Annexure -A

Point wise Compliance Report of renewed CCA No. GPCB/CCA/JNG-1 (18)/ID-17239/149692 from GPCB, Gandhinagar granted on 28.05.2013 which is valid up to 20.02.2018

CONSENT AND AUTHORIZATION:
(Under the provisions/Rules of the aforesaid environmental Acts)

No. GPCB/CCA/JNG-1 (18)/ID-17239/149692, Dated:-07/06/2013

To,

Indian Rayon
(A Unit of Aditya Birla Nuvo Ltd)
Plot / Phase No. 1502, 1493, 13p,
Veraval-362266, (Gujarat)
TAL- Patan Veraval, SIDC: Junagadh
Dist. Gir-Somanath

1. Consent order Number.AWH -54395 Date of issue: 28-05-2013

2. The consent is valid up to 20.02.2018 for the use of outlet for the discharge of treated effluent and an emission due to operation of industrial plant for manufacture of the following items / products.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Name of Products &amp; By Products</th>
<th>Quantity in MT/month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Viscose Filament Yarn</td>
<td>1650</td>
</tr>
<tr>
<td>2</td>
<td>Sodium Sulphate</td>
<td>2050</td>
</tr>
<tr>
<td>3</td>
<td>Sulphuric Acid</td>
<td>3600</td>
</tr>
<tr>
<td>4</td>
<td>Sodium Sulphide (100%)</td>
<td>100</td>
</tr>
<tr>
<td>5</td>
<td>Carbon di sulphide</td>
<td>1000</td>
</tr>
<tr>
<td>6</td>
<td>Caustic Soda Lye (100%)</td>
<td>12000</td>
</tr>
<tr>
<td>7</td>
<td>Chlorine (100%)</td>
<td>10560</td>
</tr>
<tr>
<td>8</td>
<td>Hydrochloric Acid (100%)</td>
<td>1800</td>
</tr>
<tr>
<td>9</td>
<td>Sodium Hypo chlorite (100%)</td>
<td>3750</td>
</tr>
<tr>
<td>10</td>
<td>Compressed Hydrogen</td>
<td>650000 Nm3</td>
</tr>
<tr>
<td>11</td>
<td>Captive Power (Thermal)</td>
<td>34.5 MW</td>
</tr>
</tbody>
</table>

Complied
3. **CONDITION UNDER THE WATER ACT:**

3.1 **Quantity of the industrial effluent shall not exceed 10612 KL/Day.**

At present industry is maintaining effluent flow below 10612 KL/day, by taking various water conservation steps in our unit like effluent water is used in preparation of lime slurry in lime preparation unit, Sand filter washing & also make up to cooling towers in the plant. The flow of effluent water is running in between 8000-9000 KL/day.

3.2 **The quantity of sewage effluent from the factory shall not exceed 388 KL/Day**

At present the quantity of sewage effluent from the factory shall not exceed 388 KL/Day

3.3 **In case RO is running during water Shortage RO, Reject water quantity 12180 kl/day**

The quantity of RO Reject water from the factory shall not exceeds 12180 kl/day

3.4.1 **Trade Effluent**

3.4.2 **The quality of the treated effluent as per GPCB norms mentioned in column no.2**

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>GPCB NORMS</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>5.5 to 9.0</td>
<td>being maintained &amp; same is recorded on chart</td>
</tr>
<tr>
<td>Temperature</td>
<td>45°C</td>
<td>online monitor on continuous Basis with all controlling &amp; Monitoring equipment in Place with proper functioning</td>
</tr>
<tr>
<td>Colour (pt.co.scale)</td>
<td>100 units</td>
<td>maintained</td>
</tr>
<tr>
<td>Suspended Solids</td>
<td>100 mg/L</td>
<td>maintained</td>
</tr>
<tr>
<td>Oil and Grease</td>
<td>10 mg/L</td>
<td>maintained</td>
</tr>
<tr>
<td>BOD (5 days at 20°C)</td>
<td>100 mg/L</td>
<td>maintained</td>
</tr>
<tr>
<td>COD</td>
<td>250 mg/L</td>
<td>maintained</td>
</tr>
<tr>
<td>Zinc</td>
<td>15.00 mg/L</td>
<td>maintained</td>
</tr>
</tbody>
</table>

If the COD of the treated effluent is more than 250 Mg/L , industry is required to identify chemicals causing the same in case these are to be toxic as defined in the hazardous chemical rules-1989 (schedule-I) industry shall have to install tertiary treatment system within the month from date of such directions.

The permissible limit of COD in condition No.3.41 above has been fixed on the following grounds:

(A) Indian Rayon is an integrated plant manufactures various products such as sulphuric acid, caustic soda, power and sulphuric acid etc. along with viscose filament yarn.

(B) Plants other than viscose filament yarn products effluent which would have less BOD in effluent compare to effluent to give benefits of dilutions to the effluent generated.

(C) Standards for viscose filament yarn as laid down in Govt. of Gujarat Gazette dt. 11-9-97 on p.no.209/14 for Ind. Specific Standards doe BOD is 30 mg/L.

**Our BOD limit is 100 mg/lit; at present it is running under GPCB norms.**
3.4.3 The effluent conforming to the above standards shall be discharged into the sea through Closed Marine Pipeline.
Effluent being discharged into deep sea through closed Marine pipeline, in the effluent water all parameter maintained within GPCB limits. Bioassay test is carried on monthly basis and the report indicates that quality of treated effluent is very much within safe limits of Mortality test.

3.5 All the conditions stipulated by Ministry of Environment & Forests, Government of India vide letter No.11-80/2008-IA –III dtd.20/10/2008 shall be strictly implemented for laying a pipe line for disposed of treated effluent in the coastal environmental of Arabian Sea off Veraval Coast
Company is complying with all the conditions given by MOEF, New Delhi

Company is complying with all the conditions given by MOEF, New Delhi

Company is complying with all the conditions given by MOEF, New Delhi

3.8 All the conditions stipulated by Forests & Environment Department of, Government of Gujarat their letter No.ENV-10/2008-1177 –E dtd.06/10/2008 shall be strictly implemented for proposed treated effluent disposal pipe line
Company is complying with all the conditions given by DOEF, Gandhinagar

3.9 All the effluent treatment units shall be operated and maintained efficiently so that the treated effluent always conforms to the specifications referred in condition no.3.41 above
All the effluent treatment units are in operation and well maintained. On continuous basis equipped with standby /redundant capacity of all critical equipments.

3.10 Domestic Sewage Treatment sewage shall be disposed off through septic tank / soak pit system or it shall be treated along with industrial effluent or it shall be treated separately to conform to the following standards and shall discharged at:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>GPCB Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD</td>
<td>Less than 20 mg/l</td>
</tr>
<tr>
<td>Suspended solids</td>
<td>less than 30 mg/l</td>
</tr>
<tr>
<td>Residual Chlorine</td>
<td>minimum 0.5 ppm</td>
</tr>
</tbody>
</table>

Industry has Installed Sewage Treatment Plant Capacity of 500 M³/day for plant & staff colony and used as source of make-up Water for cooling Towers and plantation.

3.11 In order to enable the Board to perform its functions of ascertaining the standards of effluent laid down by it for the discharge of the effluent under the condition no.3.41 of this order are complied with by the Company while causing discharge of effluent, the applicant shall have to submit every month the analysis report of the samples of
effluent to be collected and analyzed by one of the laboratories recognized by the State Board.
Industry is submitting report of effluent samples on monthly basis to GPCB Regional office at Junagadh & its Head office at Gandhinagar.

3.12 The Environmental Management Unit / Cell shall be set up to ensure implementation on and monitoring of environmental safeguards and other conditions stipulated by statutory authorities. The Environmental Management Cell / Unit shall directly report to the Chief Executive of the organization and shall work as a focal point for internalizing environmental issues. These cells/units also coordinate the exercise of environmental audit and preparation of environmental statements.

a) Industry has corporate Environment Management Structure, which reports to the office of the Chairman.

b) Director of our Business monitors the Environment Management System and at the Unit Level President & Assistant Vice President (Heads Environment Management system).

c) A team of Qualified & Competent engineers to maintain the aspects & implement Environment Management system effectively and ensure its continuous improvement. Environment Cell also coordinates in Carrying out Environment Audit and preparation of Environmental Statements.

3.13 The Environmental Audit shall be carried out yearly and the environmental statements pertaining to the previous year shall be submitting to this State Board latest by 30th September every year.

a) Environment Statement Form -V is being submitted to GPCB regularly.

b) Ahmedabad Textile Industry’s Research Association (ATIRA) Carried out Environment Audit-2013 and report has been submitted to Member Secretary GPCB, Gandhinagar on 31.01.2014.

3.14 The Board reserves the right to review and/or revoke the consent and/or make variations in the conditions, which the Board deems fit in accordance with Section 27 of the Act.
As per Section 27 of the Act, Indian Rayon has not made any change in process, plant design, treatment of effluent plant and discharge system. Industry has strengthened their ETP system by additional one SS clarifier, one guard pond & control valve for controlling lime/acid dosing for marinating pH & same is recorded on chart.

3.15 In case of change of ownership / management the name and address of the new owners/partners/directors/proprietor should immediately be intimated to the Board.
Industry has intimated to GPCB/CPCB if any change in above point is arised.

3.16 The consent to operate the industrial plant shall lapse if at any time the any conditions of this consent order are not complied with OR any parameters of the liquid effluent are not within the tolerance limit specified in the condition no.3.4.1 above.
As Industry concerns, industry has established full-fledged environment pollution control equipment as per best available techniques Industry also has pollution monitoring equipment to monitor the various level of emissions. The facilities installed, operated & maintained in the company premises are the level of acceptable norms.
3.17 Industry shall have to obtain CRZ clearance if applicable & submit to this Board. Not applicable because the plant is located 500 mtr distance beyond high tide line.

3.18 The applicant shall also comply with the General Conditions as per Annexure-I enclosed. All the general Conditions are complied on the point of the management commitment towards environment protection.

PENALTY PROVISIONS: If the applicant fails to comply with the conditions and other directives issued by this Board as laid down in this order, the applicant is liable for prosecution under Section 43 & 44 and other penal provisions of the Act and shall on conviction, be liable for punishment and imprisonment as provided in the said Act.

4. CONDITIONS UNDER THE AIR ACT:

4.1 The following shall be used as fuel.

<table>
<thead>
<tr>
<th>SL.No.</th>
<th>Boiler/ DG Set/ Flaker Unit</th>
<th>Name of Fuel Used</th>
<th>Quantity</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Boiler No.1 &amp; 2 (Old Power Plant)</td>
<td>Coal cum Lignite</td>
<td>8.5 MT/Hr for each boiler</td>
<td>Being Maintained</td>
</tr>
<tr>
<td>2.</td>
<td>Boiler No.3 (New Power Plant)</td>
<td>Coal cum Lignite</td>
<td>14 MT/hr</td>
<td>Being Maintained</td>
</tr>
<tr>
<td>3.</td>
<td>Boiler No.4</td>
<td>HCV Coal</td>
<td>3.5 MT/hr</td>
<td>Being Maintained</td>
</tr>
<tr>
<td>5.</td>
<td>D.G. Sets- 2270 KVA-6 Nos.</td>
<td>F.O.</td>
<td>7 KL/day for each DG set</td>
<td>Being Maintained</td>
</tr>
<tr>
<td>6.</td>
<td>D.G. Sets -1450 KVA- 2Nos.</td>
<td>L.D.O.</td>
<td>5 KL/day for each DG set</td>
<td>Being Maintained</td>
</tr>
<tr>
<td>7.</td>
<td>D.G. Set -1500 KVA-1 No.</td>
<td>L.D.O.</td>
<td>5 KL/day</td>
<td>Being Maintained</td>
</tr>
<tr>
<td>8.</td>
<td>Caustic Soda Flaking Unit</td>
<td>Hydrogen</td>
<td>375 M³/MT</td>
<td>Being Maintained</td>
</tr>
</tbody>
</table>

4.2 The applicant shall install & operate a comprehensive control system so as to achieve standards.

Industry has installed following Air pollution control systems:-

a) Alkali Scrubber for removal of traces of SO2 emission from Sulphuric Acid Plant.
b) Alkali Scrubber for recovery of H2S and CS2 emission and generation of Sodium Sulphide as salable by-product in CS2 Plant.
c) Multistage Alkali Scrubber for recovery of Waste / Chlorinated Gases as Sodium Hypochlorite by product in Caustic Soda Plant.
d) H2S and CS2 emissions control by continuous supply of humidified air through Air Washers and exhausting dilute gases through 2 Nos. of Process Stacks.
e) Fogging Generating System ODC-50 at CS2 plant for neutralization of odour in and around the plant.
f) Water scrubber in Sodium Sulphate plant to control Sodium Sulphate aerosols emitting to atmosphere.
g) Bag filters with Coal fired boilers to control particulate emissions.

h) Electrostatic precipitators (ESP) with Boilers of 34.5 MW Co-generation Power Plant.

i) Opacity Meter which is connected to our DCS for continuous monitoring of SPM in Power plant.

j) Bag filters in Coal crushing unit.

4.2.1 The emission shall conform to the following specifications:

(A) FOR BOILER STACK

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>SOURCE</th>
<th>TOLERANCE LIMIT</th>
<th>IR Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>Stack Attached To Boiler-4</td>
<td>150 mg/Nm3</td>
<td>&lt;150 mg/Nm3</td>
</tr>
<tr>
<td>Oxides of Nitrogen</td>
<td>Stack Attached To Boiler-4</td>
<td>50 ppm</td>
<td>&lt; 50 ppm</td>
</tr>
<tr>
<td>Oxides of Sulphur</td>
<td>Stack Attached To Boiler-4</td>
<td>100 ppm</td>
<td>&lt; 100 ppm</td>
</tr>
</tbody>
</table>

(B) FOR PROCESS STACK

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>SOURCE</th>
<th>TOLERANCE LIMIT</th>
<th>IR Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>Stack Attached to Coal Crushing Unit &amp; Flaker Unit</td>
<td>150 mg/Nm3</td>
<td>&lt;150 mg/Nm3</td>
</tr>
<tr>
<td>SO₂</td>
<td>Stack Attached to Old &amp; New Sulfuric Acid (H₂SO₄) Plant</td>
<td>2 Kg/Ton of 100% Acid Production</td>
<td>&lt;2 Kg/Ton of 100% Acid Production</td>
</tr>
<tr>
<td>Acid Mist</td>
<td>Stack Attached to Old &amp; New Sulfuric Acid (H₂SO₄) Plant</td>
<td>50 mg/Nm3</td>
<td>&lt;50 mg/Nm3</td>
</tr>
<tr>
<td>CS₂</td>
<td>Stack Attached to Rayon Plant (Old &amp; New)</td>
<td>225 Kg/ MT of Yarn Production</td>
<td>&lt; 225 Kg/ MT of Yarn Production</td>
</tr>
<tr>
<td>H₂S</td>
<td>Stack Attached to Rayon Plant (Old &amp; New)</td>
<td>45 mg/Nm3</td>
<td>&lt;45 mg/Nm3</td>
</tr>
<tr>
<td>HCL Vapour &amp; Mist</td>
<td>Stack Attached to Hydro Chloric Acid Plant (HCL) In Caustic Soda Plant</td>
<td>35 mg/Nm3</td>
<td>&lt;35 mg/Nm3</td>
</tr>
<tr>
<td>Chlorine</td>
<td>Stack Attached to Hypo Plant In Caustic Soda Plant</td>
<td>15 mg/Nm3</td>
<td>&lt;15 mg/Nm3</td>
</tr>
</tbody>
</table>
(C) FOR POWER PLANT

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>SOURCE</th>
<th>TOLERANCE LIMIT</th>
<th>IR Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter</td>
<td>Stack Attached To Power Plant Boiler (1&amp;2 and 3)</td>
<td>150 mg/Nm³</td>
<td>&lt;150 mg/Nm³</td>
</tr>
<tr>
<td>Oxides Of Nitrogen</td>
<td>Stack Attached To Power Plant Boiler (1&amp;2 and 3)</td>
<td>50 ppm</td>
<td>&lt; 50 ppm</td>
</tr>
<tr>
<td>Oxides Of Sulphur</td>
<td>Stack Attached To Power Plant Boiler (1&amp;2 and 3)</td>
<td>100 ppm</td>
<td>&lt; 100 ppm</td>
</tr>
</tbody>
</table>

4.3 The height of stack shall be as under:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Stack attached to</th>
<th>Stack Height in Meter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Old and New Rayon Plant</td>
<td>52.5</td>
</tr>
<tr>
<td>2</td>
<td>Old and New sulfuric Acid Plant</td>
<td>30</td>
</tr>
<tr>
<td>3</td>
<td>Caustic Chlorine Plant (Hypo Plant)</td>
<td>34</td>
</tr>
<tr>
<td>4</td>
<td>Caustic Chlorine Plant (HCL Plant)</td>
<td>34</td>
</tr>
<tr>
<td>5</td>
<td>Old and New Caustic Flaker Unit</td>
<td>34</td>
</tr>
<tr>
<td>6</td>
<td>Power Plant Boiler No.1 &amp; 2</td>
<td>122</td>
</tr>
<tr>
<td>7</td>
<td>Power Plant Boiler No 3</td>
<td>122</td>
</tr>
<tr>
<td>8</td>
<td>Boiler No.4</td>
<td>31</td>
</tr>
<tr>
<td>9</td>
<td>Coal Crushing Unit</td>
<td>52</td>
</tr>
<tr>
<td>10</td>
<td>D.G. Sets - 2270 KVA-6 Nos.</td>
<td>40</td>
</tr>
<tr>
<td>11</td>
<td>D.G. Sets -1450 KVA-2Nos.</td>
<td>11</td>
</tr>
<tr>
<td>12</td>
<td>D.G. Set -1500 KVA-1 No.</td>
<td>30</td>
</tr>
</tbody>
</table>

4.4 Industry shall have to comply following in pursuant to notification issued by GOI on 22-12-98.

(A) Uncontrolled Emission Quantities (EQ) of CS2 shall not exceed
FOR VFY
EQ = 225 KG/OF CS2/T OF FIBER  < 225 KG/OF CS2/T OF FIBER

(B) STACK HEIGHT:

(a) A minimum of 80% total emission estimated above shall pass through stack having height calculated for formula described under at (b). If calculated stack height is less than 30 mt, a minimum height 30 mt shall be provided.

(b) STACK HEIGHT IN METER

H = 11 Q^{0.41} − 3 VS D/U
WHERE Q = CS2 EMISSION RATE, KG/HR.
VS=STACK EXIT VELOCITY -m/sec.
D = DIAMETER OF STACK – METER
U = ANNUAL AVERAGE WIND SPEED AT TOP OF STACK – m/sec.

(C)  IN CASE OF MULTIPLE STACK

1. All stack carrying CS2 emission shall be same height based on maximum emission rate.
   **Height is 52 M of Both Rayon Stack.**

2. Number of stack shall be increased from the existing number. However, the number of stack may be reduced. The existing stack may be rebuilt and if stack are to be relocated, condition no.3 below applies.
   **Number of Stack is TWO**

3. Spacing among the stacks (x) at the minimum shall be 3.0 H (in mt.) if the distance, X between two stack is less than 3.0 H (in mt.) emission both stack shall be calculated considering all emission is going through one stack.
   **The distance between two rayon stacks is 186 M, with more than three times of height of the chimney.**

(D)  AMBIENT AIR QUALITY MONITORING

Industry shall install three air quality monitoring station for CS2 and H2S measurement in consultation with this board to ensure following ambient air norms on 24 hour average basis.

<table>
<thead>
<tr>
<th>PARAMETER</th>
<th>PERMISSIBLE LIMIT</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM10</td>
<td>100 µg /per cubic meter</td>
<td>&lt; 100 µg /per cubic meter</td>
</tr>
<tr>
<td>PM2.5</td>
<td>60 µg /per cubic meter</td>
<td>&lt; 60 µg /per cubic meter</td>
</tr>
<tr>
<td>Oxides of Sulphur</td>
<td>80 µg /per cubic meter</td>
<td>&lt; 80 µg /per cubic meter</td>
</tr>
<tr>
<td>Oxides of Nitrogen</td>
<td>80 µg /per cubic meter</td>
<td>&lt; 80 µg /per cubic meter</td>
</tr>
<tr>
<td>HCl</td>
<td>200 Microgram per cubic mtr.</td>
<td>&lt; 200 Microgram per cubic mtr.</td>
</tr>
<tr>
<td>Cl2</td>
<td>100 Microgram per cubic mtr.</td>
<td>&lt; 100 Microgram per cubic mtr.</td>
</tr>
</tbody>
</table>

4.5 The concentration of the following parameters in the ambient air within the premises of the industry shall not exceed the limits specified hereunder.

4.6 The applicant shall provide portholes, ladder, platform etc. at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board’s staff. The chimney(s) vents attached to various sources of emission shall be designed by number(s) such as S-1, S-2, etc. and these shall be painted / displayed to facilitate identification.
Industry has provided portholes, ladder, platform etc. at chimney(s) for monitoring the air emissions. Emissions from the various sources are identified by different Colour.

4.7 The applicant shall operate air pollution control equipment very efficiently and continuously so that the gases emission always conforms to the standards specified in condition No.4.2.1 and 4.5 above.

Industry has installed following Air pollution control systems:-

a) Alkali Scrubber for removal of traces of SO2 emission from Sulphuric Acid Plant.

b) Alkali Scrubber for recovery of H2S and CS2 emission and generation of Sodium Sulphide as salable by-product in CS2 Plant.

c) Multistage Alkali Scrubber for recovery of Waste / Chlorinated Gases as Sodium Hypochlorite by product in Caustic Soda Plant.

d) H2S and CS2 emissions control by continuous supply of humidified air through Air Washers and exhausting dilute gases through 2 Nos. of Process Stacks.

e) Fogging Generating System ODC-50 at CS2 plant for neutralization of odour in and around the plant.

f) Water scrubber in Sodium Sulphate plant to control Sodium Sulphate aerosols emitting to atmosphere.

g) Bag filters with coal fired boilers to control particulate emissions.

h) Electrostatic precipitators (ESP) with Boilers of 34.5 MW Co-generation Power Plant.

i) Opacity Meter which is connected to our DCS for continuous monitoring of SPM in power plant.

j) Bag filters in Coal crushing unit.

4.7.1 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75 dB(a) during day time and 70 dB(A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

The noise level in the industry is being monitored and these are within the range expect in very few location. Workers working in those areas are using the earplug/ earmuffs.

4.7.2 The consent to operate the industrial plant shall lapse if at any time any conditions of this consent order are not complied with OR parameters of the gaseous emission are not within the tolerance limits specified in the condition no. 4.2.1 and 4.5 above.

As Industry concerns, Industry has established full-fledged environment pollution control equipment as per best available techniques. Industry also has pollution monitoring equipment to monitor the various level of emissions. The facilities installed, operated & maintained in our company premises are the level of acceptable norms.

4.7.3 The applicant shall at his own cost get samples of emissions collected and analyzed from an approved laboratory once in three months for the parameters indicated in condition no. 4.2.1 & 4.5 and shall submit in duplicate the report there of to the Board by the 10th of the succeeding month. The applicant shall also maintain records of the analytical results properly and shall keep these records/charts open for inspection.

Industry has analyzed samples, Stack monitoring, Ambient monitoring through ATIRA and maintain the record for inspection.
PENAL PROVISIONS: - If the applicant fails to comply with the conditions of this order and other directives issued by the Board he is liable for prosecution under Section 37, 38, 39 and other penal provisions of the Act.

5. AUTHORIZATION FOR THE MANAGEMENT & HANDLING OF HAZARDOUS WASTES Form-2 (See rule 3(C) & 5 (5)) Form for grant of authorization for occupier or operator handling hazardous waste.

5.1 Indian Rayon. (A Unit of Aditya Birla Nuvo Ltd.) is hereby granted an authorization to operate facility for following hazardous waste on the premises situated at Veraval, Dist; Junagadh.

<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Type of Waste &amp; Nature</th>
<th>Quantity/Year</th>
<th>Schedule I Process No.</th>
<th>Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sulphur Sludge (Acidic)</td>
<td>70 MT</td>
<td>17.1</td>
<td>Collection, Storage, Transportation, Disposal by Secured Land filling at CTSDF of SEPPL, Bhachau, Dist. Kutch</td>
</tr>
<tr>
<td>2</td>
<td>Used Oil/Burnt Oil &amp; LDO/FO Sludge</td>
<td>60 MT</td>
<td>5.1</td>
<td>Collection, Storage, Transportation, Disposal by selling to registered reprocess</td>
</tr>
<tr>
<td>3</td>
<td>Discarded Container</td>
<td>1500 nos</td>
<td>33.3</td>
<td>Collection, Storage, Transportation, Disposal by selling to authorized recycler</td>
</tr>
<tr>
<td>4</td>
<td>Cellulose waste (organic Bio degradable)</td>
<td>110 MT</td>
<td>23.1</td>
<td>Collection, Storage, Transportation, Disposal by co-incineration in cement kiln of ULC, Kovaya, Dist, Amerli &amp; also being send for disposal by incineration to CTSDF of SEPPL, Bhachau, Dist.</td>
</tr>
</tbody>
</table>

Complied
<table>
<thead>
<tr>
<th>Sr. No</th>
<th>Type of Waste &amp; Nature</th>
<th>Quantity/Year</th>
<th>Schedule-IV</th>
<th>Facility</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Spent catalyst from H2SO4 Plant (Solid)</td>
<td>5 MT</td>
<td>17.2</td>
<td>Collection, Storage, Transportation, Disposal by Solidification &amp; Stabilization at CTSDF of SEPPL, Bhachau, Dist. Kutch</td>
</tr>
<tr>
<td>6</td>
<td>Toxic metal containing waste i.e. Spent Resin from DM Plant (Solid)</td>
<td>2.5 MT</td>
<td>34.2</td>
<td>Collection, Storage, Transportation, Disposal by incineration at CTSDF, of SEPPL, Bhachau, Dist. Kutch</td>
</tr>
<tr>
<td>7</td>
<td>Oily Cotton Waste</td>
<td>1.5 MT</td>
<td>5.2</td>
<td>Collection, Storage, Transportation, Disposal by incineration at CTSDF of SEPPL, Bhachau, Dist. Kutch</td>
</tr>
<tr>
<td>8</td>
<td>E-Waste</td>
<td>5 MT</td>
<td>18</td>
<td>E-Waste is to be sold to the E-coli Waste Management Private Limited, Sabarkantha</td>
</tr>
<tr>
<td>9</td>
<td>Lead Acid Battery plates and other Led Scrap not covered under Batteries Rules-2001</td>
<td>40 MT</td>
<td>17</td>
<td>Lead Acid Batteries are to be sold to the GPCB approved recyclers</td>
</tr>
</tbody>
</table>

5.2 The authorization is granted to operate a facility for collection, storage, within factory premises, transportation, incineration and ultimate disposal of Hazardous wastes at TSDF. Developed by Saurashtra Enviro Private Project Limited, Bhachau, Dist. Kutch Complied
| 5.3 | The authorization shall be in force for a period of Five Years from the date of application. | - |
| 5.4 | The authorization is subject to the conditions slated below and such other conditions as may be specified in the rules from time to time under the Environment (Protection) Act-1986. | Specific Conditions |

**Specific Conditions**

| 5.5 | Toxic Metal containing waste should be disposed only after & Encapsulation and compliance of toxicity test | Industry will Comply |
| 5.6 | Cellulose waste shall be disposed by Co-incineration in the cement kiln of UCL, Kovaya Amreli & unit shall maintained separate record of it. | Complied |
| 5.7 | Unit shall carry out analysis of ETP waste every month & Submit its report to the board specifically with reference to zinc concentration and if it is found beyond prescribed limit ,it shall be disposed of at TSDF SEPL, Bhachau, Dist. Kutch. | Complied |
| 5.8 | Unit Shall comply condition of EC issued by MOEF Dated 18.07.2008 | Complied |
| 5.10 | TERMS AND CONDITIONS OF AUTHORIZATION | |
| a) | The applicant shall comply with the provisions of the Environment (Protection) Act – 1986 and the rules made there under. | Complied |
| b) | The authorization shall be produced for inspection at the request of an officer authorized by the Gujarat Pollution Control Board. | Complied |
| C) | The persons authorized shall not rent, lend, sell transfer of otherwise transport the hazardous wastes without obtaining prior permission of the Gujarat Pollution Control Board. | Complied |
| d) | Any unauthorized change in personnel, equipment or working conditions as mentioned in the consents form / order should immediately be intimated to this Board. | Complied |
| e) | It is the duty of the authorized person to take prior permission of the Gujarat Pollution Control Board to close down the facility. | Complied |
| f) | An application for the renewal of an authorization shall be made as laid down in rule 5. | -- |
| g) | Industry shall have to manage waste oil, discarded containers etc .as per Amended rules 2008 and shall Authorization/ Submit details for all the applicable waste as per Amended Rules – 2008. | Complied |
| h) | Industry shall submit annual report within 15 days and sub squinty by 31\textsuperscript{st} January every year | Complied |

5 **GENERAL CONDITIONS:** -

6.1 Any change in personnel, equipment or working conditions as mentioned in the consents form / order should immediately be intimated to this Board. If change in process, equipment & other condition industry shall inform to GPCB immediately.

6.2 Applicant shall also comply with the general conditions given in Annexure. I All the general conditions are complied on the point of the management commitment towards Environment protection.
6.3 The waste generator shall be totally responsible for (i.e., collection, storage, Encapsulation, incineration, Treatment, transportation and ultimate disposal of waste generated Compiled

6.4 Records of waste generation, its management and annual return shall be submitted to Gujarat Pollution Control Board in Form –IV by 30th June of every year
Records of waste generation, its management & annual return submitted to GPCB in Form-4 respectively. This report submitted to GPCB on regular basis.

6.5 In case of any accident, details of the same shall be submitted in Form-5 to Gujarat Pollution Control Board.
Any incidence occurred the details shall be submitted to GPCB

6.6 As per “Public Liability Insurance Act-91” Company shall get Insurance Policy, if applicable “Public Liability Insurance Act-91” Valid up to 31/03/15

6.7 Empty drums and containers of toxic & hazardous material shall be treated accordingly and after making sure that no traces of toxic and hazards are left out then and only then, they shall be stored safely. Records of the same shall be maintained and forwarded to Gujarat Pollution Control Board regularly
Industry has stored empty drums & sent to GPCB approved recyclers and its record forwarded to GPCB.

6.8 In no case any kind of solid waste shall be imported without prior approval of appropriate authority
Indian Rayon does not import any solid/hazardous waste

6.9 In Case of Transport of Hazardous waste to a facility for (i.e., treatment ,storage & Disposal ) existing in a state other then the state where Hazardous waste are generated, the occupier shall obtain NOC from the state Pollution Control Board, Committee concerned state or Union territory and administration where the facility exist.
Not applicable

6.10 Unit shall take all concrete measures to show tangible results in waste generation reduction voidance, reuse and recycle .Action taken in this regards shall be submitted within the three months along with form-IV.
Industry will comply.

6.11 Industry shall have to display relevant information with regard to Hazardous waste as indicated in the Hon. Supreme Court's Order in W.P. No. 657 of 1995 dated 14th Oct 2003.
Industry has been displaying all relevant information with regard to Hazardous waste

6.12 Industry shall have to display on line data outside the main factory gate with regard to quantity and nature of Hazardous Chemicals being handled in the plant including waste water & air emissions & Solid Hazardous waste generated within the factory premises
Industry has been displaying all relevant information on the Main factory gate with regard to quantity and nature of Hazardous Chemicals handled in the plant including waste water & air emissions & Solid Hazardous waste generated within the factory premises.

6.13 Whenever due to accident or other unforeseen act or ever, such emissions occur or is apprehended to occur in excess of standards laid down such information shall be forthwith reported to Board, concerned Police Station, Office of Directorate of Health Service, Department of Explosives, Inspectorate of Factories and local body. In case of failure of pollution control equipments, the production process connected to it shall be stopped. Remedial actions/measures shall be implemented immediately to bring entire situation normal.

Noted, Industry will comply, however in case of failure in pollution control Equipments & problem in process, industry has prepared Guard Pond.

For and on behalf of
Gujarat Pollution Control Board

(R V Patel)
ENVIRONMENT ENGINEER
General Conditions- ANNEXURE-I

1. In case of any change either in products, its capacity or manufacturing process, the applicant shall have to obtain prior permission of this Board. The application shall not commence the production until consent under Water (Prevention and Control of Pollution) Act-1974, Air (Prevention and Control of Pollution) Act-1981 and authorization under the Hazardous Waste (Management and Handling) Rules-1989 is obtained.

Industry will inform accordingly.

2. If the products/process falls in SCHEDULE-I or II of the Environment Audit Scheme, as specified in the order dated 13/3/97 of Hon. High Court in MCA NO.326/97 in SCA No. 770/95, the applicant shall also abide by the said scheme.

Ahmedabad Textile Industry’s Research Association (ATIRA) has carried out environment Audit-2013 and report has been submitted to Member Secretary GPCB Gandhinagar on 31.01.2014.

3. The applicant shall have to register the unit under the provisions of the Factories Act 1948 and shall obtain the necessary factory license.

Industry has registration under the provisions of the Factories Act 1948

4. The applicant shall have to obtain P.L.I. Policy as per P.L.I. Act, 1991 and submit the copy of the same to the G.P.C.B.

Industry has P.L.I. for the period of 01/04/2014 to 31/03/2015 as P.L.I. Act, 1991.

4.1 The unit shall have and operate all the requisite equipments/facilities for prevention and control of efficiently all its effluent treatment plant/air pollution control equipments/facilities for management and handling of hazardous wastes. Whenever the effluent treatment plant/air pollution control equipments/facilities for hazardous waste or any part thereof are fully or partly non-operational for any reason whatsoever (whether for maintenance/repairs/electricity failure or otherwise) unit shall closedown its manufacturing/processing activities and shall not restart it unless and until all it's the effluent treatment plants/air pollution protection and control equipments and facilities including stack monitoring/facilities for hazardous waste management and handling are fully operational.

As Industry concerns, Industry has established full-fledged environment pollution control equipment as per best available techniques. Industry also has pollution monitoring equipment to monitor the various level of emissions. The facilities installed, operated & maintained in the company premises are the level of acceptable norms. In case of any power failures, emergency power supply is available by DG Set to effluent treatment plant/Air pollution control equipments and other Auxiliary unit of the plant apart from this, in case of failure of pollution control equipment, industry has sufficient Capacity of Guard pond.
5. The applicant shall comply with provisions of The Water (Prevention & Control of Pollution) Cess Act 1977 (to be referred as Cess Act) and Rules there under:

5.1 The industry falls in the Schedule -I the category of the Cess Act and the Rules made there under.

5.2 The daily water consumption for the following categories is as under:

i) Domestic 422296 kl/year  
ii) Industrial Processing 3082749 kl/year  
iii) Industrial Cooling 717899 kl/year
iv) Agriculture/Gardening

5.3 The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess specified under Section 3 of the said Act. The industry has paid water cess for the period 2012-2013, Assessment Order No. 166583 dated 14/10/2013, amount paid Rs. 6, 31, 017/- and 2013 -2014 is under progress.

6. The unit shall have and use only one outlet for the discharge of its effluent and no effluent shall be discharged without requisite treatment and without meeting with the GPCB norms. Such outlet shall be near the front gate/entrance of the unit. The unit shall not keep any bypass line or system, or loose or flexible pipe for discharging effluent outside or even for transporting treated or untreated effluent within the factory premises, within effluent treatment plants or in the compound of the unit.

The industry has installed magnetic flow meter at the outlet of effluent treatment plant for measuring the flow of effluent discharged from the plant. All the liquid effluent of the plant is discharged through this single point and maintaining the records of the same.

7. The unit shall, within one week from the date of issue of this order.

7.1 Put up at the entrance and prominent places boards prominently displaying the name of the unit, particulars of the products/process and the name of the proprietor/partners/directors of the unit, the electricity consumer number and the name of the electricity consumers as on the record of the GEB. Complied

7.2 Make adequate lighting arrangements all around the Effluent Treatment Plants / Air Pollution Control measures / incinerator / facilities of hazardous management and handing also above the Boards mentioned in the above clause. Yes, Lighting is provided in and around the ETP such that workers can work within the ETP without any difficulty during night.

8. The unit shall supply to the GPCB the figures of production and consumption of electricity and water for each day during the period of production, though such figures shall be supplied on weekly basis. The unit shall supply separate figures for consumption of electricity for running the Air Pollution Control measures/incineration
system by having a separate meter / sub-meter for each Air Pollution Control measures. The number of units consumed by operating the diesel generating sets, if any, shall also be supplied to the GPCB on monthly basis.
Complied

9. The unit shall also supply to the GPCB within one week from the date of the order, the documents regarding monthly production and consumption of electricity in the last six months.
Complied

10. The unit shall submit, within one week from the date of the order, to the GPCB any committee appointed by the court, the site plan of the unit indicating the location of manufacturing / processing plant as also the effluent treatment plants, and also a separate plan indicating the channel through which water / effluent passes from different stages of manufacturing / processing and the effluent treatment process right up to the stage of its final outlet.

Site plan of the Unit indicates location of Manufacturing process, Effluent Treatment Process. Apart from this, a separate plan of channel through which effluent passes from different stages of manufacturing and treatments process to the final outlet.

11. Such plans shall also be displayed by the unit on a Board of adequate size within its compound and near its effluent treatment plant/s shall permit the officers/employees of the GPCB/Govt. Members/s of the Committee appointed by Court, Member/s of the monitoring committee of the Association/s of the Industries to enter the factory premises and to inspect and take samples from the unit at any time without any prior intimation.
Industry has displayed site plan near Main Gate and Ready to inspect at any time.

12. Any delay in giving any of the above person’s entry into the factory premises or any plant thereof or Air Pollution Control measures shall entail closure of the unit. All the Watchman/Security personnel of the unit shall be immediately appraised of the above.
Industry will comply.

13. It shall be open to the GPCB through general instructions of circulars and to the GPCB Officers inspecting the unit to give all the support instructions regarding location of the outlet and / or any other appropriate directions regarding effluent treatment plants/air pollution control equipments, their operation and processes and disposal channel and disposal system. The unit shall comply with all such instructions, whether general or special.
Industry will comply.

14. When electricity supply or water supply is disconnected in future on account of non-compliance with the GPCB norms or on account of the closure order, which may be
passed by the court or by the Govt./GPCB under any statutory provisions relating to environmental protection and prevention and control of pollution.

14.1 The unit shall not use any diesel generating set or any other alternative source of energy or water tankers from outside for continuing the production activities.
14.2 The unit shall pay wages to its workers regularly every month or at such shorter intervals as per the central / practice followed so far. Industry will comply.

15. “Magnetic Flow Meters” should be installed at inlet and outlet of Effluent Treatment Plant (ETP thereafter).
Company has installed magnetic flow meter at the outlet of effluent treatment plant for measuring the flow of effluent discharged from the plant. All the liquid effluent of the plant is discharged through this single point and maintaining the records of the same.

16. All the chemicals and nutrients, which are required to be added /dosed anywhere in the ETP, should be so added by using “Metering Pumps” only.
Industry has installed Metering pumps for dosing of Poly electrolyte in the ETP.

17. The pipelines connecting various equipments or sumps or tanks of ETP should be minimum in number. Loose connections of hosepipes or temporary connections will not be permitted. Industry will comply.

18. In case of plants involving “Bio-mass” treatment, for each addition of biomass time and quantity, should be recorded. The uptake rate of Oxygen of the biomass in the aeration basin and other parameters of biological system should be recorded, every day.
Not Applicable

19. In case of incinerators the unit shall provide, the flow measuring devices for mother liquor, light diesel oil, air used for combustion and temperature measuring devices within incinerators at different points and scrubber. These devices should be provided outside the incinerator. The temperatures as well as flow should be recorded every day.
Not Applicable

20. The printed log-books shall be maintained and get them certified for :-
20.1 Energy/Fuel Consumption/Raw material consumption and quantity of products manufactured.
20.2 Waste water / gaseous / hazardous waste flow at inlet & outlet of E.T.P. & air pollution control measures / incinerator.
20.3 Quantity of sludge generated / treated / stored / reused / disposed off separately for each type of hazardous waste.
20.4 Laboratory analysis / reports for each of the specified parameters of liquid effluents, gaseous discharge and hazardous waste sample.
Industry is maintaining the above records and certified by our Environment Auditor.
21. Adequate number of influent and effluent quality monitoring stations should be set up in consultation with the Gujarat Pollution Control Board. Regular Effluent / emission quality monitoring should be carried out for relevant parameters and the monitored data along with the statistical analysis and interpretation should be submitted to the Gujarat Pollution Control Board on monthly basis.

Industry has analyzed effluent samples, stack monitoring, Ambient monitoring through ATIRA and maintain the record for analysis & submit the analysis report to GPCB. Industry has also in-house analyzing of effluent Samples Stack monitoring, Ambient monitoring and submit the report at GPCB. We have maintained four Ambient stations in consultation with GPCB/CPCB officials and Environment Auditors ATIRA.

22. Guard ponds of sufficient holding capacity should be provided to cope with the effluent discharge during the process disturbances. In the event of failure or non-functioning of the ETP, the respective units should be immediately put out of operation and should not be restarted until the control measures are rectified to achieve the desired efficiency. Guard pond should be provided with impervious lining and stability of the ponds with respect to leakages/cracks and other factors should be ensured.

As Industry concerns, Industry has established full-fledged environment pollution control equipment as per best available techniques. Industry also has pollution monitoring equipment to monitor the various level of effluent water. The facilities installed, operated & maintained in the company premises are the level of acceptable norms. In case of any power failures emergency power supply by DG Set to effluent treatment plant pollution control equipments and other Auxiliary unit of the plant apart from this in case of failure of pollution control equipment, industry has sufficient Capacity of Guard pond.

23. The ground water quality around the guard ponds and facilities of hazardous waste should be monitored on a regular basis. The monitored data should be submitted to this Board once in six months.

Industry is monitoring ground water quality around the guard ponds and maintaining the records of the same. Facilities of hazardous waste (Sulphur sludge, Vandum Pentoxide and Resin) are being monitored on regular basis and maintaing the records of same & Submitted to GPCB Regional Office at Junagadh and Head office at Gandhinagar.

24. Fugitive emissions should be controlled, regularly monitored and data recorded. The monitored data should be submitted to this Board once in a month.

The work environment is monitored on continuous basis by chlorine sensors installed at different locations as per the requirement. CS2 and H2S are also monitored with sensor and the results are continuously monitored and maintained.

24.1 Ambient air quality monitoring stations should be set up in the downwind direction as well as at locations where maximum ground level concentrations are anticipated. These locations should be fixed in consultation with the GPCB. The number of air
quality monitoring stations and frequency of monitoring should be selected on the basis of mathematical modeling to represent short term ground level concentrations, human settlements, sensitive targets, etc. Stack emissions from the boiler and heater should be monitored for SO2, NOx, Hydrocarbon and SPM and record maintained. Online continuous stack monitoring equipments should be provided for measurement of SO2 and NOx.

Four Nos (a. Engineering Hostel terrace b.Guest House terrace c. Rayon Administrative terrace d.Caustic Administrative terrace) of ambient air stations are established and ambient quality is being measured for PM10, PM 2.5, SOx, NOx, CS2, H2S, HCl and Cl2. Stations are fixed as per the guidelines of the Gujarat Pollution Control Board Officers.

24.2 Data on ambient air quality and stack emission from boiler and heater should be submitted to this Board once in a month along with the statistical analysis and interpretation.

Industry is regularly maintaining data of ambient air quality of four stations and stack analysis and submitting the analysis report to GPCB Head office at Gandhinagar and Regional office at Junagadh on monthly basis.

26. Low NOx burns should be provided to avoid excessive formulation of NOx. Only LSHS will be used as fuel during the critical months to ensure that SO2 levels in the ambient air is within the norm specified.

Industry has 34.5 MW Power Plant and 9 D.G sets. Only emergency situation we use D.G set for power supply of auxiliary unit of the plant. We will maintain the Sox & NOx values in the ambient Air pollution due to DG Sets are not having much significance, mere quantity of fuel is utilized in the DG Sets only operating during emergency. Emission from all DG Sets by providing adequate stack height as per CPCB Regulation. Safe Stack height of DG Sets is 11 M above the roof. Flue gas emitted from DG sets is sent to the waste heat recovery boiler for steam generation. Industry has installed DG sets with acoustic enclosure.

27. On-site and off-site Emergency Plan as required under the Rules 13 and 14 of the Handling, Manufacture, Storage and Import of the Hazardous Chemicals Rules, 1989 should be prepared and approval from the Board should be obtained.

On-site and off-site emergency plans have been defined, documented and implemented by the industry. The industry upgrades the same regularly. Industry has approved onsite Emergency plan and Offsite Emergency plan and its validity period is one year and it is duly approved by Deputy –Director (Industrial Safety and Health), Government of Gujarat.

HAZOP Study Report of CS2 Plant / Xanthomate Section / Caustic Plant / Sulfuric Acid Plant is prepared by M/s Prosafe, Surat in year 2013.

Statutory Safety Audit of entire plant was carried out in the year 2012 by external agency M/s Prosafe, Surat.

The Company is fully committed to the protection of the environment as evident in the ISO 14001, ISO 9001, OHSAS 18001 and SA 8000 yearly reconfirmation of the same to our company by reputed International Agencies like DNV and Intertek.
28. **A community welfare scheme for improving the socio-economic environment should be worked out and report submitted to the Board and Government for review.**

Industry has Corporate Social Jan Seva Trust, which is working for the upliftment of the weaker sections of the Society and raise the Country’s Human Development Index in consultation with Government agencies. We have a separate budget for socio-economic development of weaker Society. Apart from this, industry has also taken up a number of community development initiatives including periodic medical camps, in which free medicine is distributed, and sustainability livelihood projects for improving socio-economic conditions of the neighboring villagers. As a result of this, Industry has been able to maintain a very cordial relationship with the surrounding communities. Industry is regularly submitting report to the concerned department.

29. **Periodical medical check-up of the workers should be done and records maintained as a measures to provide occupational health service to the workers.**

Work Zone Monitoring for CS2 and H2S was conducted in Rayon Plant by National Institute of Occupational Health, Ahmedabad from 18/03/2011 to 24/03/2011 and Report of “Cardiological and Neurological Health effects in Viscose Rayon workers exposed to Carbon disulphide” is received from NIOH dated 18.09.2012 and report is ok. Occupational health surveillance programme are conducted on regular basis. Improving medical facilities and monitoring facilities are planned in our OHSAS - 18001 Safety Management Programme. Employees exposed to different emissions like exposures to CS2, H2S .Cl2 and Noise levels are subjected to respective Medical Examinations. Records of such examinations are maintained in the Base line Data for Individual Medical History Card. Services of Surgeons & Physicians from Veraval town also provided for specific requirements of the employees including their family members. We are pleased to inform you that Medical camps are also conducted by the industry for the rural people.

30. **The project authorities should set up laboratory facilities for collection, analysis of samples under the supervision of competent technical personnel who will report to the Chief Executive.**

Industry has a Corporate Environment Management structure which reports to the Office of the Chairman. Director of our Business monitors the environment management system and at the Unit Level President & Asistant Vice President (Heads Environment Management system). Qualified & Competent Engineers to maintain the aspects and implement Environment Management System effectively and ensure its continuous improvement. A well-equipped laboratory & dedicated EMC are established in the factory to regularly analyze & monitor the highly fragile eco-system of the complex. We are also monitoring ambient air apart from four stations, All the results are within the GPCB Prescribed Norms.

31. **The funds earmarked for the Environmental protection measures should not be diverted for any other purpose and year wise expenditure should be reported to this Board and to the Government.**

The policy of the company is that for any Environmental incidents there are no budget restrictions. However, a minimum amount of Rs.25 to 30 lacs earmarked on annual basis for environmental activities. This is besides expansion incurred for chemical consumption and strengthening of existing pollution control and monitoring equipments. In the year 2013-2014 an amount of Rs.1 Cr have been spent for the Fogging Generating System ODC-50 at CS2 plant for neutralization of odour in and around the plant, Energy Saver LED base lighting within the various sections of the plant, three Nos. of Solar Lights at Guest House area and
others pollution control equipments in respective plant even though the present facility is capable of meeting the prescribed limits. For the Environmental requirement, return on investment is not calculated and the budget is allocated as discretionary budget. There is no limitation from the side of Management for spending on regulatory /Environmental protection requirements. Industry is regularly submitting year wise expenditure through Environment Statement.

32. **Storm water shall not be mixed with the industrial effluent. Disposal system for storm water shall be provided separately.**

Industry has defined & periodic schedule for cleaning of all Effluent Channel as well as storm channels to eliminate choking of the same and instructed all the concerned departments / sections for implementation of the same on continuous & regular basis. Industry is very conscious and alert to take all precautions regularly as not to mix both the streams.

33. **Good house-keeping shall be maintained within the factory and industrial premises.**

All pipes, valves and drains shall be leak proof. Floor washing shall be admitted in to the effluent collection system for subsequent treatment and disposal.

Industry has defined & periodic schedule for cleaning of all Effluent Channel as well as storm channels to eliminate choking of the same and instructed all the concerned departments / sections for implementation of the same on continuous & regular basis. Apart from this plant routes, passages and roads within the premises are ensured to be free from spillages of raw materials and finished products.

34. **The directives issues by the Board from time to time in view of direction issued by the Honorable High Court of Gujarat in the matter of S.C.A.770/95 shall have to be complied with.**

Industry will comply

**PENALTY PROVISIONS:**

If the applicant fails to comply with the conditions and other directives issued by this Board as laid down in this order, the applicant is liable for the action under section 5 of the E(P) Act and also prosecution under Section 43 & 44 and other penal provisions of the Water Act and under section 37, 38, 39 and other penal provisions of the Air Act & under section 15 of the E(P) Act and shall on conviction, be liable for punishment and imprisonment as provided in the said Acts.

**NOTE:**

The Board reserves the right to review and/or revoke the consent/authorization and/or make variations in the conditions that the Board deems fit in accordance with provisions of the Rules/Acts.

**Conditions for Transportation facility:**

1. **For transportation of waste the generator, occupier or operator of a facility shall ensure that the hazardous wastes are packed, based on the composition in a manner suitable for handling, storage and transport.**
Industry generates Sulfur Sludge, Spent Catalyst & Resin and finally send to CTSDFs Saurashtra Enviro Private Project Limited, Bhachau. Sulphur sludge is stored in an identified & approved site with impervious lining and sent to SEPPL, Bhachau. Vanadium Pentoxide and Resin keeping in a tightly closed container stored in a cool, dry ventilated area and protected under covered shed and finally sent to SEPPL, Bhachau. Used burnt Oil & LDO sludge these are being stored in identified area with proper shed. The accumulated wastes are sold to the GPCB approved recyclers.

2. The labeling and packaging shall be easily visible and be able to withstand physical conditions and climate factors.
Labeling and packaging of each waste easily visible and able to withstand physical conditions and climate factors.

3. Packaging, Labeling, marking on containers and transport of the Hazardous waste shall be in accordance with the provisions of the rules made by the Central Government under the Motor Vehicle Act, 1988 and other guidelines issued from time to time.
Packaging, Labeling, marking is followed.

4. All hazardous waste containers shall be provided with a general label as given in Form-8 as per Amended rules.
Industry will comply.

5. The occupier shall prepare six copies of the manifests in form 9 comprising of color codes indicated in the rules and follow up the movement of manifests as per the rules. No transporter shall accept hazardous wastes from an occupier for transport unless it is accompanied by copy 2 to 5 of the manifests.
Copy of manifest as per the colour codes prepared as per guidelines of MOEF.

6. The transporter shall return copy number 2 of the manifest signed with date in the occupier as token of receipt of the other four copies of the manifest and retain the remaining four copies to be handled over to respective agencies in specified in the rules.
Copy of manifest is submitted to GPCB & other statutory authorities.

7. The transporter shall be given clear instruction in Form-10.
TERM Card is provided and given clear instruction in Form -10.

8. Each container shall be inspected at least once in a week for any leakages or spillage problem. Due care shall be taken during transportation to avoid leakages or spillage.
Maintained wherever applicable.

9. The transporter shall be responsible for taking appropriate steps to clean up spillage, which may occur during transit as specified in TREMCARD.
Transporters follow guidelines of TREMCARD.

10. Transporter and person handling Hazardous waste shall be trained and drivers shall be educated trained properly.
Transporter, driver and person handling hazardous waste are properly trained.
11. **Transporter shall be given TREMCARD. A copy of TREMCARD shall be forwarded before operation carried out to Gujarat Pollution Control Board, Gandhinagar.**
   TERM Cards are provided and Copy of TERM CARD attached as annexure at the time of obtaining Hazardous waste consent.

12. **Transporter shall be given in safety devices like goggles, gloves, mask, fire extinguisher, gumboots, etc.**
   Safety appliances are provided wherever needed.

13. **Vehicles, which are proposed to be used for transportation, shall be registered under Motor Vehicle Act.**
   Registered vehicles are only used for transportation.

14. **Emergency Plan shall be prepared for transportation activity.**
   Emergency plan for Transportation is prepared & documented.

15. **Source of waste generation and final destination of disposal place shall be informed to Gujarat Pollution Control Board, Regional Office in that Area.**
   Industry generates Sulfur Sludge, Spent Catalyst & Resin and finally send to CTSDFs Saurashtra Enviro Private Project Limited, Bhachau. Sulphur sludge is stored in an identified & approved site with impervious lining and sent to SEPPL, Bhachau. Vanadium Pentoxide and Resin keeping in a tightly closed container stored in a cool, dry ventilated area and protected under shed and finally sent to SEPPL, Bhachau. Used burnt Oil & LDO sludge these are being stored in identified area with proper shed. The accumulated wastes are sold to the GPCB approved recyclers under intimation to them.

16. **Transporter shall dispose Hazardous waste only at authorized disposal facility.**
   Industry generates Sulfur Sludge, Spent Catalyst & Resin and finally send to CTSDFs Saurashtra Enviro Private Project Limited, Bhachau. Sulphur sludge is stored in an identified & approved site with impervious lining and sent to SEPPL, Bhachau. Vanadium Pentoxide and Resin keeping in a tightly closed container stored in a cool, dry ventilated area and protected under shed and finally sent to SEPPL, Bhachau. Used burnt Oil & LDO sludge these are being stored in identified area with proper shed. The accumulated wastes are sold to the GPCB approved recyclers. E-Waste is being disposed off to the E-Coli Waste Management Private Limited, Sabarkantha, which is an approved recycler by GPCB.

17. **A contingency plan shall be prepared and made known to the transporter for emergency action.**
   Contingency Plan has been prepared & made available with safety department & Transporters.

**Conditions for Collection and Storage facilities:**

1. **You shall keep complete records of the types, quantities and characteristics of hazardous waste and its management from collection to ultimate disposal.**
   The records of waste generation, collection & its storage area are submitted to GPCB on monthly basis.

2. **Storage site shall be prepared & maintained as follows:-**
a. Storage site shall have sufficient capacity for storage of solid Hazardous waste with impervious lining having four-side adequate boundary protection.

b. A leachate collection & drainage line at all storage sites shall be provided and connected to the inlet of Effluent Treatment Plant for treatment.

c. Additional precautions shall be taken to prevent surface runoff through waste body during monsoon.

d. Unit shall explore the possibilities of waste minimization, avoidance, reuse, recycling, etc. and submit the complete plan for the approval of GPCB.

Sufficient Capacity of storage provided for storage/solid/hazardous waste. Sulphur sludge pits are provided with leachate collection system, which is connected, to the ETP. This provision is made to avoid spillage of water runoff during Mansoon.

3. Waste after required treatment shall be stored with due care that in no case any waste shall be released from this site into Environment causing surface water or underground water or soil pollution.

Industry has provided dyke wall around the all storage tanks, neutral waste & one of the storage tank always kept empty so in case of emergency liquid transferred to empty stand-by storage tank. Due to this no seepage of chemicals to underground water or soil pollution occurred.

4. In no case waste shall be disposed off on land, within or outside factory premises, sold out to traders/dealers or transferred, without prior approval of the Board.

Oil wastes are sold to the GPCB approved recyclers.

5. All the storage site, “Hazardous Waste Storage Site” & “Danger” signboards shall be provided with all safety devices.

Industry has provided all the signboards.

6. Hazardous waste shall be segregated at source from non-hazardous waste.

Industry has provided separate cell/pits for each waste.

7. Each type of waste shall be stored in a separate storage cell. In no case more than one waste shall be stored in one cell.

Sufficient Capacity of storage provided for storage/solid/hazardous waste. Sulphur sludge pits are provided with leachate collection system, which is connected, to the ETP. This provision is made to avoid spillage of water runoff during Mansoon. Industry has provided separate cell/pits for each waste.

8. Post storage monitoring shall be regularly carried out and report of the same shall be submitted to Gujarat Pollution Control Board.

Records of waste generation, its management & annual return submitted to GPCB in form –3 & Form-4 respectively. This report submitted to GPCB on regular basis.

9. Hazardous Waste shall be stored on site for a maximum period of 90 days & a maximum quantity of 10 MT or a truckload whichever is less. For storage of Hazardous waste more than 90 days/or more than 10 MT prior permission shall be obtained from Gujarat Pollution Control Board, Gandhinagar.
Industry will comply.

10. **For “Small Generator” (i.e. less than 1000 Kg in a month)** Hazardous Waste shall be stored on site for a maximum period of one year and at the end of which it should be disposed off.

   Industry will comply.

11. **Preparation of containers it’s total No. Map of storage site nearby Activities, etc. shall be maintained and submitted to Gujarat Pollution Control Board.**

   Industry has record of Empty oil drums and empty drums are sent to recycler which was approved by GPCB & Map of Storage site where containers are kept is submitted to GPCB Regional Office at Junagadh and Head Office at Gandhinagar.

12. **Environment Impact Analysis and/or Risk assessment report shall be prepared and reviewed time-to-time and submitted to Gujarat Pollution Control Board, Gandhinagar.**

   Industry will comply.

13. **Emergency plan shall be prepared for storage site of Hazardous Waste and submitted to Gujarat Pollution Control Board, Gandhinagar.**

   Emergency plan for storage site of Hazardous Waste is prepared & documented shall be submitted to GPCB.

14. **The occupier shall prepare six copies of the manifests in Form 9 comprising of color codes indicated in the rules and follow up the movement of manifests as per the rules. The occupier shall forward copy number 1 (White) to the State Pollution Control Board or Committee and in case the hazardous waste is likely copy each for such State and forward the same to the concerned State Pollution Control Board or Committee before the hands over the hazardous waste to the transporter.**

   Copy of manifest as per the colour codes prepared as per guidelines of MOEF.

15. **The occupier shall provide the transporter with relevant information in Form 10, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency.**

   Emergency plan for Transportation is prepared & documented.

16. **The generator shall offer his Hazardous waste to the authorized transporter.**

   Registered vehicles of Authorized transporter are only used for transportation of Hazardous waste.

   **Disposal by selling:**

   1. **The hazardous waste shall be sold out to authorize actual reuser only.**

      Oil wastes are sold to the GPCB approved recyclers.

   2. **If the authorization of the reuser is withdrawn or cancelled by the Board, authorization issued to you for transportation of Hazardous Waste for selling/disposal shall be automatically treated as cancelled without further reference to you.**

      Industry will comply.

   3. **No owner or occupier generating non-ferrous metal waste specified in Schedule 4 or generating used oil or waste oil of ten tons or more per annum shall sell or auction**
such non-ferrous metal wastes, used oil or waste oil except to a registered re-refiner or recycler, as the case may be, who undertakes or re-refine of recycle the waste within the period of validity of his certificate of registration.
Industry will comply.

4. Any waste oil which does not meet the specifications laid down in Schedule 6 shall not be auctioned or sold but shall be disposed of in hazardous wastes Incinerator installed with air pollution control devices and meeting emission standards.
Industry will comply.

5. The persons generating waste or auctioneers shall ensure that at the time of auction or sale, the period of validity of the certificate registration of the registered re-refiner or recycler is sufficient to reprocess the quantity of wastes being sold or auctioned to him.
Industry will comply.

6. The waste generators and auctioneers shall ensure that the wastes are not allowed to be stored for more than ninety days and shall maintain a record of auctions and sale of such wastes and make these records available to Board or Committee for inspections.
Industry will comply.

7. The waste generators and auctioneers shall file annual returns of auction and sale in Form-13 latest by 31st day of January of every year to the Board.
Industry will comply.