
</tr>
</table>

			CS2. o Alkali Scrubber o Klaus kiln for recovery of sulphur o Dust extraction cum Ventury Scrubbing system for Furnaces.	
	SO_2	H_2SO_4 Plant	o Alkali Scrubber	
		CPP boiler	o Lime dosing in boiler o Adequate stack height (as per CPCB guidelines).	
	Acid Mist	H_2SO_4 Plant	o Mist eliminator	
	PM	CPP boiler	o ESPs	
	Fugitive Emissions	CPP-Handling & Storage	o Covered storage yard to store coal at the plant site. o Silos to store fly ash at the plant site. o Transportation of fly ash through closed tankers / bulkers. o Dust collection system to control dust emission. o Water sprinkling to reduce dust generation. o Greenbelt / plantation done along the plant boundary to attenuate air pollution.	
		CS_2 Plant-Sulphur handling	o Covered storage yard for storage of sulphur. o Sulphur melting in closed system.	

Details of solid/hazardous waste generation and its management are as under:

Hazardous Waste Treatment and Disposal Facilities				
Type of waste	Schedule No.	Quantity	Treatment	Disposal practice
ETP Sludge	35.3	10955	De-watering on belt press & drying. Stored under Gypsum storage shed area.	Disposal at TSDF BEIL, or Sold to Cement industries
Spent Catalyst	17.2	0	Stored in Drums and disposal as per CCA condition	Disposed at TSDF, BEIL, Ankleshwar
Spent Resin	35.2	4.0	Stored in drums and neutralize	Reutilize for energy recovery in boiler as a waste to energy recovery as per CCA
Sulphur Deashing sludge	17.1	262	Stored in storage rooms which is fully covered	Disposed at TSDF, BEIL, Ankleshwar
Discarded containers and Liners	33.3	3423 Nos.	Decontamination is done at user point in Unit and stored in dedicated storage yard	Sold to authorized recycler as per guidelines of CC&A.
HDPE Bags	33.3	37.08	Collected and stored in dedicated storage yard	Sold to authorized recycler as per guidelines of CC&A.
Used oil	5.1	3.14	Collected and stored in drums	Sold to authorized recycler as per guidelines of CC&A.
Exhaust Air or Gas cleaning Residue	35.1	65.05	Collected and stored in dedicated storage yard	Disposed at TSDF, BEIL, Ankleshwar

8.	The project/activity is covered under category A of item 5(d) 'Manmade fibres manufacturing Rayon' of the Schedule to the Environmental Impact Assessment Notification, 2006, and requires appraisal at central level by the sectoral EAC in the Ministry.	○ **Noted.**

9.	The ToR for the project was granted by Ministry vide letter dated 13th February, 2017 and the public hearing was conducted by the SPCB on 30th August, 2017.	○ **Noted.**
10.	The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 31st meeting held during 23-24 November, 2017. The project proponent and their accredited consultant M/s J.M.EnviroNet Pvt Ltd, presented the EIA / EMP report as per the ToR. The Committee found the EIA / EMP report as satisfactory and complying with the ToR. The Committee has recommended the proposal for grant of environmental clearance.	○ **Noted.**
11.	Based on the proposal submitted by the project proponent and subsequent 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 unit from 1,27,750 to 2,33,600 TPA and Coal based CPP from 25 MW to 45 MW'*** by M/s Birla Cellulosic (A Unit of M/s Grasim Industries Ltd) in a total area of 242.81 ha, at Birladham, Village Kharach, Tehsil Hansot, District Bharuch (Gujarat), under the provisions of EIA Notification, 2006, subject to the compliance of term and conditions as below:-	○ **Noted & shall be complied.**
(a)	Consent to Establish/operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.	○ **Noted & Complied.** ○ Unit has obtained EC to CTE for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 06.09.2019. ○ Unit has obtained CCA-Renewal for VSF capacity upto 1,73,375 TPA and Sodium sulphate recovery max up to 1,73,375 TPA having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029.

(b)	Total fresh water requirement shall not exceed 22,286 KLD proposed to be met from Kim River water supply. Prior permission in this regard shall be obtained from the concerned regulatory authority.	○**Noted & Complied.** ○An agreement with Irrigation Department has been made for water withdrawal @ 19000 M3/day. ○A Summary of water Consumption for the reporting period is given in point no. (5). ○The Half- yearly average water Consumption is 12175 M3/day, which is less than the quantity mentioned in Agreement.
(c)	Total effluent discharge after treatment shall not exceed 11535 cum/day to be discharged to the Kim Estuary through 23 km long pipeline. The effluent discharge shall confirm to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.	○**Noted & Complied.** ○As stipulated in the CCA, we have installed a separate 24 KM long underground pipeline for discharging the treated effluent in the estuary of Kim River as approved by GPCB. The pipeline passes through 8 Nos. of villages and 213 private farm lands, and we have 174 ROUs with the land owners. The disposal point was suggested by NIO, Goa. ○A Summary of treated effluent for the reporting period is given in point no. (5). ○The Half- yearly average effluent discharge is 6499 M3/day, which is less than the quantity mentioned in consent. ○As stipulated by GPCB, we have also provided lined guard ponds with a holding capacity of 65,000 M3 for storing treated waste-water while taking-up any repair work on the treated effluent pipeline. Such stored water is also discharge to Kim Estuary through effluent carrying pipeline. ○Recently, to treat rich concentrated zinc stream, zinc recovery project has installed.

o A Summary of treated effluent for the reporting period is given below:

Parameter	pH	Temp.	S.S.	COD	BOD	Amm. N	Color	Zinc
Unit	-	°C	mg/l	mg/l	mg/l	mg/l	Co-pt u.	mg/l
Limit	**6.5-8.5**	**40**	**100**	**250**	**100**	**50**	**100**	**10**
Oct-25	7.21	29.9	36	131	24.58	2.31	75	0.73
Nov-25	7.4	29.5	52	128	31.24	2.14	65	0.82
Dec-25	7.2	29.6	41	132	26.56	2.03	55	0.46
Jan-26	7.2	30	41	130	30.2	2.01	65	0.65
Feb-26	7.1	29.9	34	119	22.74	1.83	55	0.56
Mar-26	7.1	30.4	29	128	28	1.71	45	0.47

o A Summary of treated Domestic sewage for the reporting period is given below:

Parameter	TSS	BOD	Residual Free Chlorine	pH
Unit	mg/Lit.	mg/Lit.	mg/Lit.	-
Limit	**<30**	**<20**	**Min 0.5**	**-**
Oct-25	21	16	LTAR(<0.2)	7.61
Nov-25	19	15	LTAR(<0.2)	7.31
Dec-25	26	17	0.80	7.52
Jan-26	23	17	0.60	7.32
Feb-26	18	14	0.80	7.19
Mar-26	21	13	0.90	7.26

(d)	Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.	o **<u>Noted & shall be complied.</u>** o Unit has obtained CCA-Renewal (including authorization for the Hazardous and Other Wastes) for VSF capacity upto 1,73,375 TPA and Sodium sulphate recovery max up to 1,73,375 TPA having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029. o Generated ETP sludge is being dispatch to cement manufacturers as stipulated in CCA. o Generated Fly ash is provided to Cement manufacturers for co-processing and surrounding local Brick manufacturers as stipulated in the CCA.

		○ Generated Deashing sludge, Viscose Lumps & Spent catalyst is provided to BEIL, TSDF site as stipulated in CCA. ○ Spent resin reutilized as a waste to recover energy in CPP for Power & Steam generation. ○ A Summary of solid/hazardous waste generation and management is given in point no. (8).
(e)	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608 (E) dated 21st July, 2010 and amended from time to time shall be followed.	○ **Not applicable**. ○ We are not engaged in manufacturing of organic chemicals, as these standards are not applicable. ○ We are engaged in manufacturing of Viscose Staple Fiber.
(f)	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers (2x100 & 1x120 TPH) to control particulate emissions within permissible limits.	○ **Complied.** ○ To control Sulphur emission, Unit has installed lime injection systems at coal feeders of boilers (2x100 & 1x120 TPH). ○ To control particulate matter emissions, Unit has installed ESP. ○ Sulphur content of the imported coal and indigenous coal is being analyze and record for the same is being maintain. ○ Unit has installed 3 nos. of Continuous ambient air quality monitoring stations in consultation with GPCB. ○ Unit has also installed 4 nos. of offline Ambient air quality monitoring stations within premises. ○ Unit has installed Online monitoring system for SO2, NOx, and PM monitoring (the flue gas emissions from Power Plant) from the stack attached with Boiler, connected with GPCB/CPCB server & transmitting data 24*7*365. ○ Unit has appointed NABL accredited laboratory M/s. Pollucon laboratories for

	The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	monthly monitoring of Stack concentration as well as ambient air quality. As per the monitoring conducted by their team, the results are well within the prescribed norms as per consent condition.

o A Summary for Flue gas emission from stack for the reporting period is given below:

Location	**Boiler-1 & 2 (76 m)**			**Boiler-3 (86 m)**			
Parameter	**SPM**	**SO2**	**NOx**	**SPM**	**SO2**	**NOx**	**Mercury**
Unit	**mg/Nm3**	**mg/Nm 3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm 3**	**mg/Nm3**
Limit	**100**	**600**	**600**	**50**	**600**	**300**	**0.03**
Oct-25	49	256	86	45	245	79	LTAR
Nov-25	44	249	83	42	240	76	LTAR
Dec-25	48	253	85	46	243	79	LTAR
Jan-26	46	251	84	44	241	77	LTAR
Feb-26	49	258	88	48	247	81	LTAR
Mar-26	48	254	86	46	244	79	LTAR

LTAR* :- Lower Than Accreditation Range

o A Summary for process gas emission from stack for the reporting period is given below:

Location	**CS2 Plant + Spinning**		**Total**	**Acid plant I**		**Acid plant II**	
Parameter	**CS2**	**H2S**		**SO2**	**Acid Mist**	**SO2**	**Acid Mist**
Unit	**Kg/ToF**			**Kg/ToA**	**mg/Nm3**	**Kg/ToA**	**mg/Nm3**
Limit	**125**			**2**	**25**	**2**	**25**
Oct-25	8.11	1.03	9.14	0.74	10.29	0.63	7.04
Nov-25	7.45	1.04	8.49	0.81	10.73	0.72	7.67
Dec-25	7.19	1.03	8.22	0.76	10.41	0.66	7.23
Jan-26	7.78	1.03	8.81	0.79	10.56	0.69	7.45
Feb-26	7.53	1.03	8.55	0.75	10.34	0.64	6.98
Mar-26	7.11	1.02	8.14	0.71	10.12	0.60	6.72

(-)* : Plant was under maintenance

o A Summary for Ambient Air quality for the reporting period is given below:

Location	**Ambient air Quality**					
Parameter	**PM10**	**PM2.5**	**SO2**	**NOx**	**H2S**	**CS2**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit	**100**	**60**	**80**	**80**	**150**	**100**
Oct-25	53	29	18	21	21	23
Nov-25	55	32	21	26	22	24
Dec-25	54	31	19	22	20	22
Jan-26	57	33	20	24	21	23
Feb-26	59	36	22	28	23	25
Mar-26	57	40	25	31	26	29

o A Summary for Ambient Air quality for the reporting period is given below:

Location	**Ambient air Quality**							
Parameter	**Ozone**	**Lead**	**CO**	**Benzene**	**BAP**	**Arsenic**	**Nickel**	**Ammonia**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit (8 hr avg.)	**100**	**0.5**	**2**	**5**	**1**	**6**	**20**	**100**
Dec-25	15.42	ND	0.93	ND	ND	ND	ND	11.32
Mar-26	13.33	ND	0.91	ND	ND	ND	ND	10.42

(g)	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	o **<u>Complied.</u>** o Process effluent/any wastewater is not allowed to mix with storm water. o All storm water drain of plant as well as colony area are at the end meeting to Storm water well. o The conserved quantity in this storm water well as well as in separate pit is being harvest to conserve the fresh water. In the Monsoon season, approx. 456712 M3 rain water was conserved & utilized within plant premises along with hard water. Currently, we are not recharging ground water.

(h)	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer through pumps.	○ **Complied.** ○ Hazardous chemicals are stored in tanks, tank farms, drums, carboys etc. Flame arresters are provided on tank farm and solvent transfer through pumps.
(i)	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	○ **Complied.** ○ We are not engaged in manufacturing of organic chemicals; we are engaged in manufacturing of Viscose Staple Fiber. Hence, there is no organic residue and spent carbon being generated from plant. ○ Generated ETP sludge is provided to cement manufacturers as stipulated in CCA.
(j)	The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.	○ **Being complied.** ○ Unit strictly adheres the applicable rules & regulations for manufacture, storage and Import of Hazardous Chemicals rules, 1989 as amended in 2000 and the public Liability Insurance Act for handling of hazardous chemicals. ○ Approval for chlorine storage has taken on 09.10.2023 and valid up to 30.09.2028. ○ Approval for possession and sales of Sulphuric acid has taken on 27.02.2018 and valid up to 27.02.2028. ○ Approval for Ammonia, DA gas storage has taken on 17.03.2022 and valid up to 30.09.2027. ○ Unit has obtained factory license #6059 and registration# 165/17114/1997 dated 06.07.2021 which is valid up to 31.12.2026. ○ Handling, manufacturing, storage and transportation of hazardous chemicals is being carry out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended time to time. ○ On-site and Off-site Disaster Management Plans available with Unit.

(k)	The company shall undertake waste minimization measures as below:- i. Metering and control of quantities of active ingredients to minimize waste. ii. Reuse of by-products from the process as raw material substitutes in other processes. iii. Use of automated filling to minimize spillage. iv. Use of Close Feed system into batch reactors. v. Venting equipment through vapor recovery system. vi. Use of high pressure hoses for equipment clearing to reduce wastewater generation.	○ **Being complied.** ○ The unit has undertaken waste minimization measures and will continue exploring measures to minimize at possible extent. To minimize quantity of waste, the unit has explored techniques and implemented some operational changes. ○ Few initiatives taken for waste minimization. ✓ ETP sludge is sell to cement units for pre-processing/co-processing activities. ✓ Mass/volume flow meters installed for Active ingredients i.e. CS2, H2SO4, NaOH etc. dosing to minimize waste. ✓ Atomization for Raw material feeding and dosing is done for minimizing of spillage and leakages. ✓ Salt recovery plant is installed. ✓ Sweeping and mopping machines have been procured for floor cleaning activities instead of floor washing to reduce the waste water generation ✓ By-products from the process are reused as raw material substitutes in other processes. ✓ Automated filling & packing m/c are installed to minimize spillage and also closed feed system is used for the continuous process reactors. ✓ Vapor recovery systems installed to recover Raw material and water which is reused in the process. ✓ For reduction of wastewater generation, High pressure jets are used for equipment cleaning. ✓ Vapor condensate water is recycled through RO to minimize waste water generation.

(l)	The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	○ **Being complied.** ○ Adequate Green belt has been develop in the campus along the boundary wall and open spaces.
(m)	All the commitments made regarding issues raised during the public hearing/consultation meeting held on 30th August, 2017 shall be satisfactorily implemented.	○ **Being complied.** ○ All the commitments made regarding issues raised during the public hearing has implemented satisfactorily.
(n)	At least 2.5% of the total project cost shall be allocated for Enterprise Social Commitment based on item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	○ **Being complied.** ○ Unit is going for production increase quantity phase wise. A year wise expenditure on environment safeguards & towards Enterprise Social commitment is being submit to MOEF&CC at the end of each FY along with EC compliance report. In FY'26, 54.55 Crores spent towards Environmental protection measures.
(o)	The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.	○ **Being complied**. ○ Unit has installed 2 no. of D.G. Set having capacity ~4 MW. ○ Along-with D.G. Set unit has provided 30 m stack height & acoustic enclosure.
(p)	The unit shall make the arrangements for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	○ **Complied.** ○ During manufacturing process in material handling the unit has made all the arrangements for protection of possible fire hazards and the firefighting systems are as per the norms. ○ Unit has provided 1417 nos. of Extinguisher at BC plant and 300 nos. of Extinguisher at mfg. plant of Solvent spun cellulosic fibre. ○ Extinguisher bottle pressure testing schedule has been made and maintain the extinguisher standard.

		○ Unit has 2 nos. of fire tender with capacity of 8500 liters water and 1000 liters foam in BC plant. ○ Unit has provided 372 no. fire hydrant system at BC plant and 49 no. fire hydrant system at mfg. plant of Solvent spun cellulosic fibre. ○ Unit has provided 422 no. fire alarm along with smoke detector at BC plant and 263 no. fire alarm along with smoke detector at mfg. plant of Solvent spun cellulosic fibre.
(q)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	○ **Complied.** ○ Awareness programs is conducted on health by CMO and by ABG Emergency Code Red. ○ First aid training is being arranged on periodic interval, which covers all categories of employees, workmen. ○ Medical check-up is being conducted annually for all employees and six monthly, for those employees who engaged in handling hazardous substances at work place area. ○ All the Employees are covered under Health Survey. Periodic and pre-joining medical check-up for each and every employees and Contractual worker is being done. ○ Medical records of employees and contract workers are maintained online and the individual person can access his own record as read only from any computer in the Unit.
(r)	Continuous online (24x7) monitoring system for stack emissions and the effluent, shall be installed for measurement of flow/discharge and the pollutants concentration, and the emission and the effluent monitoring data to be transmitted to the CPCB and SPCB server as per the directions of CPCB in this regard.	○ **Complied.** ○ For effluent monitoring; ○ Online TOC Meter for monitoring of BOD, COD, pH, Flow, TOC has been installed and this is connected to the GPCB/CPCB online server. ○ For Stack Monitoring;

		○ Online monitor is provided for SO2, NOx, and PM for monitoring the emissions from Power Plant. ○ Online stack monitoring system at CPP is provided & connected with GPCB/CPCB server. ○ Online stack monitoring systems are installed for Rayon and CS2 plant stack.
(s)	Storage of raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. Raw material storage should not exceed 3 days at any point of time.	○ **Complied.** ○ Covered Storage yards, warehouse, tanks etc have been provided for individual Raw material storage. ○ EC amendment has been obtained on 31.12.2018 vides order no. F.No.J-11011/320/2016-IA II (I) with specific condition, "Raw material storage shall not exceed 30 days at any point of time".
(t)	The energy sources for lighting purposes shall preferably be LED based. A minimum of 10-20% of the total power requirement for the industrial operations shall be met from non-conventional energy resources/solar supply.	○ **Complied.** ○ Unit has already replaced energy source as LED based for lighting purpose in plant as well as colony area. ○ An agreement between M/s. Grasim Industries Ltd. & M/s. Greenyana Sunstream Pvt. Ltd has been done to supply 4.4 MW hybrid power to company. ○ An agreement between M/s. Grasim Industries Ltd. & M/s. Bajrang Processor Pvt. Ltd. has been done to supply 2.10 MW wind power to company. ○ An agreement between M/s. Grasim Industries Ltd. & M/s. Manikaran Pvt. Ltd. has been done to supply 1.5 MW wind power to company. ○ M/s. Manikaran Pvt. Ltd. is an trading license holder entity, engaged in resale the wind power.
12.1	The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:	○ **Noted.**
(i)	The project authorities must strictly adhere to the stipulations made by the State Pollution	○ **Complied.** ○ Unit is in compliance for the conditions and standard stipulated in consolidated

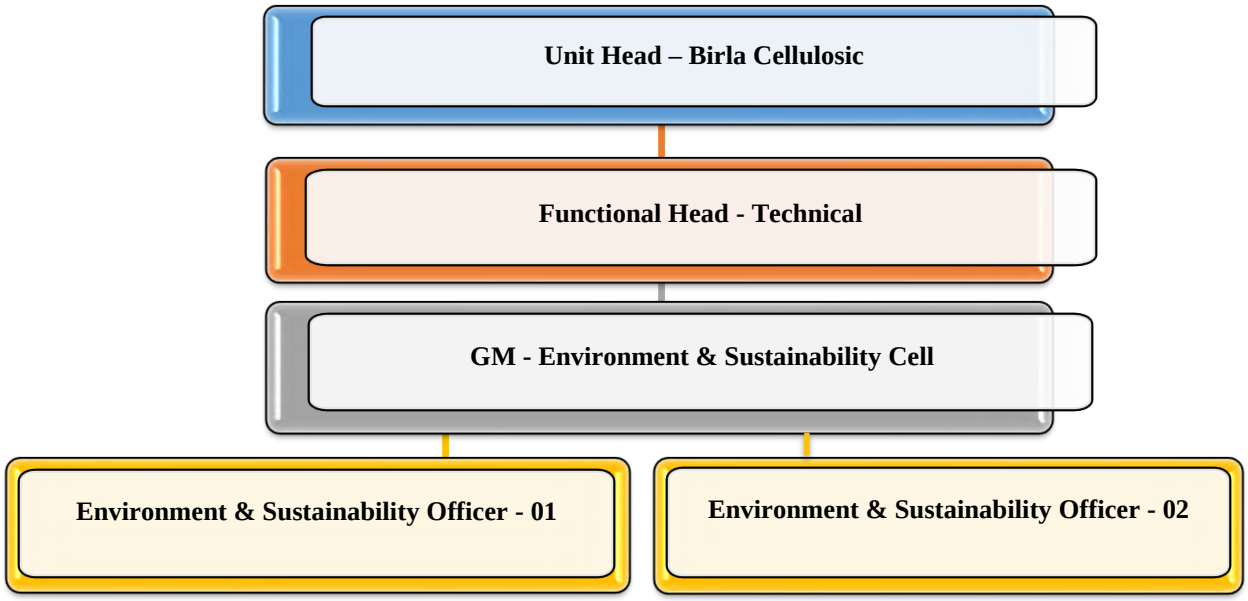
	Control Board (SPCB), State Government and/ or any other statutory authority.	consent and authorization issued by GPCB.
(ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forest and Climate Change. In case of deviations 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 adequacy of the conditions imposed and to add additional environmental protection measures required, if any.	○ **Noted.** ○ No further expansion or modifications in the plant will be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.
(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 stations each is installed in upward and downward direction as well as where maximum ground level concentrations are anticipated.	○ **Complied.** ○ Unit has installed 3 nos. of continuous AAQMS systems in plant premises with the consultation with GPCB officers and 3 other AAQMS systems installed at down wind direction area and regularly checking the parameters of CS2, H2S, SO2, NOx, PM10 and PM2.5.
(iv)	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.	○ **Being Complied.** ○ A Summary for Ambient Air quality for the reporting period is mentioned in Point no. 12-(E).
(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 viz. 75 dBA (day time) and 70 dBA (night time).The ambient noise levels shall conform to the standards prescribed under the Environment (P) Rules,1989 viz.75 dBA (day time) and 70 dBA (night time).	○ Regular monitoring the noise level in and around the plant area is being conducted.

○ A summary for noise level monitoring for the reporting period is given below:		

Sr. No.	Location	Day	Night
1	**Office- Workshop**	48	46
2	**Gate 1**	48	44
3	**Gate 2**	50	46
4	**TRADC circle**	51	44
5	**Shopping Centre**	50	44
6	**D-Block**	48	44
7	**School**	49	44
8	**Hospital**	41	40

(vi)	The Company shall harvest rainwater from the tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	○ **Being Complied.** ○ Rainwater is being harvest to conserve the fresh water. In the Monsoon season, approx. 456712 M^3 rain-water was conserved & utilized within plant premises along with hard water. ○ Currently, we are not recharging ground water.
(vii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	○ **Complied.** ○ Safety trainings including Chemical handling are being provide to all the employees on regular basis for safe working and to handle any emergency. Also experts are hired for training purpose. ○ Safety videos for employees and visitors have been prepared. All important safety information contains guide templates provided to educate more about safety at work place. ○ Arranging 12-days mandatory safety orientation program for new joiners prior to take a charge of concern dept., also arranging by refresher training as per schedule TNI for existing employees. ○ For all outside visitors, safety induction is mandatory prior to enter into plant. ○ PPEs are mandatory in the plant. PPEs like safety shoes, safety goggles, dust mask, ear plug, helmet etc made available

		for all employees and visitors in the plant. Additionally, job specific or special category PPEs are also provided to those who work in critical area. o Periodic medical check-up for all the employees are being done.
(viii)	The company shall 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, risk mitigation measures and public hearing shall be implemented.	o **Being complied.** o Unit is in compliance with the environmental protection measures and safeguards recommended in EIA / EMP / Risk Analysis Reports and in public hearing.
(ix)	The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.	o **Being complied.** o Unit is going for production increase phase wise. As per total project cost, various community development measures in and around 32 villages have been taken by the unit. o A separate budget is being allocated for the same.
(x)	A separate Environment Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	o **Complied.** o A separate environment management cell has been constituted under the leadership of Facility Head. o The detailed Organization chart is given below:



(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.	○ **Complied.** ○ The funds earmarked for the environmental protection measures are being maintained and not diverted for other purpose. ○ Unit has kept separate budget to meet the capital & recurring cost for maintaining the environment -cost for all instrument, pipe line and ETP. ○ A year wise expenditure on environment safeguards & towards Enterprise Social commitment is being submitted to MOEF&CC at the end of each FY along with EC compliance report. In FY'26, 54.55 Crores spent towards Environmental protection measures.
(xi)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	○ **Complied.** ○ A copy of clearance letter has been submitted to District Industries Centre, District Panchayat, Collector Office, GPCB-RO & GPCB-HO.

(xiii)	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.	○ **Complied.** ○ Every six monthly hard copy of compliance report is being submitted to, IRO office of MOEF & CC, Gandhinagar & SPCB. ○ Every six monthly soft copy of compliance report is being submitted to online parivesh portal of MOEF & CC & sending by E-mail also. ○ Six monthly Compliance report for the period of **Apr-25 to Sept-25** submitted in hard/soft copy in **Nov-25.** ○ Last six monthly Environment clearance compliance report uploaded on company's website.
(xvi)	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to concerned State Pollution Control Board as per 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 environmental clearance conditions and shall also be sent to the respective Regional offices of MoEF & CC by e-mail.	○ **Complied.** ○ The environmental statement for each financial year ending 31st March in Form-V is being submitted to Gujarat State Pollution Control Board as per prescribed under the Environment (Protection) Rules, 1986, as amended subsequently. Annual Environment statement for FY-26 is submitted in **May-26.** ○ Unit is uploading copy of Environment statement on company's website as prescribed in EC & send to MOEFCC regional office through mail along-with EC compliance report.
(xv)	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 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	○ **Complied.** ○ Advertisement has been published within 7 days from the date of issue of the clearance letter and copy forwarded to Ministry's Regional Office at Bhopal. ○ Refer EC advertisement copy is enclosed below.

	the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.	
		
	English Advertisement	**Gujarati Advertisement**
12.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	○ **Noted.**
13.	The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner will implement these conditions.	○ **Noted.**
14.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous waste (Management, Handling & Transboundary movement) rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.	○ **Complied.**

ADITYA BIRLA

GRASIM

Dated: 21.05.2026

ID: 14989
Birla Cellulosic- Kharach

To,
State level Environment Impact Assessment Authority,
Gujarat Pollution Control Board,
Sector-10 A, Paryavaran Bhavan
Gandhinagar-382010.

Subject: Half Yearly Compliance Report of Environmental Clearance for period of "Oct-25 to Mar-26"

Respected Sir,

With reference to above-mentioned subject and in accordance with conditions stipulated in EC granted, vide **Letter No. SEIAA/GUJ/EC/5(d) &1(d)/339/2016 Dated: 20.05.2016**, we hereby submit Half Yearly Environmental Clearance Compliance Report for the reporting period **"Oct-25 to Mar-26".**

We trust that submission is in order

Yours Faithfully,
(For Birla Cellulosic)

Dharmesh Patel
GM – Environment & Sustainability

Encl. :
1. EC Copy
2. EC-2016 Compliance report- **Oct-25 to Mar-26**

Birla Cellulose
Fibres from nature

Grasim Industries Limited
Unit – Birla Cellulosic

Works : Birladham, Kharach Kosamba R.S.
Dist. Bharuch (Gujarat) – 394 120 INDIA
CIN : L17124MP1947PLC000410

Telephone +91 2646 270001-005, 270301-305
Fax +91 2646 270010, 270130
Email bc-kharach.info@adityabirla.com

Liaison Office : 11th Floor – 1101 & 1102 OCEAN, Opposite Vadodara Central Mall, Vikram Sarabhai Marg, Vadiwadi, Vadodara – 390023, Gujarat – India
Regd. Office : P.O. Birlagram, Nagda (MP) – 456 331. Phone : (07366) 246760-66, Fax : 255198, Website : www.grasim.com

CC To:

1. **GPCB Regional office** - Gujarat pollution control board, Plot No. 1501, GIDC, Ankleshwar
2. **GPCB Head office** - Gujarat pollution control board, Paryavaran Bhavan, CHH Road, Sector 10A, Gandhinagar, Gujarat 382010
3. **MOEFCC- IRO office** - Ministry of Environment, Forest and Climate Change, Aaranya Bhavan, Gandhinagar
4. **MOEFCC office** - Ministry of Environment, Forest & Climate Change, New Delhi

M. M. JOSHI
MEMBER SECRETARY
SEIAA (GUJARAT)

सत्यमेव जयते

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/5(d)&1(d)/339/2016 **Date: 20 MAY 2016** By R P A D

Time Limit

Sub: Environment Clearance to M/s. Birla Cellulosic (A Unit of Grasim Industries) for setting up of the proposed manufacturing of Solvent Spun Cellulosic Fibre and Coal based Captive Power Plant (CPP) within the existing premises of Birla Cellulosic plant at Survey no.155-181,183,184,202,205,219, Birladham, Kharach, Kosamba (R.S.), Dist: Bharuch..... In Category 5(d) &1(d) of Schedule annexed with EIA Notification dated 14/09/2006.

Dear Sir,

This has reference to your application along with Form-I dated **13/06/2012** submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006 and EIA/ additional information / documents submitted vide letter dated **29/05/2015, 23/10/2015 and 22/03/2016** to the SEAC.

The proposal is for Environmental Clearance to **M/s. Birla Cellulosic (A Unit of Grasim Industries) for setting up of the proposed manufacturing of Solvent Spun Cellulosic Fibre and Coal based Captive Power Plant (CPP) within the existing premises of Birla Cellulosic plant at Survey no.155-181,183,184,202,205,219, Birladham, Kharach, Kosamba (R.S.), Dist: Bharuch.** It is an existing unit for manufacturing following products, which falls in the category - **5(d) &1(d)** of the schedule of the EIA Notification-2006:

Sr. no	List of product	Capacity
1	Solvent Spun Cellulosic Fibre	109500 MT/Annum
2	Captive Power Plant	71 MW

The project activity is covered in **5(d) &1(d)** and is of 'B' Category. Public hearing was carried out by Gujarat Pollution Control Board on 15/05/2015.

The SEAC, Gujarat vide their letter dated **04/05/2016** had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on **23/03/2016**. The proposal was considered by SEIAA, Gujarat in its meeting held on **07/05/2016** 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 manufacturing process for the production of Solvent spun cellulosic fibre shall be environmental friendly and there shall be no use of any hazardous chemicals like CS_2 and H_2SO_4 in the main process.
2. The proposed "Solvent Spinning Technology" for production of cellulosic fibres shall use N-Methyl Morpholine N-Oxide (NMMO)/ Ionic Liquid (IL) as a direct solvent for cellulose and Recovery of NMMO/ Ionic Liquid from the Regenerating and Washing Baths shall be more than 99.5% and recovered solvent shall be reused in the process.

A. 2 WATER :

3. Water requirement for the proposed expansion shall not exceed 12069 KL/day. Additional fresh water requirement shall be 7962 KL/day as unit shall reuse RO permeate 3319 KL/day from RO plant and 788 KL/day of MEE Condensate.
4. The additional fresh water shall be sourced from River Kim. Permission from the Concern authority for additional water requirement shall be obtained.
5. The water meter shall be installed and records of daily and monthly water consumption shall be maintained. No ground water shall be tapped for the project requirements in any case.
6. Total waste water generation from the proposed project shall not exceed 7149 KL/day.
7. Unit shall provide adequate Multiple Effect Evaporator (MEE) plant and RO system and it shall be operated regularly and efficiently so as to achieve the GPCB norms at the final outlet.
8. Out of the total effluent generation, 4149 KL/day shall be fed to R.O. and balance 3000 KL/day shall be treated in the existing ETP.
9. R.O permeate (3319 KL/day) shall be reused back in the process and R.O reject (830 KL/day) shall be subjected to MEE

(Multiple Effect Evaporator). Condensate (788 KL/day) from MEE shall be reused and MEE salts after drying shall be disposed off in the authorized TSDF site.

10. The treated water from ETP conforming to the GPCB norms shall be discharged into the Kim estuary through 24 km long existing pipeline. The anticipated treated effluent quantity to be discharged into existing pipeline shall not exceed 14500 KL/day (existing 11500 KL/day and proposed 3000 KL/day). The unit shall also provide on line pH meter and TOC meter for online monitoring of the treated effluent.
11. There shall be no increase in domestic waste water generation.
12. The unit shall provide metering facility at the inlet and outlet of the ETP, for RO system & for MEE and maintain the records of the same. A proper logbook of ETP, RO & MEE operation and also showing the quantity of effluent generated, Reuse/Recycle, shall be maintained and furnished to the GPCB from time to time.
13. Regular performance evaluation of the ETP, RO & MEE system shall be undertaken once in a year through a reputed institute / organization and its records shall be maintained.
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.
15. A separate electric meter shall be placed for the ETP, RO and MEE system. Proper logbook of ETP, RO system and MEE operation also showing chemicals consumed, effluent evaporated, power consumed etc. shall be maintained and furnished to the GPCB from time to time.

A. 3 AIR:

16. Blended Coal (Imported Coal – 50 % and Indigenous Coal – 50 %) to the tune of 2130 MT/day shall be used for 4 no.s of Steam Boilers [3 Boilers of capacity 120 TPH each and one Boiler of capacity 100 TPH].
17. Sulfur and ash content of the imported coal and Indigenous coal shall be analyzed and its record shall be maintained.
18. Stack of adequate height shall be provided as per the prevailing norms for flue gas emissions.
19. Lime stone injection technology shall be adopted to control SO_2 for proposed Steam Boilers and it shall be ensured that SO_2 levels in the ambient air do not exceed the prescribed standards.
20. 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, 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.
21. Flue gas emission from Boilers shall conform to the standards prescribed by the GPCB. At no time, emission level should go beyond the stipulated standards.
22. The air pollution control systems shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB at vent / stack outlets.
23. 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.
24. 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.
25. Online monitoring system shall be installed on the flue gas stacks to monitor the pollutant concentrations. An arrangement shall also be made for reflecting the online monitoring results on the company's server, which can be accessed by the GPCB on real time basis.
26. There shall be no process gaseous emission from the proposed project.
27. Adequate storage facility for the fly ash in terms of closed silos shall be provided at site. No ash pond shall be constructed.
28. Handling of the fly ash shall be through a closed pneumatic system.
29. Ash shall be handled only in dry state.
30. 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.
31. 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 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 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.

32. All the vessels used in the manufacturing process shall be closed to reduce the fugitive emission.
33. Measures shall be taken to reduce the process vapors emissions as far as possible. Toxic solvents shall not be used. All venting equipment shall have vapour recovery system.
34. All the vessels used in the manufacturing process shall be close to reduce the fugitive emission.
35. The fugitive emission in the work zone environment shall be monitored. The emission shall strictly conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety & Health).
36. Regular monitoring of ground level concentration of SO_2, NOx, PM_{10}, $PM_{2.5}$, HC and 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 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.
37. Airborne dust at all transfers operations/ points shall be controlled either by spraying water or providing enclosures.
38. Solvent management shall be carried out as follows :
    - Reactor and solvent handling pump shall have mechanical seals to prevent leakages.
    - The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 99.5% solvent recovery.
    - Solvents shall be stored in a separate space specified with all safety measures.
    - Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
    - Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.
39. Regular monitoring of Volatile Organic Compounds (VOCs) shall be carried out in the work zone area and ambient air.
40. For control of fugitive emission, VOCs, following steps shall be followed :
    a. Closed handling and charging system shall be provided for chemicals.
    b. Reflux condenser shall be provided over Reactors / Vessels.
    c. Pumps shall be provided with mechanical seals to prevent leakages.
    d. System of Leak Detection and Repair of pump/pipeline based on preventive maintenance.

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 & 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.
42. 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.
43. ETP waste & MEE salt shall be disposed off at the Common TSDF site.
44. Used resin & Tow waste (Cellulose) shall be disposed off at the Common TSDF site or CHWIF depending on the characteristics of the waste or shall be sent for co-processing.
45. Discarded barrels / containers / bags / liners shall be either reused or returned back to suppliers or sold only to the authorized vendors after decontamination.
46. Used oil shall be sold only to the registered recyclers.
47. The unit shall obtain necessary permission from the nearby TSDF site and CHWIF.
48. 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 EPA and it shall be ensured that there is 100% utilization of ash to be generated from the unit. Necessary records shall be maintained for this purpose and furnished to

the GPCB from time to time.

49. Continuous technical & quality control guidance shall be provided to actual users of fly ash to boost the utilization of fly ash.
50. 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.
51. All possible efforts shall be made for Co-Processing of the Hazardous waste prior to disposal into TSDF/CHWIF.

A. 5 SAFETY:

52. The company shall strictly comply with the rules and regulations under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended.
53. 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.
54. Necessary precautions like continuous monitoring of hot spots (ignited coal) using temperature detection systems, water sprinklers, avoiding stacking of coal near steam pipeline etc. shall be made for storing coal to prevent fire hazard.
55. Storage of flammable chemicals shall be sufficiently away from the production area.
56. Sufficient no. of fire extinguishers shall be provided near the plant and storage area.
57. All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.
58. 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.
59. The project management shall ensure to comply with all the environment protection measures, risk mitigation measures and safeguards mentioned in the Risk Assessment repot.
60. Only flame proof electrical fittings shall be provided in the plant premises.
61. 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.
62. 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.
63. Handling and charging of the chemicals shall be done in closed manner by pumping or by vacuum transfer so that minimal human exposure occurs.
64. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.
65. First Aid Box and required Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.
66. Training shall be imparted to all the workers on safety and health aspects of chemicals handling.
67. 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.
68. Transportation of hazardous chemicals shall be done as per the provisions of the Motor Vehicle Act & Rules.
69. The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.
70. Necessary permissions from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.

A. 6 NOISE:

71. 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 CLEANER PRODUCTION AND WASTE MINIMISATION:

72. 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.
73. The company shall undertake various waste minimization measures including :
    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. Venting equipment through vapour recovery system.
e. Use of high pressure hoses for cleaning to reduce wastewater generation.
f. Recycling of steam condensate
g. Sweeping / mopping of floor instead of floor washing to avoid effluent generation.
h. Regular preventive maintenance for avoiding leakage, spillage etc.

A. 8 GREEN BELT AND OTHER PLANTATION:

74. 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 vicinity or any other open areas in consultation with the GPCB and submit an action plan of plantation for next three years to the GPCB.
75. Drip irrigation / low-volume, low-angle sprinkler system shall be used for the green belt development within the premises.

B. OTHER CONDITIONS:

76. 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.
77. All the recommendations / commitments made and mitigation measures proposed in the EIA report of the project prepared by M/s: NEERI and submitted vide letter no. NIL dated 29/05/2015 shall be implemented in letter and spirit.
78. The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board (GPCB), State Government and any statutory authority.
79. During material transfer, spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages with domestic wastewater or storm water.
80. Pucca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.
81. Leakages from the pipes, pumps, shall be minimal and if occurs, shall be arrested promptly.
82. 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.
83. 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 & other wastes (Management and Transboundary Movement) Rules 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
84. The project proponent shall have to 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.
85. 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.
86. 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.
87. 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.
88. 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.
89. 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.
90. 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.
91. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
92. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.

93. 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.
94. 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.
95. This environmental clearance is valid for seven years from the date of issue.
96. 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,

(M. M. JOSHI)
Member Secretary

Issued to:
Mr. Bharat Patel
M/s: Birla Cellulosic,
S. no. 155-181, 183, 184 , 202, 205, 219,
Birladham, Kharach,
Kosamba (R.S.),
Dist. Bharuch

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

(M. M. JOSHI)
Member Secretary

Manufacturing of Solvent Spun Cellulosic Fiber (109500 MT/ Annum)
and
Coal based Captive Power Plant (CPP) (71 MW)

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) At Kharach, Hansot, Bharuch, Gujarat

Name of Project : Setting up of the proposed manufacturing of Solvent Spun Cellulosic Fiber (109500 MT/ Annum) and Coal based Captive Power Plant (CPP) (71 MW) within the existing premises.

Environment Clearance letter no. & Date : No. SEIAA/GUJ/EC/5(d) &1(d)/339/2016 Dated 20-05-2016

Address for Correspondence : M/s. Birla Cellulosic (A Unit of Grasim Industries Ltd.), Birladham, Village: Kharach, Kosamba (R.S.), Tehsil: Hansot,: Bharuch (Gujarat) – 394120

Duration/Reporting period : **Oct-25 to Mar-26**

S. No	Conditions	Compliance Status
1	This has reference to your application along with From-I dated 13/06/2012 submitted to SEIAA, seeking Environment Clearance under Environment Impact Assessment Notification, 2006 and EIA/ additional information / documents submitted vide letter dated 29/05/2015, 23/10/2015 and 22/03/3016 to the SEAC.	○ **Noted.**
2	The proposal is for Environmental Clearance to M/s. Birla Cellulosic (A Unit of Grasim Industries) for setting up of the proposed manufacturing of Solvent Spun Cellulosic Fiber and Coal based Captive Power Plant (CPP) within the existing premises of Birla Cellulosic plant at Survey no. 155-181, 183, 184, 202, 205, 219, Birladham, kharach, kosamba (R.S.), Dist; Bharuch. It is an existing unit for manufacturing following products, which falls in the category- 5 (d) & 1	○ **Complied.**

<table>
<tr>
<td></td>
<td>(d) of the schedule of the EIA Notification-2006:

<table>
<tr><th>Sr. No.</th><th>List of Product</th><th>Capacity</th></tr>
<tr><td>1.</td><td>Solvent Spun Cellulosic Fiber</td><td>109500 MT/Annum</td></tr>
<tr><td>2.</td><td>Captive Power Plant</td><td>71 MW</td></tr>
</table>

The project activity is covered in 5(d) & 1(d) and is of ‘B’ Category. Public Hearing was carried out by Gujarat Pollution Control Board on 15/05/2015. The SEAC, Gujarat vide their letter dated 04/05/2016 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 23/03/2016. The proposal was considered by SEIAA, Gujarat in its meeting held on 07/05/2016 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provision of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions:</td>
<td>o Unit has obtained CTE for Solvent Spun Cellulosic fibre capacity upto 109500 MT/Annum having CTE order no. 125490 dated: 01.05.2023 for the period of 19.01.2023 to 20.05.2026.
o Unit has obtained CCA-Renewal for Solvent Spun Cellulosic fibre capacity upto 36500 MT/Annum having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029.</td>
</tr>
<tr><td>A</td><td colspan="2">Conditions:</td></tr>
<tr><td>A.1</td><td colspan="2">Specific Condition</td></tr>
</table>

1.	The manufacturing process for the production of solvent spun cellulosic fiber shall be environmentally friendly and there shall be no use of any hazardous chemical like CS_2 and H_2SO_4 in the main process.	○ **Complied.** ○ Hazardous Chemicals i.e. CS_2 and H_2SO_4 are not being used in solvent spun cellulosic fiber process.
2.	The proposed "Solvent Spinning Technology" for production of cellulosic fibers shall use N-Methyl Morpholone N-Oxide (NMMO)/Ionic Liquid (IL) as a direct solvent for cellulose and recovery of NMMO/Ionic Liquid from the Regenerating and washing baths shall be more than 99.5% and recovered solvent shall be reused in the process.	○ **Complied.** ○ For mfg. of "Solvent spun cellulosic fibre" N-Methyl Morpholone N-Oxide (NMMO) is being used as a direct solvent for cellulose and recovery of NMMO/ from the Regenerating & washing baths is 99.80%. Recovered solvent is reused in the process.
A.2	**Water**	
3.	Water requirement for the proposed expansion shall not exceed 12069 KL/day. Additional Fresh water requirement shall be 7962 KL/day as unit shall reuse RO permeate 3319 KL/day from RO plant and 788 KL/day of MEE condensate.	○ **Noted & Complied.** ○ During reporting period (Oct-25 to Mar-26), unit has operated @79 TPD based on fibre demand in market. ○ Due to lower production, Fresh water consumption quantity is very less. ○ Summary of Fresh water consumption of Solvent spun cellulosic fibre plant for reporting period as below:

Month	Quantity (M3/Month)
Oct-25	16418
Nov-25	15826
Dec-25	17098
Jan-26	16852
Feb-26	16855
Mar-26	21580
Total	**104629**
Average (M3/Day)	**575**

		○ The Half- yearly average water Consumption is 575 M3/day, which is less than the quantity mentioned in Agreement.
4.	The additional fresh water shall be sourced from river Kim. Permission from the concern authority for additional water requirement shall be obtained.	○ **Noted & Complied.** ○ Permission for the withdrawal of 19,000 M^3/day water has been obtained for both VSF and Solvent spun fibre plants. The agreement has been done with the Irrigation Department. ○ During reporting period (Oct-25 to Mar-26), unit has operated @81 TPD based on fibre demand in market. ○ Unit shall take additional permission once the unit will be operated at full capacity.
5.	The water meter shall be installed and records of daily and monthly water consumption shall be maintained. No ground water shall be tapped for the project requirement in any case.	○ **Noted & Complied.** ○ The fresh water requirement is met from the surface water i.e. Kim river and groundwater is not tapped. ○ The water meters are already in place at water withdrawal line and fresh water withdrawal record is being maintained.
6.	Total waste water generation from the proposed project shall not exceed 7149 KL/day.	○ **Noted & Complied.** ○ During reporting period (Oct-25 to Mar-26), unit has operated @81TPD based on fibre demand in market. ○ Due to lower production, Waste water generation quantity is very less. ○ The waste water generation during mfg of Solvent spun cellulosic fiber is getting treated in 2 stages, in 1^{st} stage Effluent is treated at separate ETP constructed at SSCF plant and treated effluent is discharged into inlet of ETP for main VSF plant. Hence it is further treated in 2^{nd} stage along with effluent getting generated from VSF plant. ○ The waste water discharges into the Kim estuary through 24 km long existing pipeline is within the stipulated permission given by GPCB.

<table>
<tr><td></td><td></td><td>o Summary of effluent by SSCF plant & discharged into VSF-ETP for reporting period as below:
<table>
<tr><th>Month</th><th>Quantity (M3/Month)</th></tr>
<tr><td>Oct-25</td><td>13922</td></tr>
<tr><td>Nov-25</td><td>15079</td></tr>
<tr><td>Dec-25</td><td>15105</td></tr>
<tr><td>Jan-26</td><td>15261</td></tr>
<tr><td>Feb-26</td><td>12718</td></tr>
<tr><td>Mar-26</td><td>15930</td></tr>
<tr><td>Total</td><td>88014.60</td></tr>
<tr><td>Average (M3/Day)</td><td>484</td></tr>
</table></td></tr>
<tr><td>7.</td><td>Unit shall provide adequate Multi Effect Evaporator (MEE) plant and RO system and it shall be operated regularly and efficiently so as to achieve the GPCB norms at the final outlet.</td><td>o <u>Complied.</u>
o During reporting period (Oct-25 to Mar-26), unit has operated @81 TPD based on fibre demand in market.
o Currently SSCF unit is operated at lower capacity hence the effluent generation is very less (as mentioned in Sr. No. -6) from the unit.
o The waste water generation during mfg of Solvent spun cellulosic fiber is getting treated in 2 stages, in 1st stage Effluent is treated at separate ETP constructed at SSCF plant and treated effluent is discharged into inlet of ETP for main VSF plant. Hence it is further treated in 2nd stage along with effluent getting generated from VSF plant.
o The waste water discharges into the Kim estuary through 24 km long existing pipeline is within the stipulated permission given by GPCB.
o If required in future, additional MEE system shall be installed & operated</td></tr>
</table>

		once the unit will be operated at full capacity.
8.	Out of the total effluent generation, 4149 KL/day shall be fed to R.O. and balance 3000 KL/day shall be treated in the existing ETP.	○ **Complied.** ○ Currently SSCF unit is operated at lower capacity hence the effluent generation is very less (as mentioned in Sr. No. -6) from the unit. If required in future, additional RO system shall be installed & operated once the unit will be operated at full capacity.
9.	R.O. permeate (3319 KL/day) shall be reused back in the process and R.O. reject (830 KL/day) shall be subjected to MEE (multi effect evaporator). Condensate (788 KL/day) from MEE shall be reused and MEE salts after drying shall be disposed off in the authorized TSDF site.	○ **Complied.** ○ As the SSCF unit is operated at lower capacity hence the effluent generation is very less (as mentioned in Sr. No. -6) from the unit. If required in future, additional RO system shall be installed & operated at SSCF unit once the unit will be operated at full capacity.
10.	The treated water from ETP conforming to the GPCB norms shall be discharged into the Kim estuary through 24 km long existing pipeline.	○ **Noted & Complied.** ○ The waste water generation during mfg of Solvent spun cellulosic fiber is getting treated in 2 stages, In 1st stage Effluent is treated at separate ETP

	The anticipated treated effluent quantity to be discharged into existing pipeline shall not exceed KL/day (existing 11500 KL/day and proposed 3000 KL/day). The unit shall also provide on line pH meter and TOC meter for online monitoring of the treated effluent.	constructed at SSCF plant and treated effluent is discharged into inlet of ETP for main VSF plant. Hence it is further treated in 2nd stage along with effluent getting generated from VSF plant. The combined treated effluent confirming to the GPCB norms & discharged into the Kim estuary through 24 km long existing pipeline. ○ The quantity of treated effluent discharges of Solvent spun cellulosic fiber + VSF plant is within the stipulated norm given by GPCB. ○ Summary of Industrial effluent discharged for reporting period as below: **Month** / **Quantity (M3/Month)** **Oct-25** 13922 **Nov-25** 15079 **Dec-25** 15105 **Jan-26** 15261 **Feb-26** 12718 **Mar-26** 15930 **Total** **88014.6** **Average (M3/Day)** **484** ○ The treated water from ETP confirming to the GPCB norms is being discharged into the Kim estuary through 24 km long existing pipeline. ○ Online pH meter and TOC meter at outlet of final treated water have been provided. ○ A full-fledged in-house laboratory is established to monitor the parameters round the clock. The quality of treated effluent is also monitored by NABL accredited Laboratory on monthly basis.

o Summary of treated effluent for the reporting period as below:

Parameter	pH	Temp.	S.S.	COD	BOD	Amm. N	Color	Zinc
Unit	-	°C	mg/l	mg/l	mg/l	mg/l	Co-pt u.	mg/l
Limit	6.5-8.5	40	100	250	100	50	100	10
Oct-25	7.21	29.9	36	131	24.58	2.31	75	0.73
Nov-25	7.4	29.5	52	128	31.24	2.14	65	0.82
Dec-25	7.2	29.6	41	132	26.56	2.03	55	0.46
Jan-26	7.2	30	41	130	30.2	2.01	65	0.65
Feb-26	7.1	29.9	34	119	22.74	1.83	55	0.56
Mar-26	7.1	30.4	29	128	28	1.71	45	0.47

11.	There shall be no increase in domestic waste water generation.	o **Noted.** o There is no increase in domestic waste water generation during reporting period.
12.	The unit shall provide metering facility at the inlet and outlet of the ETP, for RO system & for MEE maintain the records of the same. A proper logbook of ETP, RO & MEE operation and also showing the quantity of effluent generated, Reuse/Recycle, shall be maintained and furnished to the GPCB from time to time.	o **Complied.** o Flow meters at the inlet & outlet of ETP have been installed. o As the SSCF unit is operated at lower capacity hence the effluent generation is very less (as mentioned in Sr. No. -6) from the unit. If required in future, additional RO system shall be installed & operated once the unit will be operated at full capacity. o Logbooks of ETP operation covers details of effluent generated, Effluent discharges, Reuse/Recycle are being maintained and data for same is being submitted to GPCB time to time.
13.	Regular performance evaluation of the ETP, RO & MEE system shall be undertaken once in a year through a reputed institute/ organization and its records shall be maintained.	o **Complied.** o ETP performance is evaluated during external Environment audit done by schedule-1 auditors assigned by GPCB. o Presently, unit has not installed RO, MEE system, as effluent generation is very less. If required in future, additional RO system shall be installed & operated once the unit will be operated at full capacity. GPCB norms are completely achieved at the final outlet.
14.	The unit shall join and participate	o **Shall be complied.**

<table>
<tr><td></td><td>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.</td><td></td></tr>
<tr><td>15.</td><td>A separate electric meter shall be placed for the ETP, RO and MEE system, Proper logbook of ETP, RO system and MEE operation also showing chemicals consumed, effluent evaporated, power consumed etc, shall be maintained and furnished to the GPCB from time to time.</td><td>○ <u>Being complied.</u>
○ A separate electric meters have been provided at various stages of process and record for power consumption is being maintained.
○ Record for Chemical consumption, power consumption, water consumption etc. are being maintained and shared with GPCB from time to time.</td></tr>
<tr><td>A3.</td><td>AIR</td><td></td></tr>
<tr><td>16.</td><td>Blended coal (Imported Coal – 50% and Indigenous Coal- 50%) to the tune of 2130 MT/day shall be used for 4 nos. of Steam Boiler (3 Boiler of capacity 120 TPH each and one Boiler of capacity 100TPH).</td><td>○ <u>Being complied.</u>
○ Unit is using blended coal (imported+ indigenous) for installed boilers for at BCK premises.
○ Summary of Coal consumption for reporting period as below:
<table>
<tr><th>Month</th><th>Quantity (MT/Month)</th></tr>
<tr><td>Oct-25</td><td>28177</td></tr>
<tr><td>Nov-25</td><td>25899</td></tr>
<tr><td>Dec-26</td><td>25674</td></tr>
<tr><td>Jan-26</td><td>27402</td></tr>
<tr><td>Feb-26</td><td>25648</td></tr>
<tr><td>Mar-26</td><td>28552</td></tr>
<tr><td>Total</td><td>161352.06</td></tr>
<tr><td>Average (MT/Day)</td><td>887</td></tr>
</table>
○ The above total coal consumption for centralized power plant, Generated power from this premises is booking for VSF and Solvent spun Cellulosic plant, which is less than the consent quantity.</td></tr>
<tr><td>17.</td><td>Sulfur and ash content of the imported coal and Indigenous Coal shall be</td><td>○ <u>Complied.</u>
○ Sulphur and ash content of the imported coal and</td></tr>
</table>

	analyzed and its record shall be maintained.	indigenous coal is being analyzed by internal/external laboratory and record for the same is being maintained.
18.	Stack of adequate height shall be provided as per the prevailing norms for the flue gas emissions.	○ **Complied.** ○ Unit has provided adequate stack height as per the prevailing norms for the flue gas emissions. Photographs of stack are as enclosed below.
		
19.	Lime stone injection technology shall be adopted to control SO_2 for proposed Steam Boilers and it shall be ensured that SO2 levels in the ambient air do not exceed the prescribed standards.	○ **Complied.** ○ Unit has adopted lime stone injection technology to control the concentration of SO_2 and meeting all the standards stipulated for SO_2.
20.	High efficiency Electro Static Precipitators (ESP) with efficiency not less than 99.9% shall installed for control of flue gas emission from proposed Boilers. ESP shall be operated efficiently to ensure that PM emission does not exceed the GPCB norms. The control system shall be designed and integrated in DCS in such a way that if emission from ESP exceeds the specified standard, utilization of boiler capacity shall reduce, so flue gas emission from stack meets with the specified norms or boiler shall shut down totally.	○ **Complied.** ○ Unit has installed 3 No. of ESP having three fields with boiler 1 & 2, four fields with boiler 3 having 99.9% efficiency to control particulate matter emission from flue gas. ○ Online stack monitoring system is installed for continuous monitoring of flue gas emission parameters and data is integrated with DCS system for effective control. ○ Functioning efficiency of ESP is being monitored once in a year by internal inspection and once in a 3 year with external third party during energy audit. ○ Concentration of flue gas emission for boiler is being monitored by NABL accredited third party Lab on monthly basis.

21.	Flue gas emission from Boilers shall conform to the standards prescribed by the GPCB. At no time, emission level should go beyond the stipulated standards.	○ **Complied.** ○ Flue gas emission from Boilers are being strictly maintained as per standards prescribed by the GPCB. ○ Online monitoring system for SO2, NOx, and PM is provided for monitoring the emissions from Power Plant, which is connected with GPCB/CPCB server.

o Summary of flue gas emission from stack for the reporting period as below:

Location	**Boiler-1 & 2 (76 m)**			**Boiler-3 (86 m)**			
Parameter	**SPM**	**SO2**	**NOx**	**SPM**	**SO2**	**NOx**	**Mercury**
Unit	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**
Limit	**100**	**600**	**600**	**50**	**600**	**300**	**0.03**
Oct-25	49	256	86	45	245	79	LTAR
Nov-25	44	249	83	42	240	76	LTAR
Dec-25	48	253	85	46	243	79	LTAR
Jan-26	46	251	84	44	241	77	LTAR
Feb-26	49	258	88	48	247	81	LTAR
Mar-26	48	254	86	46	244	79	LTAR

LTAR* :- Lower Than Accreditation Range

22.	The air pollution control systems shall be operated effectively to achieve the norms prescribed by the GPCB at vent/ stack outlets.	○ **Complied.** ○ Unit has installed 3 No. of ESP having 3 fields with boiler 1 & 2, 4 fields with boiler 3 having 99.9% efficiency to control particulate matter emission from flue gas. Lime dosing systems are installed at Coal feeders to control SO2 & NOx emission. These pollution control systems are being operated 365*24*7. ○ There is no any process vent/stack at mfg. plant of Solvent spun cellulosic fibre.
23.	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.	○ **Complied.** ○ Unit has prepared schedule for preventive maintenance of mechanical and electrical parts of ESPs, which is being followed.

24.	Third party monitoring of the functioning of the ESP along with its efficiency shall be carried out once in a year through a repute institute/organization.	○ **Complied.** ○ Functioning efficiency of ESP is being monitored once in a year by internal inspection and once in a 3 year with external third party during energy audit.
25.	Online monitoring system shall be installed on the flue gas stacks to monitor the pollutant concentrations. An arrangement shall also be made for reflecting the online monitoring results on the company's server, which can be accessed by the GPCB on the real time basis.	○ **Complied.** ○ Online monitoring system for flue gas parameters i.e. SO2, NOx, PM etc. monitoring has been installed. The Online data is being transmitted to GPCB/CPCB server.
26.	There shall be no process gaseous emission from the proposed project.	○ **Noted.** ○ There are no process gaseous emission from Solvent Spun Cellulosic Fibre plant.
27.	Adequate storage facility for the fly ash terns of closed silos shall be provided at site. No ash pond shall be constructed.	○ **Complied.** ○ There are 3 no. of closed silo having 250 MT storage capacity for storage of fly ash. Photographs for fly ash silo is enclosed below. ○ Unit has not constructed ash pond.
	 	
28.	Handling of the fly ash through a closed pneumatic system.	○ **Complied.**
29.	Ash shall be handled only in dry state.	○ **Complied.**
30.	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	○ **Complied.** ○ Generated quantity of Fly ash sold to surrounding local Brick and Cement manufacturers as stipulated in the CCA.

<table>
<tr>
<td></td>
<td>generated from the unit.</td>
<td>
○ Summary of month-wise quantity of fly ash for reporting period as below:
<table>
<tr><th>Month</th><th>Ash Quantity (MT/Month)</th></tr>
<tr><td>Oct-25</td><td>7150</td></tr>
<tr><td>Nov-25</td><td>6620</td></tr>
<tr><td>Dec-26</td><td>6109</td></tr>
<tr><td>Jan-26</td><td>6869</td></tr>
<tr><td>Feb-26</td><td>6080</td></tr>
<tr><td>Mar-26</td><td>6522</td></tr>
<tr><td>Total</td><td>39349.69</td></tr>
<tr><td>Average (MT/Day)</td><td>216</td></tr>
</table>
○ The quantity of Fly ash mentioned above is a total quantity of fly ash which includes generation from VSF manufacturing plant, too. However the total quantity is still less than the consent quantity.
</td>
</tr>
<tr>
<td>31.</td>
<td>The fugitive emission in the work zone environment shall be monitored. The emission shall conform to the standards prescribed by the conceded 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.

</td>
<td>
○ <u>Complied</u>.
○ Fugitive emissions are being monitored in the different identified work zone area and work area monitoring reports are regularly submitting to concerned govt. authority.
○ Unit has covered coal conveyor for handling and transporting of coal from bulker to feeder at boiler.
○ Closed area also available at CPP for unloading activities.
○ Manual water sprinklers are installed for spraying on coal heaps to retain some moisture at top of heaps and reduce fugitive emission on regular basis.
○ Coal feeding belt conveyor and unloading areas are in close loop.
○ Unit has well equipped suppression and extraction system at power plant to reduce the dust emission in and around area of CPP.
○ Unit is regularly cleaning of coal dust and fly ash on the ground and water spraying is also being done.
</td>
</tr>
</table>

	• Adequate dust suppression/ extraction system at crusher house as well as for the Coal stock yard and other vulnerable areas shall be provided to abate dust nuisance. • Accumulated Coal dust/ fly ash on the ground and other surface shall be removed / swept regularly and water the area after sweeping. • Internal roads shall be either concreted or asphalted or paved property to reduce the fugitive emission during vehicular movement. • Air borne dust shall be controlled with water sprinklers at suitable locations in the plant. • Coal 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.	○ Internal road is concreted and frequently sweep by sweeping vehicle to reduce fugitive emission. ○ Unit has already installed water jet sprinkling system at air borne dust generation area like fly ash area. ○ Fly ash and coal both are transporting through Bunker/ dumper along with covered tarpaulin. ○ Adequate planation is being done in and around of coal yard and fly ash area. Green belt developed at periphery of road area also.
32.	All the vessels used in the manufacturing process shall be closed to reduce the fugitive emission.	○ **Complied**. ○ All the sources of fugitive emissions are regularly checked & vessels are kept in closed conditions.
33.	Measures shall be taken to reduce the process vapor emissions as far as possible. Toxic solvents shall not be used. All venting equipment shall have vapour recovery system.	○ **Noted.** ○ Toxic solvent is not being used. ○ Solvent recovery system which recovers 99.8% solvent is already in place.
34.	All the vessels used in manufacturing process shall be closed to reduce the fugitive emission.	○ **Complied**. ○ All the sources of fugitive emissions are regularly checked & vessels are kept in closed conditions.
35.	The fugitive emission in the work zone environment shall be monitored.	○ **Complied**. ○ The fugitive emission in the work zone

	The emission shall strictly conform to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety &Health).	environment is being monitored. o The emission is being confirmed to the standards prescribed by the concerned authorities from time to time (e.g. Directors of Industrial Safety &Health).
36.	Regular monitoring of ground level concentration of SO2, NOx, PM10, PM 2.5, HC and 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 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 construction with the GPCB.	o **Complied**. o Regular monitoring of ground level concentration of SO2, NOx, PM10, PM 2.5, HC and VOC is being carried out by NABL accredited laboratory. Ambient air quality levels are not exceeded the standards stipulated by the GPCB. o The location of the stations and frequency of monitoring has been decided in consultation with the GPCB.

o A Summary for Ambient Air quality for the reporting period is given below:

Location	**Ambient air Quality**					
Parameter	**PM10**	**PM2.5**	**SO2**	**NOx**	**HC**	**VOC**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit	**100**	**60**	**80**	**80**	**---**	**---**
Oct-25	53	29	18	21	ND	ND
Nov-25	55	32	21	26	ND	ND
Dec-26	54	31	19	22	ND	ND
Jan-26	57	33	20	24	ND	ND
Feb-26	59	36	22	28	ND	ND
Mar-26	57	40	25	31	ND	ND

o A Summary for Ambient Air quality for the reporting period is given below:

Location	**Ambient air Quality**							
Parameter	**Ozone**	**Lead**	**CO**	**Benzene**	**BAP**	**Arsenic**	**Nickel**	**Ammonia**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit (8 hr avg.)	**100**	**0.5**	**2**	**5**	**1**	**6**	**20**	**100**
Nov-25	**15.42**	**ND**	**0.93**	**ND**	**ND**	**ND**	**ND**	**11.32**
Feb-26	**13.33**	**ND**	**0.91**	**ND**	**ND**	**ND**	**ND**	**10.42**

37.	Airborne dust at all transfers operations/ points shall be controlled either by spraying water or providing enclosure.	o **Complied**. o Unit has provided water-sprinkling system at coal storage area, fly ash handling area for prevention of Airborne dust particles.
38.	Solvent management shall be carried out as follows: • Reactor and solvent handling pump shall have mechanical seals to prevent leakages. • The condensers shall be provided with sufficient HTA and residence time so as to achieve more than 99.5% solvent recovery.	o **Complied**. o Unit has taken following actions for management of solvent. • For prevention of leakages, mechanical seals are provided to pumps. • Achieving 99.8% recovery by providing condensers. • Separate storage area allotted for storage of solvent.

	• Solvent shall be stored in a separate space specified with all safety measures. • Proper earthing shall be provided in the electrical equipment wherever solvent handling is done. • Entire plant shall be flame proof. The solvent storage tanks shall be provided with breather valve to prevent losses.	• Adequate Earthing facility has been provided to solvent handling system. • Non-Flammable solvent is being used. • Flame proof lighting facility has been provided at spinning process area, pulp feeding area, specific area at Fibre storage yard, Pulp storage yard etc.
39.	Regular monitoring of Volatile Organic Compounds (VOC) shall be carried out in a work zone area and ambient air.	○ **Complied**. ○ Non-volatile solvent is being used. ○ Regular monitoring of ground level concentration (Ambient air) of SO2, NOx, PM10, PM 2.5, HC and VOC is being carried out by NABL accredited laboratory. ○ Summary of Ambient air quality (incl. VSF plant) is given in Point no. 36.
40.	For control of fugitive emission, VOCs, following steps shall be followed: 1. Closed handling and charging system shall be provided for chemicals. 2. Reflux condenser shall be provided over Reactors /Vessels. 3. Pumps shall be provided with mechanical seals to prevent leakages. 4. System of Leak Detection and repair of pump/pipeline based on preventive maintenance.	○ **Complied.** ○ Non-volatile solvent is being used. Hence, there is no scope for the Concentration of VOC in work zone as well as in ambient. ○ Regular monitoring of ground level concentration (Ambient air) of SO2, NOx, PM10, PM 2.5, HC and VOC is being carried out by NABL accredited laboratory. ○ Achieving 99.8% recovery by providing condensers. ○ Mechanical seals are provided to pumps to prevent leakages. ○ System of Leak Detection and repair of pump/pipeline based on preventive maintenance is already in place.
A4	**SOLID/HAZARDOUS WASTE**	
41.	The company shall strictly comply with the rules and regulations with regards to handling and disposal of Hazardous	○ **Complied.** ○ Unit has obtained CCA-Renewal (including authorization for the Hazardous and Other Wastes)

	waste in accordance with the Hazardous & other wastes (Management and Transboundary) 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.	for VSF capacity upto 1,73,375 TPA and Sodium sulphate recovery max up to 1,73,375 TPA having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029.

- Summary of hazardous waste treatment and disposal facilities (incl. VSF plant) for the reporting period as below:

Hazardous Waste Treatment and Disposal Facilities

Type of waste	Schedule	Quantity	Treatment	Disposal practice
ETP Sludge	35.3	10995	De-watering on belt press & drying. Stored under Gypsum storage shed area.	Disposal at TSDF BEIL, or Sold to Cement industries.
Spent Catalyst	17.2	0	Stored in Drums and disposal as per CCA condition	Disposed at TSDF, BEIL, Ankleshwar
Spent Resin	35.2	4	Stored in drums and neutralize	Reutilize for energy recovery in boiler as a waste to energy recovery as per CCA
Sulphur Deashing sludge	17.1	262	Stored in storage rooms which is fully covered	Disposed at TSDF, BEIL, Ankleshwar
Discarded containers and Liners	33.3	3423 Nos.	Decontamination is done at user point in Unit and stored in dedicated storage yard	Sold to authorised recycler as per guidelines of CC&A.
HDPE Bags	33.3	37.08	Collected and stored in dedicated storage yard	Sold to authorised recycler as per guidelines of CC&A.
Used oil	5.1	3.14	Collected and stored in drums	Sold to authorised recycler as per guidelines of CC&A.
Exhaust air OR Gas cleaning residue	35.1	65.05	Collected and stored in dedicated storage yard	Disposed at TSDF, BEIL, Ankleshwar

42.	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.	○ **Complied**. ○ Unit has allotted separate hazardous waste storage area having closed shed and pucca bottom according to the characteristics of waste. Photographs for hazardous waste storage is as below.

		
43.	ETP waste & MEE salt shall be disposed off at the common TSDF site.	○ **Noted**. ○ Summary of hazardous waste treatment and disposal facilities (incl. VSF plant) is given in Point no. 41.
44.	Used Resin & Tow waste (Cellulose) shall be disposed off at the common TSDF site or CHWIF depending on the characteristics of the waste or shall be sent for co- processing.	○ **Noted**. ○ Summary of hazardous waste treatment and disposal facilities (incl. VSF plant) is given in Point no. 41.
45.	Discarded barrels / containers / bags / liners shall be either reused or returned back to supplier or sold only to the authorized vendors after decontamination.	○ **Noted**. ○ Summary of hazardous waste treatment and disposal facilities (incl. VSF plant) is given in Point no. 41.
46.	Used Oil shall be sold only to the registered recyclers.	○ **Noted**. ○ Summary of hazardous waste treatment and disposal facilities (incl. VSF plant) is given in Point no. 41.
47.	The unit shall obtain necessary permission from the nearby TSDF site and CHWIF.	○ **Noted**. ○ There is no any hazardous waste generation from Solvent spun cellulosic fibre plant, which can send to landfill site. ○ Unit has obtained Membership certificate from BEIL-TSDF site for landfilling of hazardous material generating from VSF plant.
48.	The ash shall be supplied to the manufactures of the ash based products such as cement, concrete blocks, bricks, panels, etc. The unit shall strictly comply with the Fly Ash	○ **Complied.** ○ 39349.69 MT quantity of Fly ash sold to the Cement manufacturers and local brick manufacturer as stipulated in the CCA. ○ Summary of Fly ash disposal (incl. VSF plant) is

	Notification under EPA and it shall be ensured that there is 100 % utilization of ash be generated from the unit. Necessary records shall be maintained for this purpose and furnished to the GPCB from time to time.	given in Point no. 30. o The quantity of Fly ash mentioned above is a total quantity of fly ash which includes the generation from VSF manufacturing plant (Birla Cellulosic plant) too. However, the total quantity is still less than the consent quantity. o Unit is filling stipulated comprehensive report annually and the same is being submitted to GPCB and MOEF & CC.
49.	Continuous technical & quality control guidance shall be provided to actual users of fly ash to boost the utilization of fly ash.	o **Complied.** o Unit has arranged to impart technical guidance for more improvement of boosting the utilization of fly ash.
50.	Vehicles used for transportations of hazardous wastes shall be in accordance with the provisions under the Motor Vehicle Act, 1988, and rules made there under.	o **Noted & Complied.**
51.	All possible efforts shall be made for Co- processing of the hazardous waste prior to disposal into TSDF/CHWIF.	o **Complied.** o As prescribed in consent, the generated quantity of ETP sludge is being sold to cement manufactures.
A5	**SAFETY**	
52.	The company shall strictly comply with the rules and regulations manufacture, storage and Import of Hazardous Chemicals rules, 1989 as amended.	o **Complied.** o Unit strictly adheres the applicable rules & regulations for manufacture, storage and Import of Hazardous Chemicals rules, 1989 as amended.
53.	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	o **Complied.** o Unit strictly adheres the applicable rules & regulations for manufacture, storage and Import of Hazardous Chemicals rules, 1989 as amended in 2000 and the public Liability Insurance Act for handling of hazardous chemicals. o Unit has obtained factory license #6059 and registration# 165/17114/1997 dated 06.07.2021 which is valid up to 31.12.2026. o Handling, manufacturing, storage and transportation of hazardous chemicals is being carried out in accordance with the Manufacture,

	Disaster Management Plans have to be prepared and implemented.	Storage & Import of Hazardous Chemicals Rules 1989 as amended time to time.
54.	Necessary precautions like continuous monitoring of hot spots (lignited coal) using temperature detection system, water sprinklers, avoiding stacking of coal near steam pipeline etc. shall be storing for coal to prevent fire hazard.	○ **Noted and complied.**
55.	Storage of flammable chemicals shall be sufficiently away from the production area.	○ **Not applicable.** ○ None of the flammable chemicals is used in mfg. of Solvent spun cellulosic fibre.
56.	Sufficient no. of extinguishers shall be provided near the plant and storage area.	○ **Complied.** ○ Unit has provided 1417 nos. of Extinguisher at VSF plant and 300 nos. of Extinguisher at mfg. plant of Solvent spun cellulosic fibre.
57.	All necessary precautionary measures shall be taken to avoid any kind of accident during storage and handling of toxic / hazardous chemicals.	○ **Complied.**
58.	All the toxic/hazardous chemicals shall be stored in optimum quantity and all necessary permissions in regard shall be obtained before commencing the expansion activities.	○ **Complied**
59.	The project management shall ensure to comply with all the environment protection measure, risk mitigation measure and safeguards mentioned in the Risk Assessment report.	○ **Complied**
60.	Only flame proof electrical fitting shall be provided in the plant premises.	○ **Complied**
61.	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**

62.	All the storage tanks shall be fitted with appropriate controls to avoid any leakages. Bund/dyke walls shall be provide for storage tanks for hazardous chemicals.	○ **Complied**
63.	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**.
64.	Personal Protective Equipment shall be provided to the workers and its usage shall be ensured and supervised.	○ **Complied.**
65.	First Aid Box and Requires Antidotes for the chemicals used in the unit shall be made readily available in adequate quantity.	○ **Complied.** ○ Unit has provided 51 no. of First aid kits at BC (VSF plant) and 14 nos. of First aid kits at Solvent spun cellulosic fibre plant. ○ Unit has installed required antidotes available at the Hospital & OHC located in factory premises.
66.	Training shall be Imparted to all the workers on safety and health aspects of chemicals handling.	○ **Complied.** ○ Safety trainings including Chemical handling are being provided to all the employees on regular basis for safe working and to handle any emergency. Also experts are hired for training purpose. ○ Safety videos for employees and visitors have been prepared. All important safety information contains guide templates provided to educate more about safety at work place. ○ PPEs are mandatory in the plant. PPEs like safety shoes, safety goggles, dust mask, ear plug, helmet etc. made available for all employees and visitors in the plant. Additionally, job specific or special category PPEs are also provided to those who work in critical area.
67.	Occupational Health surveillance of the worker shall be done and records shall be maintained. Pre-employment and periodically medical examination for the worker shall be undertaken as	○ **Complied.** ○ Awareness programs are being conducted on health by CMO and by ABG Emergency Code Red. ○ First aid training is being arranged on periodic interval, which covers all categories of employees, workmen.

	per Factories Act & Rules.	○ Medical check-up is being conducted annually for all employees and six monthly, for those employees who engaged in handling hazardous substances at work place area. ○ All the Employees are covered under Health Survey. Periodic and pre-joining medical checkup for each and every employees and Contractual worker is being done. ○ Medical records of employees and contract workers are maintained online and individual person can access his record as read only from any computer in the Unit.
68.	Transportations of hazardous chemicals shall be done as per provisions of the Motor Vehicle Act & Rules.	○ **Complied**
69.	The company shall implement all preventive and mitigation measures suggested in the Risk Assessment Report.	○ **Noted & Complied.** ○ Unit has prepared HIRA report and preventive and mitigation measure points are complying.
70.	Necessary permission from various statutory authorities like PESO, Factory Inspectorate and others shall be obtained prior to commissioning of the project.	○ **Complied** ○ Unit has obtained factory license from DISH and VSF unit has valid PESO License.
A6.	**NOISE**	
71.	The overall noise level in and around the plant areas shall be kept well within the standards by providing noise control and measure including engineering controls like acoustic insulations hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level confirms to the standard prescribed under The Environmental (Protection) Act,1986 & Rules.	○ **Being complied.** ○ Unit is monitoring noise level in and around plant area as per the prescribed standard under Environment Act 1986. ○ Acoustic enclosures and closed area are being provided for noise reduction.

- Summary of Noise level reading measurement results for the reporting period as below:

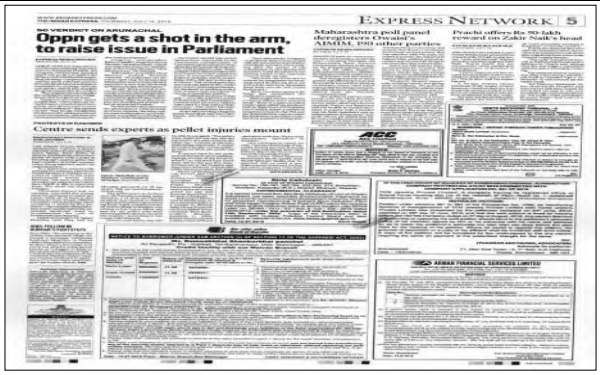
NOISE LEVEL MEASURMENT					
Month		**Nov-25**		**Mar-26**	
Sr. No.	**Location**	**dBA Day**	**dBA Night**	**dBA Day**	**dBA Night**
1	**Entry flap Gate**	**66**	**63**	**65**	**63**
2	**Pulper South Side**	**68**	**66**	**67**	**66**
3	**Spinning East Side**	**66**	**65**	**65**	**64**
4	**ETP West side**	**67**	**66**	**67**	**66**

A7.	**CLEANER PRODUCTION AND WASTE MINIMIZATION**	
72.	The unit shall undertake the Cleaner Production Assessment study through the reputed institute/ organization and shall form a CP team in the company. The recommendation thereof along with the compliance shall be furnished to the GPCB.	○ **Shall be complied.** ○ Unit will take initiatives for cleaner production project once production ratio has been finalized as per mass balance.
73.	The company shall undertake various waste minimization measures including: a. Measuring and controls of quantities of active ingredients to minimize waste. b. Reuse of by-products from the process as raw material or as raw materials substitute. c. Use of automated and close filling to minimize spillages. d. Venting equipment through vapor recovery system. e. Use of high pressure hoses for cleaning to reduce wastewater generation.	○ **Being complied.** ○ Few initiatives taken for waste minimization. ✓ PLC based effluent treatment plant established. ✓ ETP Waste is sold to cement units for co-processing activities. ✓ By-product from VSF plant is sold as a Raw material for other process industries. ✓ Atomization made for Raw materials and solvent tank for minimizing of spillage and leakages. ✓ Solvent recovery equipment is installed in closed loops so that vapor will be collected & recovered in process. ✓ Sweeping and mopping machine has been procured for floor cleaning activities instead of floor washing and reduce the waste water

	f. Recycling of steam condensate. g. Sweeping / mopping of floor instead of floor washing to avoid effluent generation. h. Regular preventing maintenance for avoiding leakage, spillages etc.	generation. ✓ Steam condensate are being recycled. ✓ high pressure hoses are used for cleaning of equipment to reduce wastewater generation ✓ Scheduled Preventive maintenance are done to minimize leakages and spillages.
A8.	**GREEN BELT AND OTHER PLANTATION**	
74.	The unit shall develop green belt within the premises as per the CPCB guidelines. However, adequate land is not available within the premises; the unit shall take up adequate plantation on road sides and suitable open areas in the vicinity or the open areas in consultation with the GPCB and submit an action plan of plantation for next three years to GPCB.	○ **Being complied.** ○ Adequate Green belt has been developed in the campus along the boundary wall and open spaces.
75.	Drip irrigation / low – volume, low-angle sprinkle system shall be used for green belt development within the premises.	○ **Being complied.** ○ Unit is utilizing treated sewage water to use as water sprinkling on green belt area through low-angle sprinkle system.
B.	**OTHER CONDITIONS:**	
76.	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.** ○ The ETP has about 29 hrs. of contingency storage margin in the collection tank. ○ Also, each equipment in ETP has its standby equipment which starts automatically in case of failure of the operating equipment. Therefore, in case of any failure in ETP there is sufficient margin to rectify the same. ○ In VSF plant, Unit has constructed guard pond having 65000 m3 capacity for storage of effluent in case of any emergency situation. ○ As & when effluent generated with having non-Uniform flow or with different characteristics diverted towards Catch pond for further treatment. Unit has constructed catch pond having 2500 m3 Volume, for water storage.

77.	All the Recommendations / commitments made and mitigation measure proposed in the EIA reports of the project prepared by M/s: NEERI and submitted vide letter no NIL dated 29/05/2015 shall be implemented in letter and spirit.	○ **Noted and shall be comply.**
78.	The project authority must strictly adhere to the stipulation made by the Gujarat Pollution Control Board (GPCB), state Government and any statutory authority.	○ **Noted.** ○ All stipulations made by GPCB in various consent and authorizations are Being complied.
79.	During material transfer spillages shall be avoided and garland drain be constructed to avoid mixing of accidental spillages of domestic wastewater or storm water.	○ **Complied.** ○ Unit has constructed material transfer dike as well as separate network of storm water and process drain so that there is no possibilities of mixing of waste water into storm water
80.	Puccca flooring / impervious layer shall be provided in the work areas, chemical storage areas and chemical handling areas to minimize soil contamination.	○ **Complied.** ○ Unit has constructed pucca flooring along with secondary platform for waste, chemicals to minimize soil contamination. ○ Chemical storage area photographs are as below.
		
81.	Leakages from the pipes, pumps shall	○ **Noted and being complied.**

	be minimal and if occurs, shall be arrested promptly.	
82.	No further expansion or modification in the plant likely to cause environmental impacts shall be carried out without obtaining prior Environment Clearance from the concerned authority.	○ **Noted**. ○ No further expansion or modifications in the plant will be carried out without prior Environment Clearance from the concerned authority.
83.	The above conditions will be enforced, inter-alia under the provisions of the water (Prevention & control Pollution) Act, 1974 Air (Prevention & control Pollution), Act, 1981, The Environment (Protection)Act, 1986, Hazardous & other wastes (Management and trans boundary movement)Rules 2016 and the Public Liability Insurance Act , 1991 along with their amendments and rules.	○ **Complied**. ○ Unit is in compliance with the rules and regulations under Water act-1974, Air act-1981 and Hazardous and other waste (Management and trans boundary movements) rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and rules.
84.	The project proponent shall have to 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 and being complied.**
85.	The project management shall ensure that unit companies with all the Environment protections measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.	○ **Noted and being complied.**
86.	The project authorities shall earmark	○ **Complied.**

	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 provided shall not be diverted for any other purpose.	○ The funds earmarked for the environmental protection measures are being maintained and not diverted for other purpose. ○ Unit has kept separate budget to meet the capital & recurring cost for maintaining the environment - cost for all instrument, pipe line and ETP. ○ A year wise expenditure on environment safeguards & towards Enterprise Social commitment is being submitted to MOEF&CC at the end of each FY along with EC compliance report. In FY'26, 54.55 Crores spent towards Environment protection measures.
87.	The applicant shall inform the public that the project has been accorded environment 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 the seven days from the date of the clearance letter in at least two local newspapers that are widely circulated in the region, one of each shall be in the Gujarati language and other in English. A copy of each of the same shall be forwarded to the concerned Regional Office at the Ministry.	○ **Complied.** ○ Advertisement has been published within 7 days from the date of issue of the clearance letter and copy forwarded to Ministry's Regional Office at Bhopal. EC advertisement copy is enclosed below.
○		
88.	The project proponent shall also	○ **Noted and shall be complied**

	comply with any additional conditions that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of environmental protection and management.	
89.	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 of the regulatory authority concerned, on.1st June to 1st December of each calendar year.	○ **Being complied.** ○ Every six monthly compliance report is being submitted to Regional Office of GPCB & SEIAA. ○ Compliance report for the period of **Oct-25 to Mar-26** submitted through E-mail/hard copy in **May-26** to concern statutory authority.
90.	Concealing factor data or submission of false / fabricated data and failure to comply with any of the conditions mentioned above may results in withdrawal of this clearance and attract action under the provision of Environment (Protection) Act, 1986.	○ **Noted.**
91.	The project authorities shall be also adhere to the stipulations made by the Gujarat Pollution Control Board.	○ **Being complied.**
92.	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	○ **Noted and shall be abide.**
93.	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 and shall be abide.**
94.	The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the data of financial closure and final approval of the	○ **Noted and acknowledged.**

	project by the concerned authorities and the date of start of the project.	

ADITYA BIRLA

GRASIM

Dated: 21.05.2026

ID: 14989
Birla Cellulosic- Kharach

To,

Mr. Yogesh Kumar (IRO),
Ministry of Environment, Forest and Climate Change
Aaranya Bhavan, Gandhingar.

Subject: Half Yearly Compliance Report of Environmental Clearance for period of "Oct-25 to Mar-26".

Respected Sir,

With reference to above-mentioned subject and in accordance with conditions stipulated in EC granted, vide **Letter No. J-11011/130/2006-IA II (I) Dated: 15.01.2007**, we hereby submit Half Yearly Environmental Clearance Compliance Report for the reporting period **"Oct-25 to Mar-26".**

We trust that submission is in order.

Yours Faithfully,
(For Birla Cellulosic)

Dharmesh Patel
GM – Environment & Sustainabiliy Cell

Encl. :

1. **EC Copy**
2. **EC-2007 Compliance report (Oct-25 to Mar-26)**

CC To:

1. **GPCB Regional office** - Gujarat pollution control board, Plot No. 1501, GIDC, Ankleshwar
2. **GPCB Head office** - Gujarat pollution control board, Paryavaran Bhavan, CHH Road, Sector 10A, Gandhinagar, Gujarat 382010
3. **MOEFCC office** - Ministry of Environment, Forest & Climate Change, New Delhi.

Birla Cellulose
Fibres from nature

Grasim Industries Limited
Unit – Birla Cellulosic

Works : Birladham, Kharach Kosamba R.S.
Dist. Bharuch (Gujarat) – 394 120 INDIA
CIN : L17124MP1947PLC000410

Telephone +91 2646 270001-005, 270301-305
Fax +91 2646 270010, 270130
Email bc-kharach.info@adityabirla.com

Liaison Office : 11th Floor – 1101 & 1102 OCEAN, Opposite Vadodara Central Mall, Vikram Sarabhai Marg, Vadiwadi, Vadodara – 390023, Gujarat – India
Regd. Office : P.O. Birlagram, Nagda (MP) – 456 331. Phone : (07366) 246760-66, Fax : 255198, Website : www.grasim.com

F. No. J-11011/130/2006- IA II (I)

Government of India
Ministry of Environment and Forests
(I.A. Division)

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail : pb.rastogi@nic.in
Talefax : 011-24367668

Dated 15th January, 2007

To,

Shri S.V. Kulkarni
Executive President
M/s Birla Cellulose
(A unit of Grasim Industries Ltd.)
Birladham, Kharach
Kosamba R.S. – 394 120
Bharuch, Gujarat

Fax No. : 02646-270010 / 270310, 0265-2339626.

Sub : Expansion of Viscose Staple Fibre (VSF) from 60,000 TPA to 1,27,750 TPA and Captive Power Plant (CPP) from 15 MW to 25 MW at Kharach, Hansot, Bharuch, Gujarat by M/s Birla Cellulose Ltd. (A unit of Grasim Industry Ltd.) – Environmental clearance reg.

Sir,

This has reference to your letter no. En/60-17/G/1702 dated 14th March, 2006 wherein you have submitted an 'Application' alongwith project documents including EIA/EMP report, Questionnaire, Risk assessment and Disaster Management Plan etc. seeking environmental clearance under the EIA Notification, 1994 and subsequent clarifications / additional information furnished vide your letters dated 4th May, 2006 and 14th June, 2006.

2.0 The Ministry of Environment and Forests has examined your application. It is noted that proposal is for the expansion of existing Viscose Staple Fibre (VSF) from 60,000 TPA to 1,27,750 TPA and Captive Power Plant (CPP) from 15 MW to 25 MW at Kharach, Hansot, Bharuch, Gujarat as per details given below :

S.N.	Product (s)	Capacity of the plant		
		Existing	Proposed	Total
1.	Viscose Staple Fibre (Main product)	60,000 TPA	67,750	1,27,750
2.	Sodium Sulphate (By product)	38,400 TPA	57,600	96,000
3.	Carbon-disulphide (CS_2)	10,320 TPA	-	-
4.	Sulphuric acid	66,000 TPA	-	-
5.	Thermal Power Plant	15 MW	10 MW	25 MW

The existing plant is located in 242.81 ha. and no land will be required for the expansion project.

3.0 CS_2 condensers, CS_2 recovery system, cyclone separators, SO_2 scrubber, Sulphur recovery plant, ESP and dust collectors will be provided to control fugitive and gaseous emissions. Appropriate technology will be used to achieve the notified standards for CS_2 and H_2S. Total water requirement from River Kim will be 4.09 MGD (18,600 m^3/d). No treated effluent will be discharged anywhere into surface / subsurface drains and / or into river Kim without prior approval from the GSPCB. Treated wastewater will be recycled and reused in the process or used for green belt development or for spraying coal/ash in power plant. ETP sludge and fly ash will be provided to cement and brick manufacturers respectively. Spent catalyst, Spent resin, Sulphur de-ashing sludge will be disposed off at TSDF of M/s Bharuch Enviro Infrastructure Ltd. at Ankleshwar, Bharuch, Gujarat. Waste oil will be sold to approved recyclers.

4.0 Public hearing meeting was held on 28th March, 2006. 'Consent to Establish' has been accorded by the Gujarat State Pollution Control Board (GSPCB) vide letter no. GPCB/BRCH/ NOC-3241[CCA-295(4)]/10965 dated 19th April, 2006. Total cost of the project is Rs. 414.77 Crores.

5.0. The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to strict compliance of the following specific and general conditions:

A. SPECIFIC CONDITIONS :

i. The gaseous emissions (SO_2, NO_x, HC) and particulate matter from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.

ii. The process emissions (SO_2 and CS_2) shall be scrubbed by the caustic or wet scrubber from all the stacks. Electrostatic Precipitators (ESPs) shall be installed to control gaseous emissions. CS_2 condensers, CS_2 recovery system & cyclone separators shall be installed to control Sodium sulphate dust. SO_2 scrubber, Sulphur recovery plant shall be installed to control SO_2 emissions. Vents from scrubbers and condensers shall be periodically monitored and maintained as per the best practicable technology. The company shall monitor the CS_2 and H_2S and data submitted to the Ministry.

iii. The technology employed shall achieve standards notified by the Ministry for the Rayon Industry vide Gazette Notification No. 195 dated 16th October, 2006 regarding ambient air quality and stack emission norms for CS_2 and H_2S. A report shall be submitted every six months to the Ministry's Regional Office at Bhopal / GPCB / CPCB on the emission levels. Provision shall be made for retrofit additional equipment if necessary in future.

iv. The industry shall measure ambient air quality for CS_2 and H_2S at the 3 ambient air quality monitoring stations set up in consultation with the GSPCB to ensure CS_2 and H_2S emissions not to exceed 100 ug/m^3 and 150 ug/m^3.

v. Fugitive emissions in the work zone environment shall be periodically monitored with instruments of proper range and emissions shall conform to the standards prescribed by the GPCB. Action shall be taken to reduce the fugitive emissions in the work zone

environment as far as possible. Dust collectors shall be provided at transfer points to control fugitive emissions.

vi. Total water requirement from River Kim shall not exceed 4.09 MGD (18,600 m^3/d) as per the 'Permission' accorded by the Govt. of Gujarat. The wastewater shall be treated in the ETP through primary, secondary and tertiary treatment and disposed off in the pipeline of M/s Bharuch Environ Acqua Infrastructure Ltd. (BEAIL). Approval of the Gujarat Pollution Control Board shall be obtained for alteration in the routing of pipeline for disposal of effluent. The quality of the treated effluent shall conform to the standards prescribed by GPCB / EPA Rules. Efforts shall be made to recycle and reuse the treated wastewater in the process or used for irrigation, agricultural and horticultural purposes at the site. Treated effluent from captive power plant (CPP) shall be used for spraying coal/ash in power plant itself. No treated effluent shall be discharged anywhere into surface / subsurface drains and / or into river Kim without prior approval from the GPCB. Domestic wastewater shall be treated in STP and used for green belt development.

vii. The solid waste shall be segregated according to its calorific content and stored separately for treatment and disposal. Spent catalyst, Spent resin, Sulphur de-ashing sludge shall be disposed off at TSDF of M/s Bharuch Enviro Infrastructure Ltd. (BEAIL), Ankleshwar, Gujarat. ETP sludge shall be provided to cement manufacturers and properly disposed off and fly ash shall be provided to brick manufacturers. Used / waste oil shall be sold to authorized recyclers / reprocessors.

viii. Green belt of adequate width and density shall be developed in 70 ha out of the total 243 ha project area to mitigate the effect of fugitive emissions all round the plant. The development of green belt along the boundary wall, open space and avenue roads shall be provided in consultation with the local DFO as per the CPCB guidelines.

ix. Rainwater shall be harvested to conserve the fresh water and recharge the ground water and an action plan shall be submitted to the Ministry.

x. The project proponent shall comply with the environmental protection measures and safeguards recommended in EIA / EMP / Risk Analysis reports as well as the recommendations of the public hearing panel.

xi. The Company shall undertake eco-development measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan shall be submitted to the GPCB within three months of receipt of this letter for approval.

xii. As mentioned in EIA/EMP, Rs. 20.56 Crores and Rs. 6.27 Crores earmarked towards the capital cost and recurring cost/annum respectively for the environmental pollution control measures shall be used exclusively to implement the conditions stipulated by the Ministry of Environment & Forests as well as the State Government. A tome bound implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry's Regional Office at Bhopal. The funds shall not be diverted for any other purposes.

B. GENERAL CONDITIONS :

i. The project authorities must strictly adhere to the stipulations made by the Gujarat State Pollution Control Board (GPCB) and the State Government.

ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. 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 adequacy of the conditions imposed and to add additional environmental protection measures required, if any.

iii. Adequate number of influent and effluent quality monitoring stations should be set up in consultation with the GPCB. Regular monitoring shall be carried out for relevant parameters.

iv. The project authorities must strictly comply with the rules and regulations under the Manufacture, Storage and Import of Hazardous Chemicals Rules, 2000. Prior approvals of Chief Inspector of Factories, Chief Inspector of Explosives, Fire Safety Inspectorate etc. must be obtained.

v. The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2000. Authorization from the GPCB must be obtained for collection, storage, treatment and disposal of hazardous wastes.

vi. The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) 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 the Environment (P) Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

vii. Occupational health surveillance programme shall be undertaken as regular exercise for all the employees, specifically for those engaged in handling hazardous substances. First aid facilities in the Occupational Health Care Centre shall be strengthened and medical records of each employee shall be maintained separately.

viii. A separate Environment Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and monitoring functions.

ix. The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.

x. The implementation of the project vis-à-vis environmental action plans shall be monitored by Ministry's Regional Office at Bhopal / GPCB / CPCB. A six monthly compliance status report should be submitted to monitoring agencies.

xi. The Project Proponent should advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the Gujarat Pollution Control Board / Committee and may also be seen at Website

of the Ministry and Forests at http://envfor.nic.in. The advertisement shall be made within 7 days from the date of issue of the clearance letter and a copy of the same shall be forwarded to the Ministry's Regional Office at Bhopal.

xii. 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 land development work.

6.0. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

7.0. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.

8.0. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991alongwith their amendments and rules.

15/11/07

(Dr. P.B. Rastogi)
Additional Director

Copy to :

1. The Secretary, Department of environment and forests, Govt. of Gujarat, Gandhi Nagar, Gujarat.
2. The Chief Conservator of Forests (Central), Ministry of Environment & Forests, Regional Office (West), Link Road No. 3, E - 5, Arera Colony, Bhopal - 462 016, M. P.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi – 110 032.
4. The Chairman Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10-A, Gandhi Nagar – 382 010, Gujarat.
5. JS (CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New Delhi.
7. Guard File.
8. Monitoring File.
9. Record File.

15/11/07

(Dr. P.B. Rastogi)
Additional Director

Expansion of Viscose Staple Fibre (VSF) from 60,000 TPA to 1,27,750 TPA
&
Captive Power Plant (CPP) from 15 MW to 25 MW

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

Name of Project	:	Expansion of Viscose Staple Fibre (VSF) from 60,000 TPA to 1,27,750 TPA & Captive Power Plant (CPP)
EC letter no. & Date	:	F.No.J-11011/130/2006-IA II (I) Dtd: 15.01.2007
Address for Correspondence	:	M/s. Birla Cellulosic (A Unit of Grasim Industries Ltd.) Birladham, Village: Kharach, Kosamba (R.S.), Tehsil: Hansot, Bharuch (Gujarat) – 394120
Duration/Reporting period	:	**Oct-25 to Mar-26**

<table>
<tr><th>S. No</th><th>Compliance conditions by MoEF & CC</th><th>Action Taken by Birla Cellulosic</th></tr>
<tr><td>A.</td><td colspan="2">SPECIFIC CONDITIONS</td></tr>
<tr><td>1.</td><td>This has reference to your letter no. En/60-17/G/1702 dated 14th March,2006 wherein you have submitted an 'Application' along with project Documents including EIA/EMP report, Questionnaire, Risk assessment and Disaster Management plan etc. seeking environmental clearance under the EIA Notification, 1944 and subsequent clarifications / additional information furnished vide your letters dated 4th May, 2006 and 14th June'2006.</td><td>o <u>Noted.</u></td></tr>
<tr><td>2.</td><td>The Ministry of Environment and Forests has examined your application. It is noted that proposal is for the Expansion of existing Viscose staple Fibre (VSF) from 60,000 TPA to 1,27,750 TPA and captive Power plant (CPP) from 15 MW to 25 MW at Kharach, Hansot, Bharuch, Gujarat as per details given below:
<table>
<tr><th>S. N.</th><th>Products</th><th>Capacity of the Plant</th><th></th><th></th></tr>
<tr><th></th><th></th><th>Existing</th><th>Proposed</th><th>Total</th></tr>
<tr><td>1</td><td>Viscose Staple Fibre (Main Product)</td><td>60,000 TPA</td><td>67,750</td><td>1,27,750</td></tr>
<tr><td>2</td><td>Sodium Sulphate (By Product)</td><td>38,400 TPA</td><td>57,600</td><td>96,000</td></tr>
</table></td><td>o <u>Noted</u>
o Unit has obtained EC for VSF production capacity up to 1,27,750 TPA along with 25 MW CPP on 15.01.2007.
o Unit has obtained EC for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 22.02.2018, which was amended on 31.12.2018.
o Unit has obtained EC to CTE for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 06.09.2019.
o Unit has obtained CCA-Renewal for VSF capacity upto 1,73,375 TPA and Sodium sulphate recovery max up to 1,73,375 TPA having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029.
o The expansion project was implemented within the existing plant and no extra land was used.</td></tr>
</table>

	<table><tr><td>3</td><td>Carbon-disulphide (CS2)</td><td>10,320 TPA</td><td>-</td><td>-</td></tr><tr><td>4</td><td>Sulphuric Acid</td><td>66,000 TPA</td><td>-</td><td>-</td></tr><tr><td>5</td><td>Thermal Power Plant</td><td>15 MW</td><td>10 MW</td><td>25 MW</td></tr></table> The existing plant is located in 242.81 ha. and no land will be required for the expansion project.	
3.	CS2 condensers, CS2 recovery system, Cyclone separators, SO2 scrubber, Sulphur Recovery plant, ESP and dust collectors will be provided to control fugitive and gaseous Emissions. Appropriate Technology will be used to achieve the notified standards for CS2 and H2S.	○ **Complied.** ○ Unit has 4 spinning machines and each spinning machines has been provided with 3 stage CS2 condensing system. ○ For recovering of CS2, there's CS2 recovery system installed which comprising of recovery trough with steam injection and a water scrubber for condensing the steam. The vapors from the scrubber are passed through the CS2 condensing system. ○ Dust collection systems are provided with cyclones to collect the charcoal dust generated by feeding of charcoal into the CS2 manufacturing process. ○ Cyclone separators are provided for recovery of sodium sulphate in the triple effect evaporators for producing anhydrous sodium sulphate. ○ Cyclone separators & Water scrubbers are provided for scrubbing out of sodium sulphate dust from the salt dryer exhaust air to avoid dust emission. ○ Both sulphuric acid plants has 2- Stage scrubber system for scrubbing SO2 using alkaline solution. ○ Unit has installed Klaus process based sulphur recovery plant to recover sulphur from the exhaust gases of CS2 Plant. After the Klaus process, the gases are passed through a caustic scrubber and meeting the prescribed emission norms. The recovered sulphur is reused back in the process.

		○ Unit has installed 3 no. boilers, whereas, Boiler No. 1 & 2 are operating with three fields ESP and Boiler no. 3 is operating with four fields ESP. Through this ESP, we are meeting prescribed norms. ○ Unit has installed dust collectors with ash evacuation system to control dust from ash handling area. ○ The charcoal and coal belt conveyors are fully sealed with provision of water spray. ○ The exhaust gases from spinning machines are passed through 175 M height chimney, which is in line with the guidelines stipulated in the consent. ○ A system of EDTA scrubbing technology for recovering Sulphur from H2S gas and CAP system for CS2 recovery are being operated effectively. ○ The emission concentration of CS2/H2S is being maintained as per GPCB Norms.
	Total water requirement from River Kim will be 4.09 MGD (18,600 m3/d). No treated Effluent will be discharged anywhere into surface/ subsurface drains and/or into river Kim Without prior approval from the SPCB. Treated wastewater will be recycled and reused in the Process or used for green belt development or for spraying coal/ash in power plant. ETP sludge and fly ash will be provided to cement and brick manufacturers respectively. Spent catalyst, Spent resin, Sulphur de-ashing sludge will be disposed off at TSDF of M/s Bharuch Enviro Infrastructure Ltd. at Ankleshwar, Bharuch, Gujarat.	○ An agreement with Irrigation Department has been made for water withdrawal @ 19000 M3/day. ○ Unit has constructed a separate 24 KM long underground pipeline for discharging the treated effluent in the estuary of Kim River as approved by GPCB. This disposal point was suggested by NIO, Goa is 2007. ○ Treated effluent is being recycled in Belt press washing, Lime slurry making. ○ Generated quantity of Fly ash sold to surrounding local Brick and Cement manufacturers as stipulated in CCA. ○ Generated quantity of ETP sludge is being sold to cement manufactures as stipulated in CCA. ○ Generated quantity of Deashing sludge, Spent Catalyst is being sent to BEIL, TSDF site as stipulated in CCA. ○ Generated quantity of Spent resin burnt in boiler for waste to energy recovery as stipulated in CCA.

	Waste oil will be sold to approve recyclers.	○ Generated quantity of used oil is being sold to authorized recyclers as stipulated in CCA.
4.	Public hearing meeting was held on 28th March, 2006. 'Consent to Establish' has been accorded by the Gujarat State Pollution Control Board (GSPCB) vide letter no. GPCB/BRCH/NOC-3241[CCA 295(4)]/10965 dated 19th April, 2006. Total cost of the project is Rs. 414.77 Crores.	○ **Noted.**
5.	The Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA Notification dated 14th September, 2006 subject to strict compliance of the following specific and general conditions:	○ **Noted.**
i.	The gaseous emissions (SO2, NOx, HC) and particulate matter from various process units shall confirm to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.	○ **Being complied.** ○ The gaseous emission (SO2, NOx) and particulate matter generates from power plant unit and CS2, H2S, SO2 & acid mist gaseous emission generates from Spinning, CS2 & Acid plant process are met to the standards prescribed by the concerned authorities from time to time. ○ No HC is being emitted from Birla cellulosic. ○ At no time, the emission levels exceed beyond the stipulated standards. ○ There has been no event of failure of pollution control systems in the last six months. ○ Moreover, Multiple gas sensors and alarm systems Inter-linking with the pollution control equipment /units provided so that early indication of malfunctioning can be detected and control measures can be taken accordingly. In case of any event of completely failure of pollution control equipment, the respective unit(s) is stopped.

		o Vents from scrubbers & condensers are monitored periodically by the in-house laboratory (internal laboratory). o Unit has appointed NABL accredited third party laboratory for monthly monitoring of Stack concentration as well as ambient air quality. o As per the monitoring conducted by third party Lab, the results are well within the prescribed norms as per consent condition.

o A Summary for Flue gas emission from stack for the reporting period is given below:

Location	**Boiler-1 & 2 (76 m)**			**Boiler-3 (86 m)**			
Parameter	**SPM**	**SO2**	**NOx**	**SPM**	**SO2**	**NOx**	**Mercury**
Unit	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**	**mg/Nm3**
Limit	100	600	600	50	600	300	0.03
Oct-25	49	256	86	45	245	79	LTAR
Nov-25	44	249	83	42	240	76	LTAR
Dec-25	48	253	85	46	243	79	LTAR
Jan-26	46	251	84	44	241	77	LTAR
Feb-26	49	258	88	48	247	81	LTAR
Mar-26	48	254	86	46	244	79	LTAR

LTAR* :- Lower Than Accreditation Range

o A Summary for process gas emission from stack for the reporting period is given below:

Location	**CS2 Plant + Spinning**		**Total**	**Acid plant I**		**Acid plant II**	
Parameter	**CS2**	**H2S**		**SO2**	**Acid Mist**	**SO2**	**Acid Mist**
Unit	**Kg/ToF**			**Kg/ToA**	**mg/Nm3**	**Kg/ToA**	**mg/Nm3**
Limit	**125**			**2**	**25**	**2**	**25**
Oct-25	8.11	1.03	9.14	0.74	10.29	0.63	7.04
Nov-25	7.45	1.04	8.49	0.81	10.73	0.72	7.67
Dec-25	7.19	1.03	8.22	0.76	10.41	0.66	7.23
Jan-26	7.78	1.03	8.81	0.79	10.56	0.69	7.45
Feb-26	7.53	1.03	8.55	0.75	10.34	0.64	6.98
Mar-26	7.11	1.02	8.14	0.71	10.12	0.60	6.72

(-)* : Plant was under maintenance

ii.	The process emissions (SO2 and CS2) shall be scrubbed by the caustic or wet scrubber from all the stacks. Electrostatic Precipitators (ESPs) shall be installed to control gaseous emissions. CS2 condensers, CS2 recovery system & cyclone separators shall be installed to control Sodium sulphate dust. SO2 scrubber, Sulphur recovery plant shall be installed to control SO2 emissions. Vents from scrubbers and condensers shall be periodically monitored and maintained as per the best practicable technology. The company shall monitor the CS2 and H2S and data submitted to the Ministry.	○ **Complied.** ○ The mitigation measures adopted to control emissions for CS2/H2S concentration in process as well as ambient air is given below.

Process	**Emission**	**Mitigation Measures**
Sulphuric Acid Plant (2 nos.)	**SO_2**	**2 - Stage Alkali (Caustic) Scrubber**
CS2 Plant	**CS2/ H2S**	**Sulphur Recovery system**
Sulphur Recovery Plant	**SO_2**	**Alkali (Caustic) Scrubber**
Spinning Machine (4 nos.)	**CS2**	**CS2 recovery system having a water scrubber, 3-stage condensers for recovering CS2, Exhaust system, EDTA/CAP system (CS2 & H2S gas recovery system)**
Sodium Sulphate Recovery plant	**Sodium Sulphate dust**	**Cyclone Separator & Water scrubber**

		Boiler | **Gaseous Emission** | **ESP & Lime dosing system**
iii.	The technology employed shall achieve standards notified by the Ministry for the Rayon Industry vide Gazette Notification No. 195 dated 16th October,2006 regarding ambient air quality and stack emission norms for CS2 and H2S. A report shall be submitted every six months to the Ministry's Regional Office at Bhopal / GPCB / CPCB on the emission levels. Provision shall be made for retrofit additional equipment if necessary in future.	○ **Complied.** ○ The technology employed has already achieved standards notified by the Ministry for the Rayon Industry vide Gazette Notification No. 798, part-II – Sec. 3(i) dated 9th November,2018 regarding Environmental Standard for Man-Made fibre industry. ○ Every six monthly compliance report is being submitted to GPCB & MOEFCC office. Six monthly Compliance report for the period of **Apr-25 to Sept-25** was submitted in hard/soft copy in **Nov-25.** ○ A system of EDTA scrubbing technology for recovering Sulphur from H2S gas and CAP system for CS2 recovery are being operated effectively.
iv.	The industry shall measure ambient air quality for CS2 and H2S at the 3 ambient air quality monitoring stations set up in consultation with the GSPCB to ensure CS2 and H2S emission not to exceed 100 µg/m3 and 150 µg/m^3.	○ **Being complied.** ○ Unit has installed 3 nos. of Continuous ambient air quality monitoring stations in consultation with GPCB. ○ Unit has also installed 4 nos. of offline Ambient air quality monitoring stations within premises. ○ Unit has appointed NABL accredited laboratory for monthly monitoring of Stack concentration as well as ambient air quality, as per the monitoring conducted by their team, the results are well within the prescribed norms as per consent condition. ○ Such parameters i.e. Ozone, Lead, CO, Benzene, BAP, Arsenic, Nickel, Ammonia are not a part of process as well as not being generating. Analysis of same is being

		conducted on periodic basis.

o A Summary for Ambient Air quality for the reporting period is given below:

Location	**Ambient air Quality**					
Parameter	**PM10**	**PM2.5**	**SO2**	**NOx**	**H2S**	**CS2**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit	**100**	**60**	**80**	**80**	**150**	**100**
Oct-25	53	29	18	21	21	23
Nov-25	55	32	21	26	22	24
Dec-25	54	31	19	22	20	22
Jan-26	57	33	20	24	21	23
Feb-26	59	36	22	28	23	25
Mar-26	57	40	25	31	26	29

o A Summary for Ambient Air quality for the reporting period is given below:

Location	**Ambient air Quality**							
Parameter	**Ozone**	**Lead**	**CO**	**Benzene**	**BAP**	**Arsenic**	**Nickel**	**Ammonia**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit (8 hr avg.)	**100**	**0.5**	**2**	**5**	**1**	**6**	**20**	**100**
Dec-25	15.42	ND	0.93	ND	ND	ND	ND	11.32
Mar-26	13.33	ND	0.91	ND	ND	ND	ND	10.42

v.	Fugitive emissions in the work zone environment shall be periodically monitored with instruments of proper range and emissions shall conform to the standards prescribed by the GPCB. Action shall be taken to reduce the fugitive emissions in the work zone environment as far as possible.	o **<u>Being complied.</u>** o Regularly monitoring of fugitive emission of CS2, H2S and SO2 in work zone environment is being done by an in house laboratory and work area monitoring reports are regularly submitting to concerned govt. authority. o Fugitive emissions in the work zone environment are being controlled by exploring techniques like Motorized shutter & suction hoods on spinning machines & cutters, shutters for stretch roller & gear box and perfect sealing of all the openings in various tanks of spin bath.

<table>
<tr><td></td><td>Dust collectors shall be provided at transfer points to control fugitive emissions.</td><td>o Provision of fresh air by induced draft fans is in place at the spinning machines for ease of working.
o Online gas detectors installed in the work zone around the spinning machines. Motorized shutters and completely closed after treatment machine with suction duct are there to control fugitive emission.
o Dust collection systems are provided to collect the charcoal dust generated by feeding of charcoal into the CS2 manufacturing process.
o The charcoal and coal belt conveyors are fully sealed with provision of water spray.
o Cyclone separators & Water scrubbers are provided for scrubbing out of sodium sulphate dust from the salt dryer exhaust air to avoid dust emission.</td></tr>
<tr><td>vi.</td><td>Total water requirement from River Kim shall not exceed 4.09 MGD (18,600 m3/d) as per the ‘Permission’ accorded by the Govt. of Gujarat.</td><td>o <u>Noted & Complied.</u>
o An agreement with Irrigation Department has been made for water withdrawal @ 19000 M3/day.
o A Summary of water Consumption for the reporting period is given below:
<table>
<tr><th>Month</th><th>Quantity (M3/Month)</th></tr>
<tr><td>Oct-25</td><td>392868</td></tr>
<tr><td>Nov-25</td><td>339409</td></tr>
<tr><td>Dec-25</td><td>385554</td></tr>
<tr><td>Jan-26</td><td>375235</td></tr>
<tr><td>Feb-26</td><td>332828</td></tr>
<tr><td>Mar-26</td><td>389865</td></tr>
<tr><td>Total</td><td>2215759</td></tr>
<tr><td>Average (M3/day)</td><td>12175</td></tr>
</table>
o The Half- yearly average water Consumption is 12175 M3/day, which is less than the quantity mentioned in Agreement.
o A full-fledged effluent treatment plant comprising of primary treatment of neutralization, settling facility and</td></tr>
</table>

	The wastewater shall be treated in the ETP through primary, secondary and tertiary treatment and disposed off in the pipeline of M/s Bharuch Enviro. Aqua Infrastructure Ltd. (BEAIL). Approval of the Gujarat Pollution Control Board shall be obtained for alteration in the routing of pipeline for disposal of effluent.	secondary treatment of biological system based on extended aeration activated sludge process has been installed. The wastewater from the plant is treated in this well-established ETP. o A separate 24 KM long underground pipeline for discharging the treated effluent in the estuary of Kim River as approved by GPCB. The disposal point was suggested by NIO, Goa in 2007. o There was a typographical error regarding the disposal of effluent from using the pipeline of Bharuch Enviro Infrastructure Ltd. (BEIL) in the letter issued by MoEFCC. We requested MoEFCC for correction vides our letter dated 9th April 2007.
	The quality of the treated effluent shall confirm to the standards prescribed by GPCB / EPA Rules.	o A full-fledged in-house laboratory is established to monitor the parameters round the clock. o Unit has appointed NABL accredited third party laboratory for monthly monitoring of waste water from the plant and township is treated in the well-established ETP and STP, as per the monitoring conducted by their team, the results are well within the prescribed norms as per consent condition. Month-wise summary for quality of the treated effluent is given in below table.
	Efforts shall be made to recycle and reuse the treated waste water in the process or used for irrigation, agricultural and horticultural purposes at the site.	o Under Water conservation program, Unit is being recycled & reuse the treated waste water in the process & reduce fresh water consumption and increase recycling of treated water, by adopting various initiative measures. o Treated effluent from captive power plant (CPP) is being used for spraying coal/ash in power plant itself. o No treated effluent is being discharged anywhere into surface/ subsurface drains

	Treated effluent from captive power plant (CPP) shall be used for spraying coal/ash in power plant itself. No treated effluent shall be discharged anywhere into surface/ subsurface drains and / or into river Kim without prior approval from the GPCB. Domestic wastewater shall be treated in STP and used for green belt development.	and / or into river Kim without prior approval from the GPCB. o The Sewage water from the plant and township is treated in the well-established STP and recycled for green belt development.

o A Summary of treated effluent for the reporting period is given below:

Parameter	pH	Temp.	S.S.	COD	BOD	Amm. N	Color	Zinc
Unit	**-**	**°C**	**mg/l**	**mg/l**	**mg/l**	**mg/l**	**Co-pt u.**	**mg/l**
Limit	**6.5-8.5**	**40**	**100**	**250**	**100**	**50**	**100**	**10**
Oct-25	7.21	29.9	36	131	24.58	2.31	75	0.73
Nov-25	7.4	29.5	52	128	31.24	2.14	65	0.82
Dec-25	7.2	29.6	41	132	26.56	2.03	55	0.46
Jan-26	7.2	30	41	130	30.2	2.01	65	0.65
Feb-26	7.1	29.9	34	119	22.74	1.83	55	0.56
Mar-26	7.1	30.4	29	128	28	1.71	45	0.47

o A Summary of treated Domestic sewage for the reporting period is given below:

Parameter	TSS	BOD	Residual Free Chlorine	pH
Unit	**mg/Lit.**	**mg/Lit.**	**mg/Lit.**	**-**
Limit	**<30**	**<20**	**Min 0.5**	**-**
Oct-25	21	16	LTAR(<0.2)	7.61
Nov-25	19	15	LTAR(<0.2)	7.31
Dec-25	26	17	0.80	7.52
Jan-26	23	17	0.60	7.32
Feb-26	18	14	0.80	7.19
Mar-26	21	13	0.90	7.26

vii.	The solid waste shall be segregated according to its calorific content and stored separately for treatment and disposal. Spent catalyst, Spent resin, Sulphur de-ashing sludge shall be disposed of at TSDF of M/s Bharuch Enviro Infrastructure Ltd. (BEIL), Ankleshwar, Gujarat.	o **<u>Being complied.</u>** o All the wastes are segregated according to its composition and stored separately for treatment/disposal. o Generated Deashing sludge & Spent catalyst is disposed to BEIL, TSDF site as stipulated in CCA.

	ETP sludge shall be provided to cement manufacturers and properly disposed off and fly ash shall be provided to brick manufacturers. Used/ waste oil shall be sold to authorized recyclers/ pre-processors.	○ As per latest CCA-amendment received from GPCB, Spent resin reutilized as a waste to recover energy in CPP for Power & Steam generation. ○ Generated ETP sludge is provided to cement manufacturers as stipulated in CCA. ○ Generated Fly ash is provided to surrounding local Brick and Cement manufacturers for Co-processing as stipulated in the CCA. ○ Used oil is being sent to authorised recyclers.

○ A Summary of hazardous waste treatment and disposal facilities for the reporting period is given below:

Hazardous Waste Treatment and Disposal Facilities				
Type of waste	**Schedule No.**	**Quantity**	**Treatment**	**Disposal practice**
ETP Sludge	35.3	10955	De-watering on belt press & drying. Stored under Gypsum storage shed area.	Disposal at TSDF BEIL, or Sold to Cement manufacturer
Spent Catalyst	17.2	0	Stored in Drums and disposal as per CCA condition	Disposed at TSDF, BEIL, Ankleshwar
Spent Resin	35.2	4	Stored in drums and neutralize	Reutilize for energy recovery in boiler as a waste to energy recovery as per CCA
Sulphur Deashing sludge	17.1	262	Stored in storage rooms which is fully covered	Disposed at TSDF, BEIL, Ankleshwar
Discarded containers and Liners	33.3	3423 Nos.	Decontamination is done at user point in Unit and stored in dedicated storage yard	Sold to authorised recycler as per guidelines of CC&A.
HDPE Bags	33.3	37.08	Collected and stored in dedicated storage yard	Sold to authorised recycler as per guidelines of CC&A.
Used oil	5.1	3.14	Collected and stored in drums	Sold to authorised recycler as per guidelines of CC&A.
Exhaust air OR Gas cleaning residue	35.1	65.05	Collected and stored in dedicated storage yard	Disposed at TSDF, BEIL, Ankleshwar

viii.	Green belt of adequate width and density shall be developed in 70 ha out of the total 243 ha project area to mitigate the effect of fugitive emissions all round the plant. The development of green belt along the boundary wall, open space and avenue roads shall be provided in consultation with the local DFO as pert he CPCB guideline.	○ **Complied.** ○ Adequate Green belt has been developed in the campus along the boundary wall and open spaces. ○ Native plant species has been selected in consultation with DFO and as per the directives of DoEF, Mangroves have been planted in 100 Ha. at Raniyo Island.
ix.	Rainwater shall be harvested to conserve the fresh water and recharge the ground water and an action plan shall be submitted to the Ministry.	○ **Being complied.** ○ The conserved quantity in this storm water well as well as in separate pit is being harvest to conserve the fresh water. In the Monsoon season, approx. ~456712 m^3 rain water was conserved & utilized within plant premises along with hard water. Currently, we are not recharging ground water. ○ Unit is regularly submitting Monsoon action plan to GPCB every year.
x.	The project proponent shall comply with the environmental protection measures and Safeguards recommended in EIA / EMP / Risk Analysis reports as well as the recommendations of the public hearing panel.	○ **Complied**. ○ We are complying with environmental protection measures & safeguards recommended in EIA / EMP / Risk Analysis Reports.
xi.	The Company shall undertake eco-development measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan shall be submitted to the GPCB within three months of receipt of this letter for approval.	○ **Complied.** ○ Various Eco development measures in and around 32 villages have been undertaken. Our main focus has been in following 4 areas: ○ Education: ✓ Pre School Education ✓ School Development work ✓ Education Support Project ✓ Vocational & Technical Education Project ✓ School Infrastructure ○ Health Care:

		✓ Preventive Health Care ✓ Curative Health Care ✓ Reproductive and Child Health ✓ Health Support Program ✓ Health Infrastructure ✓ Blood donation camp ✓ Nutrition kit distribution to TB patient o Infrastructure Development: ✓ Roads/Culverts/Bridges/Bus Stands ✓ Community Halls ✓ Other Community Assets works ✓ RO plant installation. o Social activities: ✓ Institutional building & strengthening ✓ Awareness programs ✓ Social Events ✓ Promotion of heritage/culture/Sports ✓ Disaster Relief Programs. o Unit has developed green belt area in and around plant premises, and obtained certificate from DFO and same is submitted to GPCB from the receipt of this order.
xii.	As mentioned in EIA/EMP, Rs.20.56 Crores and Rs.6.27 Crores earmarked towards the capital cost and recurring cost/annum respectively for the environmental pollution control measures shall be used exclusively to implement the condition stipulated by the Ministry of Environment & Forests as well as the State Government. A time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry's Regional Office at Bhopal. The funds shall not be diverted for any other purposes.	o **Complied.** o The funds earmarked for the environmental protection measures are being maintained and not diverted for other purpose. o A year wise expenditure on environment safeguards & towards Enterprise Social commitment is being submitted to MOEF&CC at the end of each FY along with EC compliance report. In FY'26, 54.55 Crores spent towards Environmental protection measures. o Unit has taken various improvement measures to control pollution, which is beyond permissible limit, as mentioned below:

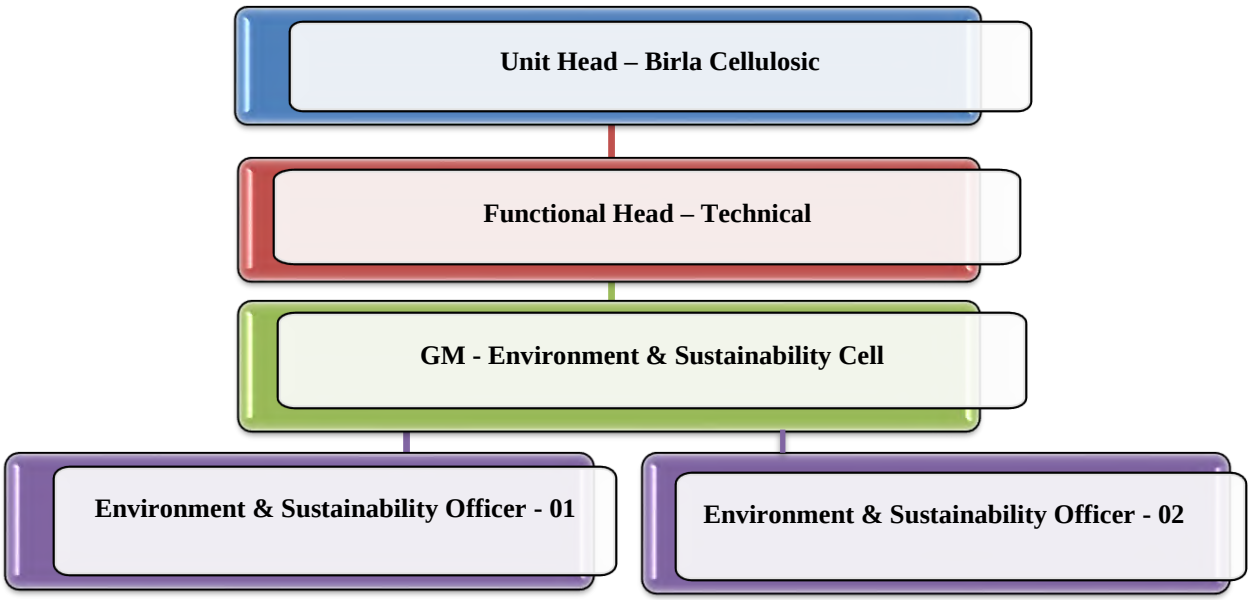
		○ As an additional measure, a system of EDTA scrubbing technology for recovering Sulphur from H2S gas and CAP system for CS2 recovery are being operated effectively. ○ Unit has commissioned an additional Biological reactor having 15400 m3 capacity, higher efficient jet aerators to meet EUBAT (European best available technology) norms for COD, which is stringent than consented norms.
GENERAL CONDITIONS		
i.	The project authorities must strictly adhere to the stipulations made by the Gujarat State Pollution Control Board (GPCB) and the State Government.	○ **Complied.** ○ All stipulations made by GPCB in various consent and authorizations are strictly complied.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. 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 adequacy of the conditions imposed and to add additional environmental protection measures required, if any.	○ **Noted.** ○ No further expansion or modifications in the plant will be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.
iii.	Adequate number of influent and effluent quality monitoring stations should be set up in consultation with the GPCB. Regular monitoring shall be carried out for relevant parameters.	○ **Complied.** ○ There are 3 locations for influent quality monitoring points and 1 location for effluent quality monitoring station finalized in consultation with the GPCB. ○ Influent quality monitoring points are located at Grit Chamber, Primary Outlet and Secondary outlet and effluent quality monitoring station which is located at Final Outlet. ○ Results are enclosed in reply of point no. vi.

iv.	The project authorities must strictly comply with the rules and regulations under the manufacture, storage and import of Hazardous Chemicals Rules, 2000. Prior approvals of Chief Inspector of Factories, Chief Inspector of Explosives, Fire Safety Inspectorate etc. must be obtained.	○ **Being complied.** ○ Approval for chlorine storage has taken on 09.10.2023 and valid up to 30.09.2028. ○ Approval for possession and sales of Sulphuric acid has been taken on 27.02.2018 and valid up to 27.02.2028. ○ Approval for Ammonia, DA gas storage has been taken on 17.03.2022 and valid up to 30.09.2027. ○ Unit has obtained factory license #6059 and registration# 165/17114/1997 dated 06.07.2021, which is valid up to 31.12.2026. ○ Handling, manufacturing, storage and transportation of hazardous chemicals is being carried out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended time to time.
v	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous wastes (Management and Handling) Rules 2000. Authorization from the GPCB must be obtained for collection, storage, treatment and disposal of hazardous wastes.	○ **Being complied.** ○ Unit has obtained CCA-Renewal (including authorization for the Hazardous and Other Wastes) for VSF capacity upto 1,73,375 TPA and Sodium sulphate recovery max up to 1,73,375 TPA having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029. ○ Hazardous waste Rules is fully complying as per the consent stipulated norms.
vi	The overall noise levels in and around the plant area shall be kept well within the standard (85 dBA) 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(P) Rules,1989 viz.75 dBA (day time) and 70 dBA (night time)	○ Regular monitoring the noise level in and around the plant area is being conducted.

o A summary for noise level monitoring for the reporting period is given below:

Sr. No.	Location	Day	Night
1	Office- Workshop	50	48
2	Gate 1	48	46
3	Gate 2	50	46
4	TRADC circle	51	44
5	Shopping Centre	51	44
6	D-Block	49	45
7	School	47	44
8	Hospital	41	40

Vii	Occupational health surveillance program shall be undertaken as regular exercise for all the employees, specifically for those engaged in handling hazardous substances. First aid facilities in the Occupational Health Care Centre shall be strengthened and medical records of each employee shall be maintained separately.	o **Being complied.** o Awareness programs are being conduct on health by CMO and by ABG Emergency Code Red. o First aid training is being arranged on periodic interval, which covers all categories of employees, workmen. o Medical check-up is being conducted annually for all employees and six monthly, for those employees who engaged in handling hazardous substances at work place area. o All the Employees are covers under Health Survey. Periodic and pre-joining medical check-up for each & every employees and Contractual worker is being done. o Medical records of employees and contract workers are maintains online and individual person can access his record as read only from any computer in the Unit.
viii	A separate Environment Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and monitoring functions.	o **Complied.** o A separate environment management cell has been constituted under the leadership of Facility Head. o The detailed Organization chart is given below:



ix.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report.	○ **Complied**. ○ We are complying with all the environmental protection measures and safeguards recommended in EIA / EMP Reports.
x.	Ministry's Regional Office at Bhopal / GPCB / CPCB shall monitor the implementation of the project vis-a-vis environmental action plans. A six monthly compliance status report should be submitted to monitoring agencies.	○ **Complied.** ○ All identified environmental action plans of project implementation is being complied and submitted to respective government agency (Ministry's Regional Office at Bhopal/ GPCB). ○ Six monthly Compliance report for the period of **Apr-25 to Sept-25** submitted in hard/soft copy in **Nov-25.**
xi.	The project proponent should advertise in atleast two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter	○ **Complied.** ○ Environment Clearance was issued on 15.01.2007 and advertisement was published in Gujarati & English language newspaper on date: 17.01.2007.

	are available with the Gujarat Pollution Control Board/ Committee and may also be seen at Website of the Ministry and Forests at http://envfor.nic.in. The advertisement shall be made within 7 days from the date of issue of the clearance letter and a copy of the same shall be Forwarded to the Ministry's Regional Office at Bhopal.	o Newspaper advertisement copy submitted to GPCB / Committee and same has been enclosed below.
		
xii.	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 land development work.	o **Complied.**
6.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	o **Noted.**
7.	The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.	o **Noted.**
8.	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability insurance Act, 1991 along with their amendments and rules.	o **Complied.**

ADITYA BIRLA

GRASIM

Dated: 21.05.2026

ID: 14989
Birla Cellulosic- Kharach

To,

Mr. Yogesh Kumar (IRO),
Ministry of Environment, Forest and Climate Change
Aaranya Bhavan, Gandhingar.

Subject: Half Yearly Compliance Report of Environmental Clearance for period of "Oct-25 to March-26"

Respected Sir,

With reference to above-mentioned subject and in accordance with conditions stipulated in EC granted, vide **Letter No. J. 11012/85/95-IA II (I), Dated. 16.01.1997**, we hereby submit Half Yearly Environmental Clearance Compliance Report for the reporting period "**Oct-25 to Mar-26".**

We trust that submission is in order.

Yours Faithfully,
(For Birla Cellulosic)

Dharmesh Patel
GM – Environment & Sustainability Cell

Encl. :

1. **EC Copy**
2. **EC-1997 Compliance report (Oct-25 to Mar-26)**

CC To:

1. **GPCB Regional office** - Gujarat pollution control board, Plot No. 1501, GIDC, Ankleshwar
2. **GPCB Head office** - Gujarat pollution control board, Paryavaran Bhavan, CHH Road, Sector 10A, Gandhinagar, Gujarat 382010
3. **MOEFCC office** - Ministry of Environment, Forest & Climate Change, New Delhi.

Birla Cellulose
Fibres from nature

Grasim Industries Limited
Unit – Birla Cellulosic

Works : Birladham, Kharach Kosamba R.S.
Dist. Bharuch (Gujarat) – 394 120 INDIA
CIN : L17124MP1947PLC000410

Telephone +91 2646 270001-005, 270301-305
Fax +91 2646 270010, 270130
Email bc-kharach.info@adityabirla.com

Liaison Office : 11th Floor – 1101 & 1102 OCEAN, Opposite Vadodara Central Mall, Vikram Sarabhai Marg, Vadiwadi, Vadodara – 390023, Gujarat – India
Regd. Office : P.O. Birlagram, Nagda (MP) – 456 331. Phone : (07366) 246760-66, Fax : 255198, Website : www.grasim.com

No.J.11012/85/95-IA II(I)

GOVT. OF INDIA
MINISTRY OF ENVIRONMENT & FOREST
PARYAVARAN BHAWAN, CGO COMPLEX
LODHI ROAD, NEW DELHI-110003.

TELE ; 4363964.

Dated 16.1.97

To,

The Chairman & Managing Director,
Birla Cellulosic (Grasim Industries Ltd.)
4th Floor, UCO Bank Building,
Parliament Street,
New Delhi-110001

Subject:- Viscose Staple Fibre Plant at Bharuch Environmental Clearance.

Sir,

This has reference to letter dated 1st August, 1995, 27th March, 1996 and 30th September, 1996 regarding your application for setting up a 60,000 TPA capacity Viscose Staple Fibre Plant and 15 MW coal based CPP at Bharuch District, Gujarat. The Ministry of Environment and Forests has carefully examined your application. It is observed that no forest land or rehabilitation is involved. The plant is based on imported pulp.

2. The Ministry of Environment and Forests hereby accords environmental clearance subject to the strict compliance of the terms and conditions mentioned below:-

i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

ii. No further expansion or modifications in the plant should be carried out without prior approval of this Ministry.

iii. The industry should set up a pilot plant and standardize the technology for incineration of CS2/H2S rich stream before commissioning the plant. The feasiblity of incinerating the entire stream containing CS2 and H2S instead of segregating and burning only CS2 and H2S stream should also be explored and report submitted to the

Ministry within a period of 1 year for review. The emission of H2S should not exceed 10 mg/Nm 3.

iv. Gaseous and particulate emissions (H2S, SO2, CS2, NOx and SPM) from the various process units should conform to the standards prescribed by the concerned authorities from time to time. At no time, the emissions level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.

v. Six air quality monitoring stations should be set up in the down wind direction as well as where maximum ground level concentrations of H2S, SPM, SO2, CS2, NOx are anticipated in consultation with the State Pollution Control Board. The air quality monitoring stations should be selected on the basis of modelling exercise to represent short term ground level concentrations, sensitive targets etc.

Stack emissions should be monitored regularly by setting stack monitoring devices in consultation with the State Pollution Control Board.

Data on stack emissions and ambient air quality including work zone should be submitted to this Ministry once in six months and the State Pollution Control Board once in three months along with the statistical analysis.

vi. Work area air quality should meet the standards prescribed by the competent authorities/OSHA. CS2 level should be less than 100 ppm in the work zone. Leakages from the ducts should be rectified, meshing windows should be sealed and better house keeping should be practiced to improve the work area air quality.

vii. Fugitive emisions should be controlled, regularly monitored and data recorded. Sensors for detection of CS2 and H2S and chlorine should be provided at appropriate places in the complex in consultation with the State Pollution Control Board.

viii. Liquid effluents coming out of the plant and the township should comply with the norms stipulated by the competent authorities from time to time. Recycling and reuse of the treated waste water should be maximised to the extent possible.

ix. Guard ponds of sufficient holding capacity should be provided to cope up with the effluent discharge during the process disturbances. The contributing units should be immediately shut down and should not be restarted without bringing the system back to normalacy.

x. Adequate number of effluent quality monitoring stations should be set up in consultation with the State Pollution Control Board. Regular monitoring should be carried out for PH, S, BOD3 , COD, Zn and colour. The monitored data along with statistical analysis and interpretation in the form of a report should be submitted to this Ministry once in six months and the SPCB once in three months.

xi. Marine Impact Assessment Study report should be submitted to the Ministry for review. Recommendations made by NIO in the Marine Impact Study should be strictly adhered to the Marine outfall point for discharge of treated effluent should also have the approval of SPCB.

xii. The hazardous wastes should be handled as per Hazardous Waste(Management & Handling) Rules, 1989 of the Environment(Protection) Act, 1986.

xiii. Handling, manufacturing, storage and transportation of hazardous chemicals should be carried out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amended in October, 1994.

The approval of the Chief Inspector of Explosives should also be obtained.

xiv. Medical survelliance and occupational health programme should be taken up on regular basis and record of the health status of the workers should be maintained. The worker's who may contract occupational diseases particularly due to carbon disulphide exposure should be monitored closely and adequate measures should be taken for their treatment and recovery.

xv. A Green belt of adequate width and density (2000-2600 trees/ha) should be raised all around the factory complex and the township. Preferably native plant species should be selected for this purpose in consultation with the local DFO.

xvi. The project authorities must set up adequate facilities for collection and analysis of samples under the supervision of competent technical personnel who will directly report to the Chief Executive.

xvii. A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of Senior Executive, who will report directly to the Head of the organisation.

xviii. The funds earmarked for the environmental protection measures should be kept in a separate account and should not be diverted for other purpose and year-wise expenditure

should be reported to this Ministry.

3. This Ministry or any competent authority may stipulate any further condition(s) after review of the monitoring reports. The above conditions will be monitored by the Regional Office of this Ministry located at Bhopal/CPCB/GSPCB.

4. The Ministry may revoke or suspend the clearance if implementation of any of the above condition is not satisfactory.

5. Any other condition(s) or alteration in the existing conditions will be fully implemented by the project authorities within the specified time frame.

6. The above conditions will be implemented under the provisions of the Water (Prevention and Control of Pollution) Act,1974, the Air (Prevention and Control of Pollution) Act, 1981. Environment(Protection) Act, 1986 and the Public(Liability) Act, 1991 along with their amendments.

(Dr. R.Warrier)
Joint Director

Copy to:-

1. Secretary, Ministry of Industry, Udyog Bhavan, New Delhi.
2. Chairman,Gujarat State Pollution Control Board, Old Assembaly Bldg, 2nd Floor, Sector 10-A, Gandhinagar.
3. Chairman Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, Delhi.
4. Secretary, State-Deptt.of Env.Govt.of Gujarat Sachivalaya, Block No. 5, 6th Floor, Gandhinagar.
5. Chief Conservator of Forests, Regional office, 3/240, Arear Colony, Bhopal.
6. Adviser (H), EI Section, Ministry of Environment & Forest, New Delhi.
7. Additional Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, New Delhi.

should be reported to this Ministry.

3. This Ministry or any competent authority may stipulate any further condition(s) after review of the monitoring reports. The above conditions will be monitored by the Regional Office of this Ministry located at Bhopal/CPCB/GSPCB.

4. The Ministry may revoke or suspend the clearance if implementation of any of the above condition is not satisfactory.

5. Any other condition(s) or alteration in the existing conditions will be fully implemented by the project authorities within the specified time frame.

6 The above conditions will be implemented under the provisions of the Water (Prevention and Control of Pollution) Act,1974, the Air (Prevention and Control of Pollution) Act, 1981. Environment(Protection) Act, 1986 and the Public(Liability) Act, 1991 along with their amendments.

(Dr.R.Warrier)
Joint Director

Copy to:-

1. Secretary, Ministry of Industry, Udyog Bhavan, New Delhi.

2. Chairman,Gujarat State Pollution Control Board, Old Assembaly Bldg, 2nd Floor, Sector 10-A, Gandhinagar.

3. Chairman Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, Delhi.

4. Secretary, State Deptt.of Env.Govt.of Gujarat Sachivalaya, Block No. 5, 6th Floor, Gandhinagar.

5. Chief Conservator of Forests, Regional office, 3/240. Arear Colony, Bhopal.

6. Adviser (H), EI Section, Ministry of Environment & Forest, New Delhi.

7. Additional Director (Monitoring Cell), Ministry of Environment and Forests, Paryavaran Bhavan, New Delhi.

8. Guard File

9. Record File.

10. Monitoring File

(Dr.R.Warrier)
Joint Director

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

Name of Project : Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

EC letter no. & Date : J-11012/85/95-IA II(I) dated 16-01-1997

Address for Correspondence : M/s. Birla Cellulosic (A Unit of Grasim Industries Ltd.) Birladham, Village: Kharach, Kosamba (R.S.), Tehsil: Hansot, District: Bharuch (Gujarat) – 394120

Duration/Reporting period : Oct-25 to Mar-26

S. No.	Conditions	Compliance Status
1.	This has reference to letter dated 1st August, 1995, 27th March, 1996 and 30th September, 1996 regarding your application for setting up a 60,000 TPA capacity viscose staple fibre plant and 15 MW coal based CPP at Bharuch District, Gujarat. The Ministry of Environment and forests has carefully examined your application. It is observed that no forest land or rehabilitation is involved. The plant is based on Imported Pulp.	o **Noted.** o Unit has obtained EC for VSF production capacity up to 1,27,750 TPA along with 25 MW CPP on 15.01.2007. o Unit has obtained EC for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 22.02.2018, which was amended on 31.12.2018. o Unit has obtained EC to CTE for VSF production capacity up to 2,33,600 TPA along with 45 MW CPP on 06.09.2019. o The expansion project was implemented within the existing plant and no extra land was used. o Unit has obtained CCA-Renewal for VSF capacity upto 1,73,375 TPA and Sodium sulphate recovery max up to 1,73,375 TPA having CCA order no. AWH-133920 dated: 16.05.2024 valid up to 11.04.2029.
2.	The Ministry of Environment and Forests hereby accords environmental clearance subject to the strict compliance of the terms and conditions mentioned below:	o **Noted & shall be complied.**
i.	The project authorities must strictly here to the stipulations made by the state pollution control board and the state Government.	o **Complied.** o All stipulations made by GPCB in various consent and authorizations are strictly complied.
ii.	No further expansion or modificationin	o **Noted.**

	the plant should be carried out without prior approval of thisministry.	o No further expansion or modifications in the plant will be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.
iii.	The industry should set up a pilot plant and standardize the technology for incineration of CS_2/H_2S rich stream before commissioning the plant. The feasibility of incinerating the entire stream containing CS_2/H_2S instead of segregating and burning only CS_2/H_2S stream should also be explored and report submitted to the ministry within a period of 1 year for review. The emission of H_2S should not exceed 10 mg/Nm^3.	o **Complied.** o The industry installed the pilot plant and standardize the technology for incineration of CS_2/H_2S rich stream and recover the sulphur before commissioning the plant. Report for the same was submitted to concern statutory authority in given time duration. o Sulphur recovery plant has been provided to recover Sulphur from CS2/H2S rich stream coming from CS2 plant. o A system of EDTA scrubbing technology for recovering Sulphur from H2S gas and CAP system for CS2 recovery are being operated effectively. o The emission concentration of CS_2/H_2S is being maintained as per GPCB Norms.
iv.	Gaseous and particulate emission (H_2S, SO_2, CS_2, NO_x and PM) from the various process units should conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be put out of operation immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.	o **Being complied.** o Unit has appointed NABL accredited third party laboratory for monthly monitoring of Stack concentration. As per the monitoring conducted by the third party Lab team, results are well within the prescribed norms as per consent condition. o Multiple gas sensors and alarm systems Inter- linking with the pollution control Equipment/units have been provided so that early indication of malfunctioning can be detected and control measures can be taken accordingly. In case of any event of completely failure of pollution control equipment, the respective unit(s) is stopped.

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

o A Summary for Flue gas emission from stack for the reporting period is given below:

Location	Boiler-1 & 2 (76 m)			Boiler-3 (86 m)			
Parameter	SPM	SO2	NOx	SPM	SO2	NOx	Mercury
Unit	mg/Nm3	mg/Nm3	mg/Nm3	mg/Nm3	mg/Nm3	mg/Nm3	mg/Nm3
Limit	100	600	600	50	600	300	0.03
Oct-25	49	256	86	45	245	79	LTAR
Nov-25	44	249	83	42	240	76	LTAR
Dec-25	48	253	85	46	243	79	LTAR
Jan-26	46	251	84	44	241	77	LTAR
Feb-26	49	258	88	48	247	81	LTAR
Mar-26	48	254	86	46	244	79	LTAR

LTAR* :- Lower Than Accreditation Range

o A Summary for process gas emission from stack for the reporting period is given below:

Location	CS2 Plant + Spinning		Total	Acid plant I		Acid plant II	
Parameter	CS2	H2S		SO2	Acid Mist	SO2	Acid Mist
Unit	Kg/ToF			Kg/ToA	mg/Nm3	Kg/ToA	mg/Nm3
Limit	125			2	25	2	25
Oct-25	8.11	1.03	9.14	0.74	10.29	0.63	7.04
Nov-25	7.45	1.04	8.49	0.81	10.73	0.72	7.67
Dec-25	7.19	1.03	8.22	0.76	10.41	0.66	7.23
Jan-26	7.78	1.03	8.81	0.79	10.56	0.69	7.45
Feb-26	7.53	1.03	8.55	0.75	10.34	0.64	6.98
Mar-26	7.11	1.02	8.14	0.71	10.12	0.60	6.72

v.	Six air quality monitoring stations should be set up in the downwind directions as well as where maximum ground level concentrations of H2S, SPM, SO2, CS2, NOx are anticipated in consultation with thestate pollution	o **<u>Being complied.</u>** o Unit has installed 3 nos. of Continuous ambient air quality monitoring stations in consultation with GPCB. o Unit has also installed 4 nos. of offline Ambient air quality monitoring stations

	control board. The air quality monitoring stations exerciseto represent short term ground level concentrations, sensitive targets etc. Stack emission should be monitored regularly by setting stack monitoring devices in consultation with the state pollution control board. Data on stack emission and ambient air quality including work zone should be submitted to this ministry once in six months and the state pollution control board once in threemonths.	within premises. o Unit has appointed NABL accredited laboratory for monthly monitoring of Stack concentration as well as ambient air quality, as per the monitoring conducted by their team, the results are well within the prescribed norms as per consent condition. o Such parameters i.e. Ozone, Lead, CO, Benzene, BAP, Arsenic, Nickel, Ammonia are not a part of process as well as not being generating. Analysis of same is being conducted on periodic basis. o Stack Emissions are regularly monitored and thecontinuous emission monitoring system has been installed at the stacks. o Stack emission data along with ambient air quality report including work zone data is being submitted to ministry & SPCB every six month along with EC compliance report. o Stack emission summary given in point no. (v).

o A Summary for Ambient Air quality for the reporting period is given below:

Location	**Ambient air Quality**					
Parameter	**PM10**	**PM2.5**	**SO2**	**NOx**	**H2S**	**CS2**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit	**100**	**60**	**80**	**80**	**150**	**100**
Oct-25	53	29	18	21	21	23
Nov-25	55	32	21	26	22	24
Dec-25	54	31	19	22	20	22
Jan-26	57	33	20	24	21	23
Feb-26	59	36	22	28	23	25
Mar-26	57	40	25	31	26	29

Setting up of Viscose Staple fibre plant (60,000 TPA) and 15 MW coal based TPP

Compliance of Environmental Clearance Conditions by
M/s. Birla Cellulosic (A unit of Grasim Ind. Ltd.) at Kharach, Hansot, Bharuch, Gujarat

o A Summary for Ambient Air quality for the reporting period is given below:

Location	Ambient air Quality							
Parameter	**Ozone**	**Lead**	**CO**	**Benzene**	**BAP**	**Arsenic**	**Nickel**	**Ammonia**
Unit	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**	**µg/m3**
Limit (8 hr avg.)	**100**	**0.5**	**2**	**5**	**1**	**6**	**20**	**100**
Dec-25	15.42	ND	0.93	ND	ND	ND	ND	11.32
Mar-26	13.33	ND	0.91	ND	ND	ND	ND	10.42

vi.	Work area air quality should meet the standards prescribed by the competent authorities / OSHA. CS2 level should be less than 100 ppm in the work zone. Leakages from the ducts should be rectified, meshing windows should be sealed and better housekeeping should be practiced to improve the work area air quality.	o **Being complied.** o Work zone environment for emission of CS2, H2S and SO2 is being regularly monitored by our Laboratory twice in a week. o Work area monitoring reports are regularly submitting to concerned govt. authority. o Fugitive emissions in the work zone environment are being controlled by exploring techniques like Motorized shutter & suction hoods on spinning machines & cutters, shutters for stretch roller & gear box and perfect sealing of all the openings in various tanks of spin bath. o Provision of fresh air by induced draft fans is in place at the spinning machines for ease of working. o Online gas detectors installed in the work zone around the spinning machines. Motorized shutters and completely closed after treatment machine with suction duct are there to control fugitive emission.
vii.	Fugitive emissions should be controlled, regularly monitored and data recorded. Sensors for detection of	o **Being complied.** o Fugitive emissions are being controlled & regularly monitored.

	CS2 and H2S and chlorine should be provided at appropriate places in the complex in consultation with the state pollution control board.	o Presently there are 5 No. of Chlorine sensors, 52 no. of CS2 sensors, 54 no. of H2S sensors. 2 no. of DA sensors, 22 no. of SO2 sensor & 14 no. of Ammonia sensors installed at various places in plant premises.
viii.	Liquid effluents coming out of the plant and the township shouldcomply with the norms stipulated by the competent authorities from time to time.	o **Being complied.** o Unit has appointed NABL accredited third partylaboratory for monitoring of waste water from the plant and township treated in the well- established ETP and STP. o As per the monitoring conducted by the lab team, results are well within the prescribed norms as per consent condition.

o A Summary of treated effluent for the reporting period is given below:

Parameter	pH	Temp.	S.S.	COD	BOD	Amm. N	Color	Zinc
Unit	-	°C	mg/l	mg/l	mg/l	mg/l	Co-pt u.	mg/l
Limit	6.5-8.5	40	100	250	100	50	100	10
Oct-25	7.21	29.9	36	131	24.58	2.31	75	0.73
Nov-25	7.4	29.5	52	128	31.24	2.14	65	0.82
Dec-25	7.2	29.6	41	132	26.56	2.03	55	0.46
Jan-26	7.2	30	41	130	30.2	2.01	65	0.65
Feb-26	7.1	29.9	34	119	22.74	1.83	55	0.56
Mar-26	7.1	30.4	29	128	28	1.71	45	0.47

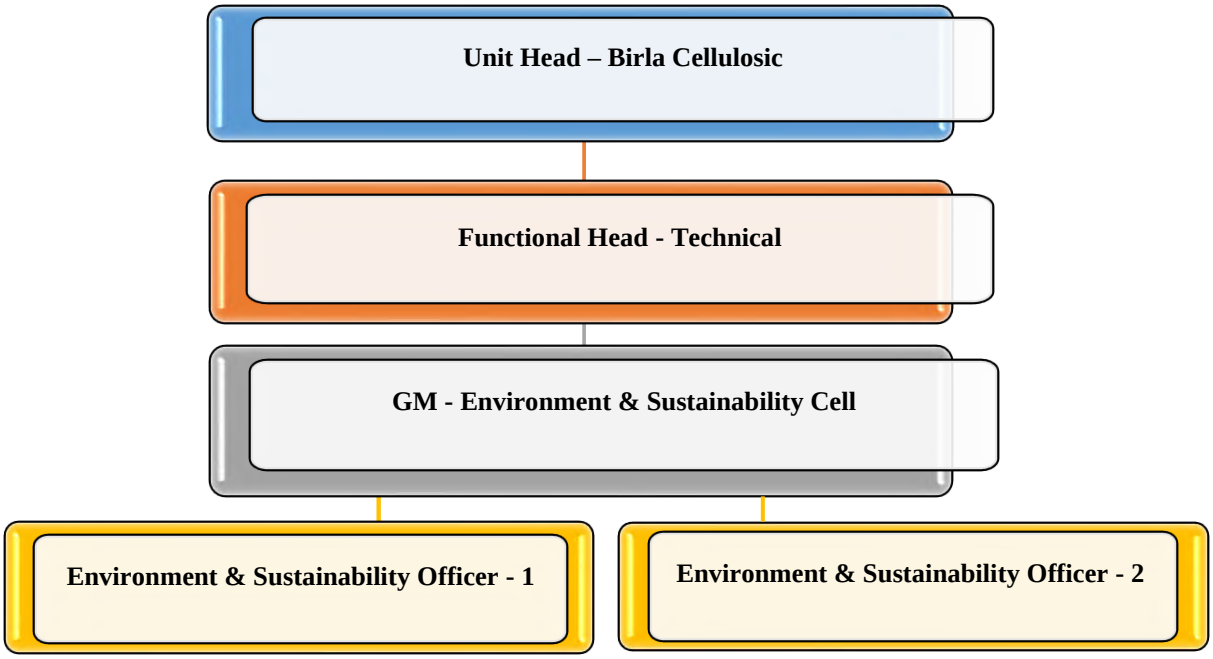
o A Summary of treated Domestic sewage for the reporting period is given below:

Parameter	TSS	BOD	Residual Free Chlorine	pH
Unit	mg/Lit.	mg/Lit.	mg/Lit.	-
Limit	<30	<20	Min 0.5	-
Oct-25	21	16	LTAR(<0.2)	7.61
Nov-25	19	15	LTAR(<0.2)	7.31
Dec-25	26	17	0.80	7.52
Jan-26	23	17	0.60	7.32
Feb-26	18	14	0.80	7.19
Mar-26	21	13	0.90	7.26

ix.	Guard ponds of sufficient holding capacity should be provided to cope up with the effluent discharge during the process disturbances. The contributing units should be immediately shut down and shouldnot be restarted without bringing the system back to normally.	o **Complied.** o Unit has constructed guard pond with sufficient holding capacity for effluent storage to cope up with the effluent discharge pipeline maintenance if any.
x.	Adequate number of effluent quality monitoring stations should be set up in consultation with the state pollution control board. Regular monitoring should be carried out for pH, SS, BOD, COD, Zn and color. The monitored data along with statistical analysis and interpretation in the form of a report should be submitted to this ministry once in six month and the SPCB once in three months.	o **Complied.** o Adequate number of effluent quality monitoring stations i.e. Online TOC Analyser, Online pH Analyser etc. are set up in consultation with the Gujrat pollution control board. o Regular monitoring is being carried out for pH, SS, BOD, COD, Zn & color by the internal laboratory on daily basis and NABL accredited Laboratory on monthly basis. o Results are enclosed in reply of point no. viii. o Waste Water quality monitoring data is being submitted to ministry & SPCB every six month along with EC compliance report.
xi.	Marine Impact Assessment study report should be submitted to the ministry for review. Recommendations made by NIO in the Marine impact study should be strictly adhered to the Marine outfall point for discharge of treated effluentshould also have the Approval of SPCB.	o **Complied.** o In FY'07, Unit has appointed NIO to carry out Pre-marine impact assessment study. o NIO, Mumbai has carried out Post Monitoring study in FY'19. o Lastly, unit has conducted pre-monsoon & post monsoon study with NABL accredited Laboratory in FY'23. o Recommendations made by NIO in the Marine impact study have been strictly adhered to the Marine outfall point for discharge of treated effluent approved by GPCB.
xii.	The hazardous wastes should be	o **Complied.**

	handled as per Hazardous waste (management & Handling) Rules,1989 of the Environment (Protection) Act, 1986.	o Unit has segregated Hazardous/solid waste according to its characteristics and stored separately for treatment and disposal in safe manner as per Waste handling and disposal Rules.
xiii.	Handling, manufacturing, storage and transportation of hazardous chemicals should be carried out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 as amendedin October, 1994. The approval of the chief Inspectorof Explosives should also be obtained.	o **Being complied.** o Unit strictly adheres the applicable rules & regulations for manufacture, storage and Import of Hazardous Chemicals rules, 1989 as amended in 2000 and the public Liability Insurance Act for handling of hazardous chemicals. o Approval for chlorine storage has taken on 09.10.2023 and valid up to 30.09.2028. o Approval for possession and sales of Sulphuric acid has taken on 27.02.2018 and valid up to 27.02.2028. o Approval for Ammonia, DA gas storage has taken on 17.03.2022 and valid up to 30.09.2027. o Unit has obtained factory license #6059 and registration# 165/17114/1997 dated 06.07.2021 which is valid up to 31.12.2026. o Handling, manufacturing, storage and transportation of hazardous chemicals is being carry out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended time to time. o On-site and Off-site Disaster Management Plans available with Unit. o Handling, manufacturing, storage and transportation of hazardous chemicals is being carried out in accordance with the Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 as amended time to time.
xiv.	Medical surveillance and occupational health program shouldbe	o **Complied.** o Awareness programs are being conducted

	taken up on regular basis and record of the health status of the workers should be maintained. The workers who may contract occupational diseases particularly due to carbon disulphide exposure should be monitored closely and adequate measures should be taken for their treatment and recovery.	on health by CMO and by ABG Emergency Code Red. o First aid training is being arranged on periodic interval, which covers all categories of employees, workmen. o Medical check-up is being conducted annually for all employees and six monthly, for those employees who engaged in handling hazardous substances at work place area. o All the Employees are covered under Health Survey. Periodic and pre-joining medical check-up for each and every employees and Contractual worker is being done. o Medical records of employees and contract workers are maintained online and individual person can access his record as read only from any computer in the Unit.
xv.	A green belt of adequate width and density (2000-2600 trees/ha.) should be raised all around the factory complex and the township. Preferably native plant species should be selected for this purpose in consultation with the local DFO.	o **Complied.** o Green belt has been developed in the campus along the boundary wall and open spaces. o Native plant species has been selected in consultation with DFO and as per the directives of DoEF, Mangroves have been planted in 100 Ha. at Raniyo Island.
xvi.	The project authorities must set up adequate facilities for collection and analysis of samples under the supervision of competent technical personnel who will directly report to the chief executive.	o **Complied.** o Adequate facilities have been developed for the collection and analysis of samples under the supervision of competent technical personnel who directly reports to the chief executive at the plant.
xvii.	A separate Environmental Management Cell with suitably qualified people to carry out various functions should be set up under the control of senior executive, who will report directly to	o **Complied.** o A separate environment management cell has been constituted under the leadership of Facility Head.

	the Head of the organization.	
		
xviii.	The funds earmarked for the environmental protection measures should be kept in a separate account and should not be diverted for other purpose and year – wise expenditure should be reported to this ministry.	o **Complied.** o The funds earmarked for the environmental protection measures are being maintained and not diverted for other purpose. o A year wise expenditure on environment safeguards & towards Enterprise Social commitment is being submitted to MOEF&CC at the end of each FY along with EC compliance report. In FY'26, 54.44 Crores spent towards Environment protection measures. o Unit has taken various improvement measures to control pollution, as mentioned below: o A system of EDTA scrubbing technology for recovering Sulphur from H2S gas and CAP system for CS2 recovery are being operated effectively. o Unit has commissioned an additional Biological reactor having 15400 m3 capacity, higher efficient jet aerators to meet EUBAT.

3.	This ministry of any competent authority may stipulate any further condition(s) after review of the monitoring reports. The above conditions will be monitored by the regional office of this ministry located at Bhopal/CPCB/GPCB.	o **Noted.**
4.	The ministry may revoke/suspend clearance if implementation of any of the above condition is not satisfactory.	o **Noted.**
5.	Any other condition(s) or alternationin the existing conditions will be fully implemented by the project authorities within the specified time frame.	o **Noted.**
6.	The above conditions will be implemented under the provisions of the water Act, 1974, the Air act, 1981, Environment) Act, 1986 and the public (Liability) Act, 1991 along with their amendments.	o **Complied.**