

**Part - II & III**



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

Compliance Status (for the period of **April 2020 – September 2020**) 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 collection system for collection, treatment and disposal of	Vessels visiting the berths do 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

	liquid wastes including shoreline interceptor for receiving liquid wastes from shoreline installations and special hose connection for ships to allow for discharge of sewage must be provided.	One such letter duly endorsed by the Vessel Master is attached as <b>Annexure 04</b> in the main report.  <b>COMPLIED.</b>
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.	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.  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.  Copy of valid work order, typical sample of certificate of training and maintenance schedule for OSR equipment is attached as <b>Annexure 09, 10 and 11</b> respectively in the main report.  <b>COMPLIED.</b>
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.	The construction workers were provided with basic amenities such as drinking water, food, sanitation etc. to prevent construction workers from deteriorating the environment.  Workers engaged for construction activities were preferred/opted from neighbouring community/population.  <b>COMPLIED.</b>
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	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 is avoided.  Hazardous chemicals like diesel, lube oils, LPG used during the construction phase were stored in a designated area with proper controls and safety precautions.  <b>COMPLIED.</b>

	<p>stored as per accepted safety standards.</p>	
<p>viii</p>	<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><u>Monitoring of Fugitive Emission –</u></b> Regular monitoring of fugitive emission (Volatile Organic Component) is carried out through Schedule-I Environmental</p>

Auditor – M/s. MANTRA (Man Made Textile and Research Association, Gujarat) - refer **Annexure 30** in the main report.

Summary of fugitive emission monitoring for the reporting period is appended as below for ready reference.

Location	VOC (mg/m3)
Near Atmospheric Gantry	1.16
Near Pressurize Gantry	1.21
Near BOG Area	1.26
Near LPG Tank Farm	1.32
Near Propane Tank Farm	1.25
Near Py Gas Tank Farm	1.08
Near Methanol Tank Farm	1.19
Near Px Tank Farm	1.02
Near Hydrocarbon Tank (Naphtha)	1.48
Near Acetic Acid Tank Farm	1.42

No limit prescribed for VOC.



Analytical report of one such fugitive emission monitoring is attached as **Annexure 31** in the main report.

**Workplace monitoring –**

Workplace monitoring for presence of hazardous chemicals, if any is carried out through MoEF&CC (recognition valid till 11.03,2021) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022 )– M/s. Kadam Environmental Consultants, Gujarat –details attached as **Annexure 33** in the main report.

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

Hazardous chemical	Average mgm3	Minimum mg/m3	Maximum mg/m3
Px	5.39	3.70	6.98
Methanol	3.20	1.61	5.18
Hydrocarbon	1.96	1.30	2.80

		<table border="1"> <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> </table>	Butadiene	ND	ND	ND	Acetic Acid	ND	ND	ND	Caustic Fumes	ND	ND	ND	Propylene Oxide	ND	ND	ND
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		<p>Report of one such workplace monitoring for the reporting period is attached as <b>Annexure 32</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>																
																		
																		
		<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>																

Summary of noise level monitoring for the period (April 2020. to September 2020) 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	47/46	66/60
Main Gate	61/55	54/52	70/62
Material Gate	60/55	56/51	68/64
Landfall Point	57/55	51/50	61/58
<b>At Workplace Noise Monitoring – in dB(A)</b>			
Jetty Service Platform	58/52	54/48	66/59
BOG Compressor House	64/55	55/49	70/68
Mechanical Workshop	57/52	51/50	62/58
Gantry Area	60/50	57/42	63/60

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

Ear plug & ear muffs are provided to the workers. Its use in high noise areas through field rounds.

**COMPLIED.**

x 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.

No discharge of wastewater or disposal of construction debris is done in offshore/onshore/CRZ areas.

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 & A.

Septic tanks/soak pit systems have been provided for disposal of sewage.



		<ul style="list-style-type: none"> <li>• 15 m3 capacity STP installed at Jetty.</li> <li>• 125 m3 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 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.</li> </ul> <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 11.03,2021) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022) – M/s. Kadam Environmental Consultants, Gujarat. Refer <b>Annexure 33</b> in the main report.</p> <p>Summary of Ambient Air Quality Monitoring for the reporting period i.e., (April 2020 to September 2020) is appended as below for ready reference-</p> <p>Location – Near Store</p> <table border="1" data-bbox="683 1220 1419 1724"> <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>64.4</td> <td>24.00</td> <td>94.00</td> </tr> <tr> <td>PM2.5</td> <td>60</td> <td>19.40</td> <td>16.00</td> <td>25.00</td> </tr> <tr> <td>SO2</td> <td>80</td> <td>7.45</td> <td>5.84</td> <td>8.47</td> </tr> <tr> <td>NOx</td> <td>80</td> <td>13.81</td> <td>10.07</td> <td>18.72</td> </tr> <tr> <td>HCL</td> <td>200</td> <td>5.19</td> <td>ND</td> <td>16.54</td> </tr> <tr> <td>Cl2</td> <td>100</td> <td>3.05</td> <td>ND</td> <td>5.91</td> </tr> <tr> <td>CO</td> <td>5000</td> <td>461</td> <td>ND</td> <td>1340</td> </tr> <tr> <td>HC</td> <td>160</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>NH3</td> <td>400</td> <td>4.16</td> <td>ND</td> <td>11.47</td> </tr> <tr> <td>H2S</td> <td>500</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>CS2</td> <td>2000</td> <td>ND</td> <td>ND</td> <td>ND</td> </tr> <tr> <td>HF</td> <td>60</td> <td>0.09</td> <td>ND</td> <td>0.23</td> </tr> </tbody> </table> <p>All the parameters are well within the prescribed limit.</p>	Parameter – AAQM	GPCB consented limit - µg/m3	Average µg/m3	Minimum µg/m3	Maximum µg/m3	PM10	100	64.4	24.00	94.00	PM2.5	60	19.40	16.00	25.00	SO2	80	7.45	5.84	8.47	NOx	80	13.81	10.07	18.72	HCL	200	5.19	ND	16.54	Cl2	100	3.05	ND	5.91	CO	5000	461	ND	1340	HC	160	ND	ND	ND	NH3	400	4.16	ND	11.47	H2S	500	ND	ND	ND	CS2	2000	ND	ND	ND	HF	60	0.09	ND	0.23
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Report of Ambient Air Quality Monitoring for the reporting period is attached as **Annexure 34** in the main report.

**Ambient Air Quality Monitoring (VOC) –**

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 **Annexure 30** in the main report.

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No limit prescribed for VOC.

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Butadiene	ND	ND	ND
Acetic Acid	ND	ND	ND
Caustic Fumes	ND	ND	ND
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**Noise monitoring –**

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.



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

**COMPLIED.**

xii	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	<p>The following socio – economic upliftment activities have been taken up in the Lakhigam village in consultation with TDO/DDO/District Collector.</p> <p>During the last two years GCPTCL had facilitated Lakhigam by providing following specific amenities/facilities but not limited to, under the provision of CSR as requested by the local people–</p>
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<p>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>	<b>SN</b>	<b>Facilities</b>	<b>Evidence – You may please refer</b>	<b>Cost incurred</b>
	1	Assembly Hall at Lakhigam	<ul style="list-style-type: none"> <li><b>Annexure 19</b> in the main report Letter from Principal Government Secondary and Higher Secondary School – Lakhigam dated 17.09.2019</li> </ul> 	Rs. 33.19 Lacs
	2	Construction of Houses for BPL Families (10 + 20 = 30 Houses)	<p><b>Annexure 20</b> : in the main report letter from Sarpanch –Lakhigam dated 14.10.2020</p> 	Rs. 42.02 +Rs. 74.42 = Rs.116.44 Lakhs
	3	Maths/Science Laboratory at Secondary & Primary School, Lakhigam	<b>Annexure 21</b> in the main report Letter from Principal of Primary School Lakhigam	Rs. 25.48 Lakhs
	4	Chief Minister Relief Fund for COVID - 19	<b>Annexure 22</b> : Acknowledgement letter to main report for Contribution to GSDMA-CSR Fund dated 05.09.2020	Rs. 500 Lakhs
	6	Donation to Seva Rural Trust, Jhagadia for installation of	<ul style="list-style-type: none"> <li><b>Annexure 23</b> Letter dt. 03.10.20 from Seva Rural trust is attached.</li> </ul>	Rs. 30 Lakhs

		Bio Optical Meter		
7	Donation to Gram Seva Trust, Kharel for upgradation of NICU/ICU facilities	<b>Annexure 24:</b> in main report letter dt.18.09.20 from Gram Seva Trust Kharel	Rs. 25 Lakhs	
8	Donation to Civil Hospital for setting up New Born Hearing Centre	<b>Annexure 25 A:</b> in main report letter from Gujarat CSR Authority dated 09.07.2019	Rs. 12.11 Lacs	
9	Donation to Civil Hospital for setting up New Born Hearing Centre Services	<b>Annexure 25 B:</b> Letter dt. 27.11.20 From Gujarat CSR Authority is attached	Rs. 3.42 Lacs	
10	Construction of Cooking Shed at Lakhigam	<b>Annexure 26:</b> cooking shade is provided at Lakhigam 	Rs. 9.04 lacs	
11	Donation to N D Desai Hospital and Medical Collage	<b>Annexure 26 A:</b> in the main report letter dated 28.09.2020 to provide 20 NICU beds	Rs. 50 Lacs	
12	Construction of 40 nos. of houses for BPL Families	<b>Annexure 27</b> Letter dt. 20.10.20 from TDO is attached	Rs. 126 lacs (In progress)	
13	Construction of Sub health Centre at Lakhigam	<b>Annexure 28</b> Letter dt. 31.12.20 from TDO is attached	Rs. 50 Lacs (In progress)	
The other key CSR activities includes –				

		<ul style="list-style-type: none"> <li>• Construction of PHC Building – 0.99 Lacs</li> <li>• Installation of R O Water Plant at Community Hall – 5.86 lacs</li> <li>• Water Tank for bath at Lakhabava Temple – 3.06 lacs</li> <li>• Contribution to Shilpa School – Rs. 3 Lacs</li> <li>• Contribution to Navratri Festival – Rs. 1 lacs</li> <li>• Food Distribution during flood – Rs. 3 Lacs</li> <li>• MS Grill at Govt. Office - Rs. 0.4 Lacs</li> <li>• Distribution of School Bags, Uniform, etc at secondary school &amp; Construction of Roof – Rs. 4.63 lacs</li> <li>• Laboratory Building Secondary School – Rs. 3.71 Lacs</li> <li>• Donation of tarpaulin sheet in Kerala – 17.09 lacs</li> <li>• Summit of IIT – 5.9 lacs</li> <li>• Contribution to mentally disabled children society 5 lacs</li> <li>• Distribution of Masks and Food at Lakhigam during Covid pandemic</li> </ul> <div style="display: flex; justify-content: space-around;">   </div> <p>Total expenditure incurred as a part of CSR and/or socioeconomic activities during the last 2 years was @ INR 10.34 crore.</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="683 1220 1403 1587"> <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><b>COMPLIED</b></p>	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.
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xiii	A comprehensive disaster management plan based on studies related to damage of port property caused by accidents and/or fire, spillages/leakages and submitted to this ministry	<p>Disaster Management Plan (DMP) / On-Site Emergency Action Plan is in place.</p> <p>Bharuch district DMP is prepared by the district administration. Copy of relevant pages are attached as <b>Annexure 64</b> in the main report.</p>								

	<p>within six months for its approval.</p>	<p>Site level On-Site Emergency Action Plan is prepared and was last reviewed in January 2020-. Copy of plan – Index Page is attached as <b>Annexure 65</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 13.08 2020</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; HH[Head HSEF (1)]     HH --&gt; MH[Manager HSEF (1)]     MH --&gt; AMH[Assistant Mgr HSEF (4)]     AMH --&gt; S[Supervisor (1)]     S --&gt; F[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> </div> <p><b>COMPLIED.</b></p>
<p>xv</p>	<p>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</p>	<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><u>Workplace monitoring –</u></b></p>

	<p>pollution control board and under the environment (Protection) Act-1986, whichever are more stringent.</p>	<p>Workplace monitoring for presence of hazardous chemicals, if any is carried out through MoEF&amp;CC (recognition valid till 11.03,2021 ) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022 )– M/s. Kadam Environmental Consultants, Gujarat –details attached as <b>Annexure 33</b> in the main report.</p> <p>Summary of monitoring of hazardous chemical at workplace for the reporting period i.e., (<b>April. to September. 2020</b>) is appended as below for ready reference.</p> <table border="1" data-bbox="665 604 1421 1024"> <thead> <tr> <th>Hazardous chemical</th> <th>Average mgm3</th> <th>Minimum mg/m3</th> <th>Maximum mg/m3</th> </tr> </thead> <tbody> <tr> <td>Px</td> <td>5.39</td> <td>3.70</td> <td>6.98</td> </tr> <tr> <td>Methanol</td> <td>3.20</td> <td>1.61</td> <td>5.18</td> </tr> <tr> <td>Hydrocarbon</td> <td>1.96</td> <td>1.30</td> <td>2.80</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> </tbody> </table> <p>Report of one such workplace monitoring for the reporting period is attached as <b>Annexure 32</b> in the main report.</p> <p><b>Ambient Air Quality Monitoring –</b>  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 11.03.2020) and NABL accredited laboratory (Certificate No. TC-7099, valid till 26.03.2022) – M/s. Kadam Environmental Consultants, Gujarat –Refer <b>Annexure 33</b> in the main report.</p> <p>Summary of Ambient Air Quality Monitoring for the reporting period i.e., (April 2020. to September. 2020 ) is appended as below for ready reference.</p> <p>Location – Terminal Control Room</p> <table border="1" data-bbox="665 1684 1421 1898"> <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>64.4</td> <td>24.00</td> <td>94.00</td> </tr> <tr> <td>PM2.5</td> <td>60</td> <td>19.40</td> <td>16.00</td> <td>25.00</td> </tr> <tr> <td>SO2</td> <td>80</td> <td>7.45</td> <td>5.84</td> <td>8.47</td> </tr> </tbody> </table>	Hazardous chemical	Average mgm3	Minimum mg/m3	Maximum mg/m3	Px	5.39	3.70	6.98	Methanol	3.20	1.61	5.18	Hydrocarbon	1.96	1.30	2.80	Butadiene	ND	ND	ND	Acetic Acid	ND	ND	ND	Caustic Fumes	ND	ND	ND	Propylene Oxide	ND	ND	ND	Parameter – AAQM	GPCB consented limit - µg/m3	Average µg/m3	Minimum µg/m3	Maximum µg/m3	PM10	100	64.4	24.00	94.00	PM2.5	60	19.40	16.00	25.00	SO2	80	7.45	5.84	8.47
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NOx	80	13.81	10.07	18.72
HCL	200	5.19	ND	16.54
Cl2	100	3.05	ND	5.91
CO	5000	461	ND	1340
HC	160	ND	ND	ND
NH3	400	4.16	ND	11.47
H2S	500	ND	ND	ND
CS2	2000	ND	ND	ND
HF	60	0.09	ND	0.23

All the parameters are well within the prescribed limit.

Report of Ambient Air Quality Monitoring for the reporting period is attached as **Annexure 34** 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 (April 2020. to September 2020) 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	47/46	66/60
Main Gate	61/55	54/52	70/62
Material Gate	60/55	56/51	68/64
Landfall Point	57/55	51/50	61/58
<b>At Workplace Noise Monitoring – in dB(A)</b>			
Jetty Service Platform	58/52	54/48	66/59
BOG Compressor House	64/55	55/49	70/68
Mechanical Workshop	57/52	51/50	62/58
Gantry Area	60/50	57/42	63/60

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.



**KADAM ENVIRONMENTAL CONSULTANTS**  
An ISO 9001-2015 Certified Company (MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10.  
Phone : (O) 0265 - 6131000, 6131001



**ENVIRONMENTAL MONITORING REPORT**

**LABORATORY TEST REPORT - EFFLUENT**

REPORT NO.: MAY20/09307 (ULR-TC7998200000620F)

**SAMPLE DETAILS**

1. Name & Address of Client: M/s Gujarat Chemical Port Terminal Company Limited, P.O. Lakhtigam Via: Dahej, Tal.: Vagra, Dist.: Bharuch - 392130.	3. Client Representative: Mr. Hemant Singh
2. Sample ID: 1919668246-05JMY20EFD1	5. Sample Collected By: Mr. Vimal Chauhan
4. Sample Date: 22.05.2020	7. Analysis Completed on: 30.05.2020
6. Analysis commenced on: 23.05.2020	9. Test Requirement: Effluent Analysis
8. Reporting Code: 06.06.2020	11. Sample Category: Grab
10. Picking Condition & Quantity: Sealed v	13. ETP Status: Working
12. Sampling Location: ETP Outlet	
14. Sampling Method: IS : 3025 (Part 1) - 1987	

**TEST RESULTS**

S.No.	Parameters	Unit/Code	Results	Specification/ ISCI, ISIRI/ IS Standards	Method Used
1.	pH		7.76	6.5 - 8.5	APHA: (4520-H) 8) 23 <sup>rd</sup> Edition
2.	Temperature	°C	29	40	APHA: (2550 B) 23 <sup>rd</sup> Edition
3.	Colour	PC-CO	200	100	APHA: (2120 B) 23 <sup>rd</sup> Edition
4.	Total Dissolved Solids	mg/L	1780	2100	APHA: (2540 C) 23 <sup>rd</sup> Edition
5.	Suspended Solids	mg/L	23	100	APHA: (2540 D) 23 <sup>rd</sup> Edition
6.	COD	mg/L	95	100	APHA: (5220 B) 23 <sup>rd</sup> Edition
7.	BOD (3 days at 27 °C)	mg/L	30	30	IS 3025 PP-44
8.	Oil & Grease	mg/L	<1	10	APHA: (5520 B) 23 <sup>rd</sup> Edition
9.	Phenolic Compounds	mg/L	<0.02	1	APHA: (5530 D) 23 <sup>rd</sup> Edition
10.	Ammonical Nitrogen	mg/L	<0.05	50	IS 3025 (PP 34)
11.	Chlorides	mg/L	440	600	APHA: (4500 Cl) 8) 23 <sup>rd</sup> Edition
12.	Sulphates	mg/L	756	1000	APHA: (4500 SO <sup>4</sup> E) 23 <sup>rd</sup> Edition
13.	Sulphide	mg/L	<1	2	APHA: (4500 SO <sup>2</sup> F) 23 <sup>rd</sup> Edition
14.	Total Chromium	mg/L	<0.02	0.1	APHA: (3500 Cr) 23 <sup>rd</sup> Edition
15.	Hexavalent Chromium	mg/L	<0.02	2.0	APHA: (3500 Cr) 23 <sup>rd</sup> Edition
16.	Fluoride	mg/L	0.50	1.5	APHA: (4500 F D) 23 <sup>rd</sup> Edition
17.	Be-Azody Test	%	Pass	95 % survival of fish after 96 hours @ 100% effluent	IS 6582 Part-2, 2001

Remark: Authorized By - *[Signature]*

Name: Saparna 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 samples 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

TEST REPORT FORMAT - EFFLUENT		
DOC. NO.: LAB-FHT-050	Issue No.: 02	Revision No.: 02
Effective Date: 24.02.2020	Issue Date: 01-01-2019	Revision Date: 24.02.2020

Page 1 of 1

**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.

**COMPLIED.**

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

**COMPLIED.**

3 Adequate financial provision for environmental

Budgeting for Environment protection measures and CSR including socio-economic constitutes a part of overall budget



	<p>management must be made for implementation of the above stipulations. The funds ear-marked for the environmental protection measures should not be diverted for other purposes and year-wise expenditure should be reported to this ministry.</p>	<p>plan and sufficient funds are earmarked every year for environmental management program including monitoring and analysis.</p> <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	<p>The ministry or any other competent authority may stipulate any further conditions for environmental safeguards subsequently, if deemed necessary.</p>	<b>Noted.</b>																					
5	<p>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.</p>	<b>Noted.</b>																					
6	<p>These stipulations will be enforced among others under the Water (Prevention &amp; Control of Pollution) Act-1974, The Air (Prevention &amp; Control of Pollution) Act-1981 and the Environment (Protection) Act-1986.</p>	<b>Noted.</b>																					