



**DESCRIPTIVE REPORT ON STATUS OF COMPLIANCE TO CONDITIONS OF ENVIRONMENT CLEARANCE AND ENVIRONMENT MANAGEMENT**

Compliance Status (for the period of **October 2020 – March 2021**) of Environmental Clearance issued by MoEF, New Delhi vide letter **Reference no. J-16011/4/93-IA.III Dated 21.06.1996**

**(Detail of project:** “Construction of a Port terminal at Dahej in the Gulf of Cambay for handling the liquid hydrocarbon and other chemicals” at GIDC, Dahej, Taluka Vagra, Dist. Bharuch, Gujarat by M/s Gujarat Chemical Port Terminal Company Limited.)

<b>SN</b>	<b>Conditions</b>	<b>Status / Action taken</b>
<b>A</b>	<b>SPECIFIC CONDITION</b>	
i	Infrastructure facilities like water supply, power supply, firefighting arrangements, sewerage and drainage system must be provided for the proposed facilities and the port area.	Infrastructure facilities like water supply, power supply, firefighting arrangements, and sewerage and drainage system are provided within the Terminal premises including Jetty.  The water is being sourced from GIDC and the power is being sourced from Dakshin Gujarat Vij Company Ltd.  <b>COMPLIED.</b>
ii	All construction designs and drawing relating to proposed construction must have the approval of the concerned state government department/agency.	GCPTCL had obtained requisite permissions from the relevant government departments / bodies / authorities like GPCB (CTE and CCA), PESO (Petroleum Explosives and Safety Organisations), DISH (Director of Industrial Safety and Health), GMB (Gujarat Maritime Board) etc.  <b>COMPLIED.</b>
iii	The projects authorities should undertake dredging and reclamation work in stages, in consultation with some expert institution in such a way as to ensure that these operations do not deteriorate the surface water quality, which must be maintained within the prescribed standards. Water quality parameters viz. Turbidity, Dissolved Oxygen, Ammonical Nitrogen and other nutrients in waters should be measured at regular intervals to monitor water quality.	Natural draught available at the berth location. Thus, no dredging activity carried out.  Dredging and reclamation work, if required – will be undertaken under approval from GMB while ensuring that surface water quality is maintained within the prescribed standards.  <b>Not applicable.</b>
iv	To prevent discharge of sewage, bilge waste and other liquid wastes in to the marine environment, adequate system for collection, treatment and disposal of liquid wastes including shoreline interceptor for	Vessels visiting the berths are not allowed to release/discharge oily waste, bilge waste, ballast & solid waste including wastes in marine environment and is ensured through implementation of “Indemnity Letter and Condition of Use of GCPTCL Jetty.  One such letter duly endorsed by the Vessel Master is attached as <b>Annexure 04</b> in the main report.  <b>COMPLIED.</b>

	receiving liquid wastes from shoreline installations and special hose connection for ships to allow for discharge of sewage must be provided.	
v	Appropriate devices such as oil water separator, oil monitor, oil skimmer etc. must be provided to remove all floatable material including oil spills while re-fuelling the vessels, because of operations of cargo handling equipment and allied machinery, cranes, tractors etc. to tackle the oil pollution in the port area and marine environment.	<p>Supply and maintenance of Oil Spill Equipment like oil water separator, oil monitor, oil skimmer etc. including competent persons to handle Oil Spill, if any is outsourced.</p> <p>Work Order has been awarded to competent agency M/s. Sea Care Marine Services for providing Tier 1 oil spill response (OSR) as per IMO (International Maritime Organization) on 24 x 7 basis.</p> <p>Copy of valid work order, typical sample of certificate of training and maintenance schedule for OSR equipment is attached as <b>Annexure 09, Annexure 10 and Annexure 11</b> respectively in the main report.</p> <p><b>COMPLIED.</b></p>
vi	To maintain hygienic conditions during construction phase appropriate sanitary facilities e.g. latrine facilities at low cost, drinking water facilities, temporary housing facilities and adequate supply of kerosene and diesel must be made available to the workers to avoid pollution of the surroundings and prevent cutting of trees.	<p>The construction workers were provided with basic amenities such as drinking water, food, sanitation etc. to prevent construction workers from deteriorating the environment.</p> <p>Workers engaged for construction activities were preferred/opted from neighbouring community/population.</p> <p><b>COMPLIED.</b></p>
vii	During construction phase it must be ensured that gasoline and diesel power vehicles be maintained and location for their maintenance should be such that accidental spillage of oil is prevented to avoid contamination of ground water. The project authorities must ensure that the spent chemical wastes are neutralised before disposal. Hazardous materials such as diesel and lubricating oil, LPG and other compressed gases, paint materials and acetylene cylinders etc. which are to be utilized during construction phase must be stored as per accepted safety standards.	<p>During the construction phase only well maintained and less polluting vehicles were used. Such vehicles were maintained outside the premises so that chances of oil contamination are avoided.</p> <p>Hazardous chemicals like diesel, lube oils, LPG used during the construction phase were stored in a designated area with proper controls and safety precautions.</p> <p><b>COMPLIED.</b></p>

viii	<p>To control fugitive emissions of hydrocarbons from storage tanks and leaks during transfer and loading, close systems should be planned during design stage to avoid occupational exposure to hydrocarbons. Use of submerged filling is recommended to reduce fugitive emissions at all transfer points. Possibilities of installing vapour collection devices for recovery of hydrocarbons through adsorption canisters may be explored for further reduction in hydrocarbons emissions to the atmosphere.</p>	<p>Fugitive emissions at work places are monitored and records are maintained. Following best practices/RAGAGEP have been implemented with a view to eliminate/reduce the fugitive emissions.</p> <ul style="list-style-type: none"> <li>• Handling of products through closed systems – use of piping and loading arms for transfer/handling of products Flange joints in the piping network are of full faced gasket joint and valves (stem) equipped with graphite fitting etc.</li> </ul>  <ul style="list-style-type: none"> <li>• Material transfer pumps are of centrifugal type and are provided with double mechanical seals.</li> <li>• Prevention/Reduction of evaporation loss - Rim seal type vapour seal mechanism is provided for storage tanks containing highly volatile products i.e. class 'A' petroleum products.</li> </ul>  <ul style="list-style-type: none"> <li>• Leak Detection and Alarm Repair 103 LEL detectors are installed at prominent locations to continuously measure the release of hazardous material, if any from the pipeline/storage tank etc. and subsequent initiating corrective measures.</li> </ul> <p><b>Monitoring of Fugitive Emission –</b> Regular monitoring of fugitive emission (Volatile Organic Component) is carried out through Schedule-I Environmental Auditor – M/s. MANTRA (Man Made Textile and Research Association, Gujarat) - refer <b>Annexure 25</b> in the main report.</p>
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Summary of fugitive emission monitoring for the reporting period (October 2020 to March 2021) is appended as below for ready reference.

Location	Average VOC (mg/m <sup>3</sup> )
Near Atmospheric Gantry	1.14
Near Pressurize Gantry	1.24
Near BOG Area	1.25
Near LPG Tank Farm	1.32
Near Propane Tank Farm	1.14
Near Py Gas Tank Farm	1.17
Near Methanol Tank Farm	1.15
Near Px Tank Farm	1.11
Near Hydrocarbon Tank (Naphtha)	1.33
Near Acetic Acid Tank Farm	1.31

No limit prescribed for VOC.



Analytical report of one such fugitive emission monitoring is attached as **Annexure 26** in the main report.



**Workplace monitoring –**

Workplace monitoring for presence of hazardous chemicals, if any is carried out through MoEF&CC (recognition valid till 04.01.2022) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022)– M/s. Kadam Environmental Consultants, Gujarat –details attached as **Annexure 28** in the main report.

Summary of monitoring of hazardous chemical at workplace for the reporting period i.e., **(October 2020 to March 2021)** is appended as below for ready reference.

Hazardous chemical	Average mg/m <sup>3</sup>	Minimum mg/m <sup>3</sup>	Maximum mg/m <sup>3</sup>
Px	3.59	2.37	5.38
Methanol	3.12	1.61	6.12
Hydrocarbon	2.27	1.24	3.11
Butadiene	ND	ND	ND
Acetic Acid	ND	ND	ND
Caustic Fumes	ND	ND	ND
Propylene Oxide	ND	ND	ND
Propane	3.96	2.68	6.68

		<p>Report of one such workplace monitoring for the reporting period is attached as <b>Annexure 27</b> in the main report.</p> <p><b>COMPLIED.</b></p>																								
ix	<p>Major sources of noise are transfer pumps at tank farms. In order to keep the noise levels within the prescribed standards noise barrier/shield in the form of walls and compressors and air dryer meeting the prescribed noise levels must be provided wherever possible. Use of ear-muffs and other protective devices in noise-prone areas are recommended for use by the workers. Plantation of tree may be carried out which also helps as a noise barrier.</p>	<p>The major activity is storage and handling of chemicals and as such no manufacturing activities are carried out, there is less likelihood of high noise generating machinery/equipment. However, noise suppression devices where applicable like -</p> <p>Pumps are provided with suitable noise suppression measures e.g. enclosure, muffler on exhaust etc.</p> <div style="text-align: center;">  <p><b>Silenser on Diesel Fire Pumps Exhaust</b></p> </div> <div style="text-align: center;">  <p><b>Enclosure - Emergency DG Set</b></p> </div> <p>Practice is in place for monitoring of Noise level, at periodic level, within the complex at workplace as well as at the extreme perimeter through MoEF&amp;CC and NABL recognized third party as well as by internal resource and records are maintained.</p> <p>Summary of noise level monitoring for the period (October 2020 to March 2021) is presented as below for ready reference.</p> <table border="1" data-bbox="682 1690 1421 1877"> <thead> <tr> <th>Area/Location</th> <th>Average</th> <th>Minimum</th> <th>Maximum</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Ambient Air Noise Monitoring – DAY/NIGHT in dB(A)</b></td> </tr> <tr> <td>Nearby Store</td> <td>56/52</td> <td>52/47</td> <td>66/62</td> </tr> <tr> <td>Main Gate</td> <td>58/53</td> <td>54/49</td> <td>62/59</td> </tr> <tr> <td>Material Gate</td> <td>59/55</td> <td>56/47</td> <td>64/62</td> </tr> <tr> <td>Landfall Point</td> <td>54/54</td> <td>49/47</td> <td>66/59</td> </tr> </tbody> </table>	Area/Location	Average	Minimum	Maximum	<b>Ambient Air Noise Monitoring – DAY/NIGHT in dB(A)</b>				Nearby Store	56/52	52/47	66/62	Main Gate	58/53	54/49	62/59	Material Gate	59/55	56/47	64/62	Landfall Point	54/54	49/47	66/59
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x	<p>The project authorities must ensure that the treatment and disposal of waste water from various sources is carried out as proposed in the environmental management plan.</p>	<p>No discharge of wastewater or disposal of construction debris is done in offshore/onshore/CRZ areas.</p> <p>Major part of wastewater generation is sewage and considerable quantity of trade effluent, which is possible only during non-routine activities like cleaning of tanks, which is possible once in blue moon as chemical specific independent storage tanks are built. In such cases, the effluent generated is taken to ETP for treatment and disposal as prescribed in CC &amp; A.</p> <p>Septic tanks/soak pit systems have been provided for disposal of sewage.</p> <div style="display: flex; justify-content: space-around;">   </div> <ul style="list-style-type: none"> <li>• 15 m<sup>3</sup> capacity STP installed at Jetty.</li> <li>• 125 m<sup>3</sup> capacity ETP is provided for treatment and disposal of industrial effluent, if any generated as a part of non-routine activities like cleaning of tanks etc. which is applicable once in blue moon.</li> <li>• In routine, the primary source of generation of industrial effluent is cooling tower blow down, which is directly diverted to ETP (Guard pond in view of no chemical</li> </ul>																

		<p>treatment is given at cooling tower) for establishing its further use on land for gardening/plantation within the Terminal premises in compliance to CC &amp; A requirement.</p> <p><b>COMPLIED.</b></p>																																																																					
xi	<p>The project authorities after the port terminal has been put into operation must monitor air, water and noise quality by establishing monitoring stations in consultation with the state pollution control board and submit the monitoring reports to this ministry at quarterly intervals. The air monitoring interalia must include measurements of such parameters as NOX, SPM and hydrocarbons. Similarly the water monitoring interalia must consist of such parameters as temperature, suspended solid, pH, alkalinity, dissolve Oxygen, biochemical oxygen demand chemical oxygen demand total organic carbon, oil and grease, hydrocarbons and heavy metals.</p>	<p><b>Ambient Air Quality Monitoring –</b></p> <p>Ambient Air quality monitoring for the general parameters as prescribed in the CC &amp; A is carried out through MoEF&amp;CC (recognition valid till 04.01.2022) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022) – M/s. Kadam Environmental Consultants, Gujarat. Refer <b>Annexure 28</b> in the main report.</p> <p>Summary of Ambient Air Quality Monitoring for the reporting period i.e., (October 2020 to March 2021) is appended as below for ready reference-</p> <table border="1" data-bbox="682 751 1404 1285"> <thead> <tr> <th>Parameter – AAQM</th> <th>GPCB consent ed limit/ NAAQS - <math>\mu\text{g}/\text{m}^3</math></th> <th>Average <math>\mu\text{g}/\text{m}^3</math></th> <th>Minimum <math>\mu\text{g}/\text{m}^3</math></th> <th>Maximum <math>\mu\text{g}/\text{m}^3</math></th> </tr> </thead> <tbody> <tr><td>PM10</td><td>100</td><td>70.83</td><td>63.67</td><td>82.00</td></tr> <tr><td>PM2.5</td><td>60</td><td>20.22</td><td>13.67</td><td>28.00</td></tr> <tr><td>SO2</td><td>80</td><td>8.67</td><td>7.52</td><td>9.34</td></tr> <tr><td>NOx</td><td>80</td><td>12.33</td><td>11.36</td><td>13.10</td></tr> <tr><td>HCL</td><td>200</td><td>6.92</td><td>0.25</td><td>15.98</td></tr> <tr><td>Cl2</td><td>100</td><td>12.02</td><td>1.58</td><td>48.94</td></tr> <tr><td>CO</td><td>4000</td><td>1100.11</td><td>957.67</td><td>1252.33</td></tr> <tr><td>HC</td><td>160</td><td>N.D.</td><td>N.D.</td><td>N.D.</td></tr> <tr><td>NH3</td><td>400</td><td>5.92</td><td>3.53</td><td>9.24</td></tr> <tr><td>H2S</td><td>500</td><td>N.D.</td><td>N.D.</td><td>N.D.</td></tr> <tr><td>CS2</td><td>2000</td><td>N.D.</td><td>N.D.</td><td>N.D.</td></tr> <tr><td>HF</td><td>60</td><td>N.D.</td><td>N.D.</td><td>N.D.</td></tr> </tbody> </table> <p>All the parameters are well within the prescribed limit.</p> <p>Report of Ambient Air Quality Monitoring for the reporting period is attached as <b>Annexure 29</b> in the main report.</p> <p><b>Ambient Air Quality Monitoring (VOC) –</b></p> <p>Ambient air quality monitoring for the presence of VOC is carried out through schedule 1 Environment Auditor – M/s. MANTRA (Man Made Textile and Research Association, Gujarat). Refer <b>Annexure 25</b> in the main report.</p> <p>Summary of fugitive emission monitoring for October 2020 to March 2021 is appended as below for ready reference.</p> <table border="1" data-bbox="690 1753 1412 1900"> <thead> <tr> <th>Location</th> <th>Average VOC (mg/m3)</th> </tr> </thead> <tbody> <tr> <td>Near Atmospheric Gantry</td> <td>1.14</td> </tr> </tbody> </table>	Parameter – AAQM	GPCB consent ed limit/ NAAQS - $\mu\text{g}/\text{m}^3$	Average $\mu\text{g}/\text{m}^3$	Minimum $\mu\text{g}/\text{m}^3$	Maximum $\mu\text{g}/\text{m}^3$	PM10	100	70.83	63.67	82.00	PM2.5	60	20.22	13.67	28.00	SO2	80	8.67	7.52	9.34	NOx	80	12.33	11.36	13.10	HCL	200	6.92	0.25	15.98	Cl2	100	12.02	1.58	48.94	CO	4000	1100.11	957.67	1252.33	HC	160	N.D.	N.D.	N.D.	NH3	400	5.92	3.53	9.24	H2S	500	N.D.	N.D.	N.D.	CS2	2000	N.D.	N.D.	N.D.	HF	60	N.D.	N.D.	N.D.	Location	Average VOC (mg/m3)	Near Atmospheric Gantry	1.14
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xii	<p>To improve the socio-economic environment, the project management must extend their help to improve the medical and drinking water facilities to the people in the nearby villages under programme of welfare activities. Schemes for apprenticeship training should also be explored, leading to availability of technical manpower from among the local people. Efforts should also be made to raise social set up of the village people through subsidies.</p>	<p>The following socio – economic upliftment activities have been taken up in the Lakhigam village in consultation with TDO/DDO/District Collector.</p> <table border="1" data-bbox="682 1031 1404 1402"> <thead> <tr> <th>SN</th> <th>Facilities</th> <th>Evidence – Refer</th> <th>Cost incurred</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Offering employment from nearby community /population .</td> <td>-</td> <td>+80% employment in Non-Supervisory level is from nearby community/population. This is a kind of an ongoing enablement.</td> </tr> </tbody> </table> <p>Following activities were carried out under CSR during October 2020 to March 2021 –</p> <table border="1" data-bbox="682 1524 1404 1770"> <thead> <tr> <th>SN</th> <th>Facilities</th> <th>Evidence – You may please refer</th> <th>Cost incurred</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Construction of Houses for BPL Families (10 + 20 = 30 Houses)</td> <td><b>Annexure 19:</b> in the main report letter from Sarpanch –Lakhigam dated 14.10.2020</td> <td>Rs. 42.02 +Rs. 74.42 = Rs.116.44 Lakhs</td> </tr> </tbody> </table>	SN	Facilities	Evidence – Refer	Cost incurred	1	Offering employment from nearby community /population .	-	+80% employment in Non-Supervisory level is from nearby community/population. This is a kind of an ongoing enablement.	SN	Facilities	Evidence – You may please refer	Cost incurred	1	Construction of Houses for BPL Families (10 + 20 = 30 Houses)	<b>Annexure 19:</b> in the main report letter from Sarpanch –Lakhigam dated 14.10.2020	Rs. 42.02 +Rs. 74.42 = Rs.116.44 Lakhs																												
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		2	Donation to Seva Rural Trust, Jhagadia for installation of Bio Optical Meter	<b>Annexure 20:</b> Letter dt. 03.10.20 from Sewa Rural trust is attached.	Rs. 30 Lakhs
		3	Donation to Civil Hospital for setting up New Born Hearing Centre Services	<b>Annexure 21:</b> Letter dt. 27.11.20 From Gujarat CSR Authority is attached	Rs. 3.42 Lacs
		4	Construction of 40 nos. of houses for BPL Families	<b>Annexure 22:</b> Letter dt. 20.10.20 from TDO is attached	Rs. 126 lacs (In progress)
		5	Construction of Sub health Centre at Lakhigam	<b>Annexure 23:</b> Letter dt. 31.12.20 from TDO is attached	Rs. 50 Lacs (In progress)
		<p>The other key CSR activities includes –</p> <ul style="list-style-type: none"> <li>• Donation of hearing aids for new born babies at Civil Hospital, Bharuch – 4.32 Lacs</li> <li>• Donation of State of the art Optical Bio-Meter to SEWA Rural Hospital, Zaghadiya, Bharuch</li> <li>• Contribution to Deen Special Education Trust – 2.50 Lacs</li> <li>• Play area equipments for 4 schools nearby Lakhigam village – 21.23 Lacs</li> <li>• Construction of Library building with infrastructure – 9.12 Lacs</li> </ul> <p>Total expenditure incurred as a part of CSR and/or socioeconomic activities during October 2020 to March 2021 was @ INR 3.63 crore.</p> <p><b>COMPLIED.</b></p>			
xiii	A comprehensive disaster management plan based on studies related to damage of port property caused by accidents and/or fire, spillages/leakages and	Disaster Management Plan (DMP) / On-Site Emergency Action Plan is in place.			

	<p>submitted to this ministry within six months for its approval.</p>	<p>Bharuch district DMP is prepared by the district administration. Copy of relevant pages are attached as <b>Annexure 58</b> in the main report.</p> <p>Site level On-Site Emergency Action Plan is prepared and was last reviewed in January 2021. Copy of plan – Index Page is attached as <b>Annexure 59</b> in the main report.</p> <p>Copy of the plan had been submitted to the office of Directorate of Industrial Health and Safety (DISH) vide our letter—dated 08.02.2021.</p> <p><b>COMPLIED.</b></p>				
<p>xiv</p>	<p>An environmental management cell with suitably qualified people to carry out various functions must be set up to have sufficient in-house capability to monitor and implement the programmes related to pollution control and environmental conservation.</p>	<p>A separate environment management cell headed by Head – HSEF and supported by an Environment Manager / HSE Manager.</p> <p>The position titled as HSE Manager is currently occupied by Mr. Hemant Singh – M. Tech. (Environmental Science and Engineering)</p> <p>Detailed organogram of HSEF department as on date is appended as below for ready reference.</p> <div style="text-align: center;"> <p><b>GUJARAT CHEMICAL PORT TERMINAL COMPANY LIMITED</b></p> <hr/> <p><b>ORGANIZATIONAL CHART - HSEF Department</b></p> <pre> graph TD     MD[MANAGING DIRECTOR] --&gt; ED[Executive Director]     ED --&gt; HO[Head of Operation]     HO --&gt; HHSEF[Head HSEF (1)]     HHSEF --&gt; MHSEF[Manager HSEF (1)]     MHSEF --&gt; AMHSEF[Assistant Mgr HSEF (4)]     AMHSEF --&gt; S[Supervisor (1)]     S --&gt; Firemen[Firemen 22+8]     S --&gt; DCO[DCO 7]     S --&gt; FPO[Fire Pump Operator (3)]     S --&gt; ETO[ETP Operator - working with Team Operation] </pre> <table border="1" style="width: 100%; margin-top: 10px;"> <tr> <td style="width: 25%;">Firemen 22+8</td> <td style="width: 25%;">DCO 7</td> <td style="width: 25%;">Fire Pump Operator (3)</td> <td style="width: 25%;">ETP Operator - working with Team Operation</td> </tr> </table> </div>	Firemen 22+8	DCO 7	Fire Pump Operator (3)	ETP Operator - working with Team Operation
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		<b>COMPLIED.</b>																																																								
xv	The quality of treated effluents, solid wastes, emissions and noise levels etc. must confirm to the standards laid down by the competent authorities including central/state pollution control board and under the environment (Protection) Act-1986, whichever are more stringent.	<p>Quality of treated effluents, solid wastes, emissions and noise levels etc. must confirm to the standards laid down by the competent authorities including central/state pollution control board and under the environment (Protection) Act-1986.</p> <p><b>Workplace monitoring –</b></p> <p>Workplace monitoring for presence of hazardous chemicals, if any is carried out through MoEF&amp;CC (recognition valid till 04.01.2022) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022)– M/s. Kadam Environmental Consultants, Gujarat –details attached as <b>Annexure 28</b> in the main report.</p> <p>Summary of monitoring of hazardous chemical at workplace for the reporting period i.e., <b>(October 2020 to March 2021)</b> is appended as below for ready reference.</p> <table border="1" data-bbox="667 720 1421 1178"> <thead> <tr> <th>Hazardous chemical</th> <th>Average mg/m3</th> <th>Minimum mg/m3</th> <th>Maximum mg/m3</th> </tr> </thead> <tbody> <tr> <td>Px</td> <td>3.59</td> <td>2.37</td> <td>5.38</td> </tr> <tr> <td>Methanol</td> <td>3.12</td> <td>1.61</td> <td>6.12</td> </tr> <tr> <td>Hydrocarbon</td> <td>2.27</td> <td>1.24</td> <td>3.11</td> </tr> <tr> <td>Butadiene</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>Acetic Acid</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>Caustic Fumes</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>Propylene Oxide</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>Propane</td> <td>3.96</td> <td>2.68</td> <td>6.68</td> </tr> </tbody> </table> <p>Report of one such workplace monitoring for the reporting period is attached as <b>Annexure 27</b> in the main report.</p> <p><b>Ambient Air Quality Monitoring –</b></p> <p>Ambient Air quality monitoring for the general parameters as prescribed in the CC &amp; A is carried out through MoEF&amp;CC (recognition valid till 04.01.2022) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022) – M/s. Kadam Environmental Consultants, Gujarat –Refer <b>Annexure 28</b> in the main report.</p> <p>Summary of Ambient Air Quality Monitoring for the reporting period i.e., (October 2020 to March-2021) is appended as below for ready reference.</p> <table border="1" data-bbox="667 1677 1421 1894"> <thead> <tr> <th>Parameter – AAQM</th> <th>GPCB consented limit - µg/m3</th> <th>Average µg/m3</th> <th>Minimum µg/m3</th> <th>Maximum µg/m3</th> </tr> </thead> <tbody> <tr> <td>PM10</td> <td>100</td> <td>70.83</td> <td>63.67</td> <td>82.00</td> </tr> <tr> <td>PM2.5</td> <td>60</td> <td>20.22</td> <td>13.67</td> <td>28.00</td> </tr> <tr> <td>SO2</td> <td>80</td> <td>8.67</td> <td>7.52</td> <td>9.34</td> </tr> </tbody> </table>	Hazardous chemical	Average mg/m3	Minimum mg/m3	Maximum mg/m3	Px	3.59	2.37	5.38	Methanol	3.12	1.61	6.12	Hydrocarbon	2.27	1.24	3.11	Butadiene	ND	ND	ND	Acetic Acid	ND	ND	ND	Caustic Fumes	ND	ND	ND	Propylene Oxide	ND	ND	ND	Propane	3.96	2.68	6.68	Parameter – AAQM	GPCB consented limit - µg/m3	Average µg/m3	Minimum µg/m3	Maximum µg/m3	PM10	100	70.83	63.67	82.00	PM2.5	60	20.22	13.67	28.00	SO2	80	8.67	7.52	9.34
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NOx	80	12.33	11.36	13.10
HCL	200	6.92	0.25	15.98
Cl2	100	12.02	1.58	48.94
CO	5000	1100.11	957.67	1252.33
HC	160	ND	ND	ND
NH3	400	5.92	3.53	9.24
H2S	500	ND	ND	ND
CS2	2000	ND	ND	ND
HF	60	ND	ND	ND

All the parameters are well within the prescribed limit.

Report of Ambient Air Quality Monitoring for the reporting period is attached as **Annexure 29** in the main report.

Practice is in place for monitoring of Noise level, at periodic level, within the complex at workplace as well as at the extreme perimeter through MoEF&CC and NABL recognized third party as well as by internal resource and records are maintained.

Summary of noise level monitoring for the period (October 2020 to March 2021) is presented as below for ready reference.

Area/Location	Average	Minimum	Maximum
<b>Ambient Air Noise Monitoring – DAY/NIGHT in dB(A)</b>			
Nearby Store	56/52	52/47	66/62
Main Gate	58/53	54/49	62/59
Material Gate	59/55	56/47	64/62
Landfall Point	54/54	49/47	66/59
<b>At Workplace Noise Monitoring – in dB(A)</b>			
Jetty Service Platform	55/52	48/46	62/58
BOG Compressor House	62/57	59/48	66/60
Mechanical Workshop	55/51	48/46	60/55
Gantry Area	56/52	48/46	60/55

From the above details, it is confirmed that the overall noise level is within the limit prescribed in EPA, 1986.

Quality parameter of treated effluent – ETP outlet is meeting with the limit prescribed in the CC&A – is appended as below for ready reference.



**LABORATORY TEST REPORT – EFFLUENT**

REPORT NO.: DEC20/082/17 (ULR- TC78992000010342F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s Gujarat Chemical Port Terminal Company Limited, P.O. Lakhigam Via: Dahej, Tal.: Vagra, Dist.: Bharuch – 392130.	3. Client Representative: Mr. Jigar Patel
2. Sample ID: ZD44626246 – 082DC20EF02	5. Sample Collected By: Mr. Vimal
4. Sample Date: 10.12.2020	7. Analysis Completed on: 18.12.2020
6. Analysis commenced on: 14.12.2020	9. Discipline : Chemical
8. Reporting Date: 29.12.2020	11. Group : Pollution and Environment
10. Packing Condition & Quantity: Sealed ✓	13. Product: Waste Water
12. Sampling Location : <b>ETP Outlet</b>	
14. Sampling Method: IS : 3025 (Part 1) - 1987	

**TEST RESULTS**

S.No.	Parameters	Unit (SI)	Results	Specification/SPS/BIS Standards	Method Used
1.	pH	:	7.94	6.5 – 8.5	APHA: 23 <sup>rd</sup> Edition 4500-H <sup>+</sup> B
2.	Temperature	°C	28	40	APHA: 23 <sup>rd</sup> Edition 2550 B
3.	Colour	Pt-CO	10	100	APHA: 23 <sup>rd</sup> Edition 2120 B
4.	Total Dissolved Solids	mg/L	1832	2100	APHA: 23 <sup>rd</sup> Edition 2540 C
5.	Suspended Solids	mg/L	26	100	APHA: 23 <sup>rd</sup> Edition 2540 D
6.	COD	mg/L	37	100	APHA: 23 <sup>rd</sup> Edition 5220 B
7.	BOD (3 days at 27 °C)	mg/L	19	30	IS 3025 (Part 44) : 1993
8.	Oil & Grease	mg/L	<1	10	APHA: 23 <sup>rd</sup> Edition 5520 B
9.	Phenolic Compounds	mg/L	<0.02	1	APHA: 23 <sup>rd</sup> Edition 5530 D
10.	Ammonical Nitrogen	mg/L	1.66	50	IS 3025 (PP-34): 1988
11.	Chlorides	mg/L	138	600	APHA: 23 <sup>rd</sup> Edition 4500 Cl <sup>-</sup> B
12.	Sulphates	mg/L	841	1000	APHA: 23 <sup>rd</sup> Edition 4500 SO <sup>4</sup> E
13.	Sulphide	mg/L	<1	2	IS 3025 (Part – 29): 1986
14.	Total Chromium	mg/L	<0.02	0.1	APHA 23 <sup>rd</sup> Edition 3500 Cr – B
15.	Hexavalent Chromium	mg/L	<0.02	2.0	APHA 23 <sup>rd</sup> Edition 3500 Cr – B
16.	Fluoride	mg/L	<0.05	1.5	APHA 23 <sup>rd</sup> Edition 4500 F – D
17.	Bio-Assay Test	%	Pass	96% survival of fish after 96 hours in 100% effluent	IS 6582 Part-2, 2001

Remark : *[Signature]*

Name : Sapana Amin Designation : Lab Incharge

- NOTE: 1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.  
 2) Re analysis of sample will be done, if requested within 15 days from the date of Reporting of sample if the samples are not consumed during analysis.  
 3) The results reported above relate to the sample identified under Sample Details.

-----END OF REPORT-----

<b>TEST REPORT FORMAT – EFFLUENT</b>		
DOC. NO.: LAB-FMT-050	Issue No.: 02	Revision No.: 03
Effective Date: 01.07.2020	Issue Date: 01-01-2015	Revision Date: 01.07.2020

**COMPLIED.**

xvi	The project authorities must strictly adhere to the stipulations made by the state pollution control board, the state government and Chief Controller of Explosives, Nagpur.	All necessary permission have been obtained from various relevant statutory bodies such as PESO, DISH, GIDC, Pollution Control Boards etc. for the import, storage and handling of hazardous chemicals and the condition stipulated there in are being complied with. <b>COMPLIED.</b>
xvii	Any expansion of the project can be taken up only with the prior approval of this ministry.	Latest approval details – “Expansion of the existing Isolated Chemical Storage capacity from existing 4, 84,614 KL to 7, 22,903 KL and modification of the existing Jetty” granted by SEIAA vide letter no. SEIAA/GUJ/EC/6(b) & 7(e)/28/2016 dated 27.01.2016.  Expansion of existing jetty & storage terminal capacity' at Gujarat Chemical Port Terminal Company Limited (GCPTCL) at GIDC, Dahej, Taluka Vagra, District Bharuch, Gujarat by M/s Gujarat Chemical Port Terminal Company Limited – Environmental and CRZ Clearance dated 11.11.2020. <b>COMPLIED.</b>
3	Adequate financial provision for environmental management must be made for implementation of the above stipulations. The funds ear-marked for the environmental protection	Budgeting for Environment protection measures and CSR including socio-economic constitutes a part of overall budget plan and sufficient funds are earmarked every year for environmental management program including monitoring and analysis.

	measures should not be diverted for other purposes and year-wise expenditure should be reported to this ministry.	<p><b>Environment Budget: 2020 – 21</b></p> <table> <thead> <tr> <th>SN</th> <th>Item</th> <th>INR - Lakh</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Environment monitoring &amp; Hazardous waste management</td> <td>13.45</td> </tr> <tr> <td>2</td> <td>Oil spill response</td> <td>54.69</td> </tr> <tr> <td>3</td> <td>Green belt/horticulture</td> <td>19.00</td> </tr> <tr> <td>4</td> <td>Housekeeping</td> <td>19</td> </tr> <tr> <td>5</td> <td>Drain cleaning</td> <td>1.0</td> </tr> <tr> <td></td> <td>Total - Lakhs</td> <td>107.14</td> </tr> </tbody> </table> <p><b>COMPLIED.</b></p>	SN	Item	INR - Lakh	1	Environment monitoring & Hazardous waste management	13.45	2	Oil spill response	54.69	3	Green belt/horticulture	19.00	4	Housekeeping	19	5	Drain cleaning	1.0		Total - Lakhs	107.14
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4	The ministry or any other competent authority may stipulate any further conditions for environmental safeguards subsequently, if deemed necessary.	<b>Noted.</b>																					
5	In case of any deviation/alterations in the project proposal from those submitted to this ministry for clearance, these stipulations may be modified and or new ones imposed or Environment clearance may be revoked for ensuring environmental protection.	<b>Noted.</b>																					
6	These stipulations will be enforced among others under the Water (Prevention & Control of Pollution) Act-1974, The Air (Prevention & Control of Pollution) Act-1981 and the Environment (Protection) Act-1986.	<b>Noted.</b>																					