



Dated: 21.11.2019

The Advisor,
Ministry of Environment, Forest and Climate Change
Regional office, Western Region
"Kendriya Paryavaran Bhavan"
Link Road No.3, Ravishankar Nagar
Bhopal-462016 (M.P)

Dear Sir,

Subject: Half Yearly Environmental Clearance Compliance Report for period of April'19 to September'19.

In view of above subject matter, Here, we are submitting the hard copy as well as soft copy of half yearly Environmental Clearance Compliance report along with annexures of EC-1997, No. J. 11012/85/95-IA II (I) dtd. 16.01.1997 for the report period from April-19 to September-19.

Hope, the same is in order.

Yours Faithfully,
(For Birla Cellulosic)

Sachin Katewale
Asst. Vice President – Technical

Encl. :

1. EC Copy
2. EC-1997 Compliance report (April-19 to September-19)



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

Half-Yearly Compliance REPORT

EC Letter No.: J-11012/85/95-1A II (I)

Dated 16.1.1997



Period of compliance: April to September, 2019

FOR

Viscose Staple Fibre Plant

By

M/s. Birla Cellulosic Ltd.

**At
Bharuch**

SUBMITTED BY



M/s. Birla Cellulosic Ltd.

(A unit of Grasim Industry Ltd.)

Biladham, Village: Kharach, Kosamba (R.S.),

Tehsil: Hansol,

District: Bharuch (Gujarat) - 394120

PREPARED BY



J.M. EnviroNet Pvt. Ltd.

(Registered IIA Consultant Organization from NAET-QCI)

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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 feasibility 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/Nm³.

iv. Gaseous and particulate emissions (H₂S, SO₂, CS₂, NO_x 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, NO_x 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 emissions 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 normalcy.

- 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 surveillance 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

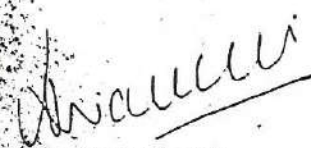
should be reported to this Ministry.

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. Warriar)
Joint Director

Copy to:-

1. Secretary, Ministry of Industry, Udyog Bhavan, New Delhi.
2. Chairman, Gujarat State Pollution Control Board, Old Assembly 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, Aarear 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.

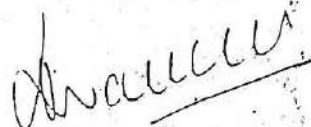
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(Dr. R. Warriar)
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1. Secretary, Ministry of Industry, Udyog Bhavan, New Delhi.
2. Chairman, Gujarat State Pollution Control Board, Old Assembly Bldg, 2nd Floor, Sector 10-A, Gandhinagar.
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6. 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

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

Environment Clearance 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 (Gujrat) – 394120

S.No	Conditions	Compliance Status																																		
i.	The project authorities must strictly adhere to the stipulations made by the state pollution control board and the state Government.	All stipulations made by GPCB in various consent and authorizations are strictly complied.																																		
ii.	No further expansion or modification in the plant should be carried out without prior approval of this ministry.	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 industry should set up a pilot plant and standardize the technology for incineration of CS ₂ /H ₂ S rich stream before commissioning the plant. The feasibility of incinerating the entire stream containing CS ₂ /H ₂ S instead of segregating and burning only CS ₂ /H ₂ S stream should also be explored and report submitted to the ministry within a period of 1 year for review. The emission of H ₂ S should not exceed 10mg/Nm ³ .	<ul style="list-style-type: none">o The industry installed the pilot plant and standardize the technology for incineration of CS₂/H₂S rich stream before commissioning the plant.o Presently there are 4 spinning machines and each of the spinning machines has been provided with a 3 stage CS₂ condensing system along with CS₂ recovery system comprising recovery through steam injection and a water scrubber for condensing the steam. The vapors from the scrubber are passed through the CS₂ condensing system.o The emission of H₂S is being maintained as per the latest standards.o A Summary of the last 6 months for CS₂/H₂S concentration from stack and ambient air is given below:<table><tr><th rowspan="3">Month</th><th>Process</th><th colspan="2">Ambient</th></tr><tr><th>CS₂ Kg/ToF</th><th>CS₂ (µg/m₃)</th><th>H₂S (µg/m₃)</th></tr><tr><th>125 kg/ToF</th><th>100 µg/m₃</th><th>150 µg/m₃</th></tr><tr><td>April-19</td><td>83.73</td><td>18</td><td>14</td></tr><tr><td>May-19</td><td>89.34</td><td>18.14</td><td>14.85</td></tr><tr><td>June-19</td><td>92.69</td><td>16.33</td><td>13.58</td></tr><tr><td>July-19</td><td>85.48</td><td>18.66</td><td>12.86</td></tr><tr><td>Aug-19</td><td>95.47</td><td>18.50</td><td>14.29</td></tr><tr><td>Sept-19</td><td>83.36</td><td>16.07</td><td>13.41</td></tr></table>	Month	Process	Ambient		CS ₂ Kg/ToF	CS ₂ (µg/m ₃)	H ₂ S (µg/m ₃)	125 kg/ToF	100 µg/m ₃	150 µg/m ₃	April-19	83.73	18	14	May-19	89.34	18.14	14.85	June-19	92.69	16.33	13.58	July-19	85.48	18.66	12.86	Aug-19	95.47	18.50	14.29	Sept-19	83.36	16.07	13.41
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iv.	Gaseous and particulate emission (H ₂ S, SO ₂ , CS ₂ , NO _x and PM) from the various process units should conform to the	<ul style="list-style-type: none">o The results are well within the stipulated norms. The results for the last six months for flue gas & process emission is given below:																																		

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	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.	<table><tr><th>Parameters</th><th>Unit</th><th>Std.</th><th>Max.</th><th>Min.</th><th>Avg.</th></tr><tr><td>PM</td><td>mg/Nm³</td><td>100/30</td><td>76</td><td>20</td><td>40</td></tr><tr><td>SO₂</td><td>Ppm</td><td>100</td><td>91</td><td>67</td><td>80</td></tr><tr><td>NOx</td><td>Ppm</td><td>50/ 100</td><td>43</td><td>24</td><td>33</td></tr><tr><td>CS₂</td><td>Kg/T of Fibre</td><td>125</td><td>95</td><td>83</td><td>88</td></tr><tr><td>SO₂ (Acid plant)</td><td>Kg/T of 100% Acid</td><td>02</td><td>0.92</td><td>0.63</td><td>0.73</td></tr><tr><td>Acid Mist</td><td>mg/Nm³</td><td>25</td><td>24</td><td>6</td><td>12</td></tr></table> <ul style="list-style-type: none">Interlocking facility is being provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit(s) is stopped automatically.	Parameters	Unit	Std.	Max.	Min.	Avg.	PM	mg/Nm ³	100/30	76	20	40	SO ₂	Ppm	100	91	67	80	NOx	Ppm	50/ 100	43	24	33	CS ₂	Kg/T of Fibre	125	95	83	88	SO ₂ (Acid plant)	Kg/T of 100% Acid	02	0.92	0.63	0.73	Acid Mist	mg/Nm ³	25	24	6	12
Parameters	Unit	Std.	Max.	Min.	Avg.																																							
PM	mg/Nm ³	100/30	76	20	40																																							
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v.	Six air quality monitoring stations should be set up in the downwind directions as well as where maximum ground level concentrations of H ₂ S, SPM, SO ₂ , CS ₂ , NOx are anticipated in consultation with the state pollution control board. The air quality monitoring stations exercise to 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 three months.	<ul style="list-style-type: none">Unit has installed 3 nos. of Continuous ambient air quality monitoring stations in consultation with GPCB and readings for same directly displayed to GPCB & CPCB server.A Summary of the last 6 months for Ambient Air quality results is given below:<table><tr><th>Parameters</th><th>Unit</th><th>Std.</th><th>Max.</th><th>Min.</th><th>Avg.</th></tr><tr><td>PM₁₀</td><td>µg/m³</td><td>100</td><td>86</td><td>67</td><td>74</td></tr><tr><td>PM_{2.5}</td><td>µg/m³</td><td>60</td><td>53</td><td>28</td><td>43</td></tr><tr><td>SO₂</td><td>µg/m³</td><td>80</td><td>23</td><td>8</td><td>15</td></tr><tr><td>NOx</td><td>µg/m³</td><td>80</td><td>42</td><td>25</td><td>34</td></tr><tr><td>CS₂</td><td>µg/m³</td><td>100</td><td>25</td><td>11</td><td>18</td></tr><tr><td>H₂S</td><td>µg/m³</td><td>150</td><td>18</td><td>9</td><td>14</td></tr></table>Stack Emissions are regularly monitored and the continuous emission monitoring system has been installed at the stacks.The data on stack monitoring, Ambient air quality monitoring including work zone is being submitted along with this compliance report as Annexure 1.	Parameters	Unit	Std.	Max.	Min.	Avg.	PM ₁₀	µg/m ³	100	86	67	74	PM _{2.5}	µg/m ³	60	53	28	43	SO ₂	µg/m ³	80	23	8	15	NOx	µg/m ³	80	42	25	34	CS ₂	µg/m ³	100	25	11	18	H ₂ S	µg/m ³	150	18	9	14
Parameters	Unit	Std.	Max.	Min.	Avg.																																							
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S.No	Conditions	Compliance Status																								
vi.	<p>Work area air quality should meet the standards prescribed by the competent authorities / OSHA. CS₂ level should be less than 100 ppm in the workzone.</p> <p>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.</p>	<p>Work zone environmentfor emission of CS₂, H₂S and SO₂ is being regularly monitored by our Laboratory. A summary of report asbelow:</p> <table><tr><th>Area</th><th>CS₂ (ppm)</th><th>H₂S (ppm)</th><th>SO₂ (ppm)</th></tr><tr><td>Std. (As per GFR)</td><td>10</td><td>10</td><td>2</td></tr><tr><td>Refinery – CS₂ Area</td><td>Min: 1.7 Max: 2.7 Ave: 2.1</td><td>Min: 1.3 Max: 2.4 Ave: 1.7</td><td>Min:00 Max:00 Ave:00</td></tr><tr><td>Furnace- CS₂ Area</td><td>Min: 1.7 Max: 2.7 Ave: 2.1</td><td>Min: 1.3 Max: 2.1 Ave: 1.7</td><td>Min:00 Max:00 Ave:00</td></tr><tr><td>Rayon plant machine- 01 & 02</td><td>Min: 1.7 Max: 2.7 Ave: 2.1</td><td>Min: 1.2 Max: 2.1 Ave: 1.7</td><td>Min:00 Max:00 Ave:00</td></tr><tr><td>Rayon plant machine- 03 & 04</td><td>Min: 1.7 Max: 2.7 Ave: 2.1</td><td>Min: 1.2 Max: 2.3 Ave: 1.7</td><td>Min:00 Max:00 Ave:00</td></tr></table> <p>Detailed report is enclosed along with Annexure 1</p> <p>We have been regularly taking actions to reduce the fugitive emissions in the work zone environment by using Motorized shutter on spinning machines, cutters, shutters stretch roller, gear box and perfect sealing of all the openings in various tanks of spin bath. Provision of fresh air fan in the spinning machines for ease of working, installation of online monitors in the work zone around the spinning machines, motorized and completely enclosed after treatment machine.</p>	Area	CS ₂ (ppm)	H ₂ S (ppm)	SO ₂ (ppm)	Std. (As per GFR)	10	10	2	Refinery – CS ₂ Area	Min: 1.7 Max: 2.7 Ave: 2.1	Min: 1.3 Max: 2.4 Ave: 1.7	Min:00 Max:00 Ave:00	Furnace- CS ₂ Area	Min: 1.7 Max: 2.7 Ave: 2.1	Min: 1.3 Max: 2.1 Ave: 1.7	Min:00 Max:00 Ave:00	Rayon plant machine- 01 & 02	Min: 1.7 Max: 2.7 Ave: 2.1	Min: 1.2 Max: 2.1 Ave: 1.7	Min:00 Max:00 Ave:00	Rayon plant machine- 03 & 04	Min: 1.7 Max: 2.7 Ave: 2.1	Min: 1.2 Max: 2.3 Ave: 1.7	Min:00 Max:00 Ave:00
Area	CS ₂ (ppm)	H ₂ S (ppm)	SO ₂ (ppm)																							
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vii.	Fugitive emissions should be controlled, regularly monitored and data recorded. Sensors for detection of CS ₂ and H ₂ S and chlorine should be provided at appropriate places in the complex in consultation with the state pollution control board.	<p>Fugitive emissions are being controlled, regularly monitored.</p> <p>Presently there are 5 Nos. of CS₂ sensors, 17 Nos. of H₂S sensors installed at CS₂ plant and 2 Nos. of Chlorine sensor installed at Chlorine area. 7 Nos. of CS₂ sensors and 7 Nos. of H₂S sensors installed at spinning machine area.</p>																								
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.	<p>The waste water from the plant and township is treated in the well established ETP and STP and the results of the final discharged waste water is well within the stipulated norms.</p> <p>The results of treated effluent monitoring are as below:</p> <table><tr><th>Parameter</th><th>Unit</th><th>Std</th><th>Max.</th><th>Min.</th><th>Avg.</th></tr></table>	Parameter	Unit	Std	Max.	Min.	Avg.																		
Parameter	Unit	Std	Max.	Min.	Avg.																					

S.No	Conditions	Compliance Status																											
		pH	-	7.5	7.3	7.1	7.2																						
		Temp.	°C	40	32	30	31.2																						
		COD	Mg/l	250	230	172	205																						
		BOD	Mg/l	100	68	42	49.7																						
		Amm. N	Mg/l	50	4.82	2.4	3.7																						
		Zinc	Mg/l	10	0.27	0.1	0.2																						
		Color	Unit	100	70	30	51.7																						
		SS	Mg/l	100	44	26	34.3																						
		The results of treated Domestic sewage monitoring are as below:																											
		<table><tr><td>Parameter</td><td>Unit</td><td>Std</td><td>Max.</td><td>Min.</td><td>Avg.</td></tr><tr><td>TSS</td><td>Mg/l</td><td><30</td><td>26</td><td>18</td><td>21.83</td></tr><tr><td>BOD</td><td>Mg/l</td><td><20</td><td>19</td><td>9</td><td>15.17</td></tr><tr><td>Resi. Chlorine</td><td>Mg/l</td><td>Min.0.5</td><td>0.8</td><td>0.6</td><td>0.7</td></tr></table>						Parameter	Unit	Std	Max.	Min.	Avg.	TSS	Mg/l	<30	26	18	21.83	BOD	Mg/l	<20	19	9	15.17	Resi. Chlorine	Mg/l	Min.0.5	0.8
Parameter	Unit	Std	Max.	Min.	Avg.																								
TSS	Mg/l	<30	26	18	21.83																								
BOD	Mg/l	<20	19	9	15.17																								
Resi. Chlorine	Mg/l	Min.0.5	0.8	0.6	0.7																								
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 normally.	As mentioned in consent, Unit has constructed guard pond for water storage while treated effluent pipeline repairing work going on.																											
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.	Adequate number of effluent quality monitoring stations are being set up in consultation with the state pollution control board. Regular monitoring is being carried out for pH, SS, BOD, COD, Zn and color Results are enclosed reply of point no. viii.0020																											

S.No	Conditions	Compliance Status
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.	InFY'07, Unit has appointed NIO to carry out Pre-marine impact assessment study. At present, NIO, Mumbai was carried out Post Monitoring study in FY'19. Study Report is attached here as Annexure-2 .
xii.	The hazardous wastes should be handled as per Hazardous waste (management & Handling) Rules, 1989 of the Environment (Protection) Act, 1986.	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 amended in October, 1994. The approval of the chief Inspector of Explosives should also be obtained.	Approval for chlorine storage has been taken for 10 tons on 26.09.2018 and valid up to 30-Sep- 2023. Also, valid factory license #6059 and registration# 165/17114/1997 dated 15-oct-2016 and valid upto 31-Dec-2021 has been obtained.
xiv.	Medical surveillance and occupational health programme should be 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.	Medical surveillance is being done in every six months, for the employees who engaged in handling hazardous substances at work place area. First aid training being arranged on periodic interval, All the Employees are being covered under Health Survey, Template for Periodic and pre-joining medical checkup for each and every employee and Contractual worker are attached as Annexure-3 . Medical records of employees and contract workers are maintained online and individual person can see the read only data for current and past health record for himself only from any computer in 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.	Green belt has been developed within the plant premises, along the boundary wall and open spaces. As on date the 1,85,000 trees have been planted in the premises covering the density as 1000 trees per acre. 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	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.

S.No	Conditions	Compliance Status
	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 organization.	A separate environment management cell has been constituted under the leadership of Facility Head. The detailed Organization chart is attached as Annexure-4 .
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.	The funds earmarked for the environmental protection measures are being maintained and not diverted for diverted for other purpose.