

AHPL/MoEF&CC/2023-24/09

Date: 30.11.2023

To  
Deputy Director/Scientist C  
Integrated Regional Office (IRO) -Gandhinagar  
Ministry of Environment Forest & Climate Change  
(Govt. of India)  
Email: [iro.gandhingr-mefcc@gov.in](mailto:iro.gandhingr-mefcc@gov.in), [ecompliance-guj@gov.in](mailto:ecompliance-guj@gov.in)



**Ref.:** 1). Environmental and CRZ Clearance issued by MoEF & CC, New Delhi vide letter No.: 11-150/2010-IA.III dated 03<sup>rd</sup> May, 2013.  
2). CRZ Recommendations issued by Forests & Environment Department, Govt. of Gujarat to MoEF & CC, New Delhi vide letter No.: ENV-10-2012-30-E dated 11<sup>th</sup> May, 2012.

**Sub.:** Six Monthly Compliance Report of conditions stipulated in Environment and CRZ Clearance for the development of Multi Cargo Port with Supporting Utilities and Infrastructure Facilities at Hazira, Surat, Gujarat for the period: **April 2023 to September 2023.**

Dear Sir,

Please find enclosed herewith point wise compliance report of conditions stipulated in the above referred letters regarding Environment Clearance and Coastal Regulation Zone Clearance of AHPL for the compliance period of **April 2023 to September 2023.**

For, **M/s Adani Hazira Port Limited,**

  
(Niraj Bansal)  
Authorized Signatory  


Cc to:

1. The Director (Monitoring - IA Division), Ministry of Environment, Forests & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110 003.
2. The Director, Forests & Environment Department, Block - 14, 8<sup>th</sup> Floor, Sachivalaya, Gandhinagar, Gujarat - 382 010.
3. The Zonal Officer, Central Pollution Control Board, Zonal Office Vadodara, Parivesh Bhawan, Opp. VMC Ward Office No.:10, Subhanpura, Vadodra-390 023.
4. The Chairman, Gujarat Pollution Control Board, Parvayaran Bhawan, Sector - 10A, Gandhinagar-382 010 (Gujarat)
5. The Regional Officer, Gujarat Pollution Control Board, Belgium Square, Ring Road, Surat-395003, (Gujarat).



## Six Monthly EC Compliance Report

### April 2023 to September 2023

ENVIRONMENTAL CLEARENCE-REFERENCE	PROJECT DETAILS	COMPLIANCE PERIOD
ENVIRONMENT AND CRZ CLEARANCE ISSUED BY MOEF & CC, NEW DELHI <u>VIDE LETTER NO.: 11-150/2010-IA.III.</u> <u>DATED 03<sup>RD</sup> MAY 2013</u>	THE DEVELOPMENT OF MULTI CARGO PORT WITH SUPPORTING UTILITIES AND INFRASTRUCTURE FACILITIES AT HAZIRA, SURAT, GUJARAT	APRIL -2023 to SEPTEMBER -2023

SUBMITTED  
BY  
**M/S ADANI HAZIRA PORT LTD.**  
HAZIRA, TAL-CHORYASI, DIST-SURAT  
GUJARAT

**LIST OF APPENDIXES**

APPENDIX	DETAILS
1.	Compliance to the Conditions Stipulated in CRZ Recommendations Issued By Forests & Environment Department, Government Of Gujarat To MOEF & CC, New Delhi Vide Letter No.: ENV-10-2012-30-E, Dated 11 <sup>th</sup> May, 2012.

\*\*\*

**LIST OF ANNEXURES**

ANNEXURE NO.	DETAILS
1	Action Plan And Compliance Status On The Issues Raised During The Public Hearing.
2.	Details Of The CSR Activities Along With Budgetary Provisions And Expenditures For the Compliance Period April 2023 to September 2023
3	Compliance Status of Environmental Management Plan As Per Integrated EIA Report - September, 2012.
4.	Environmental Monitoring / Analysis Results For the Period of April 23 - September 23
5	ISO 9001:2015, ISO 14001:2015, ISO 45001:2018 and ISO 50001:2018 Certificates
6	Photographs of Air Pollution Control Measures and Green Belt area
7	Organogram Of AHPL - Environment Management Cell.
8	Environmental Budget And Expenditure of Compliance Period
9	Environment Statement FY 2022-23


\*\*\*



- A. Six Monthly Compliance Report for Environmental and CRZ Clearance issued by **MoEF & CC, New Delhi** vide letter No.: **11-150/2010-IA.III dated 03<sup>rd</sup> May, 2013** for the development of Multi Cargo Port with supporting utilities and infrastructure facilities at Hazira, Surat, Gujarat by M/s. Adani Hazira Port Ltd (Earlier Known as Adani Hazira Port Pvt Ltd):-

By September 30, 2023, a total of 228 hectares of land has been reclaimed for port operations, including the construction of berths and development of Infrastructure for cargo storage areas. Six berths have been built, and a total of 25.28 million metric tons per annum (MMTPA) of cargo, including containers, dry bulk, and liquid, were handled during the 2022-2023 fiscal year.

S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023																					
6.	<b>Specific Conditions</b>																						
i.	<p>"Consent for Establishment" shall be obtained from State Pollution Control Board under Air &amp; Water Act and a copy shall be submitted to the Ministry before start of any construction work at site.</p>	<p><b>Complied,</b> AHPL obtained Consent to Establish (NOC) from Gujarat Pollution Control Board on 16.05.2012 and the same was submitted to the Ministry on 05.10.2012 prior to obtaining the Environment and CRZ clearances. Subsequently there were amendments in the Consent to Establish which were also submitted to the MoEF&amp;CC before start of respective construction as per the details given below: -</p> <table border="1"> <thead> <tr> <th>Consent No.</th><th>Issued On</th><th>Submitted To MoEF&amp;CC &amp; other concern authorities on</th></tr> </thead> <tbody> <tr> <td>CTE_49766</td><td>05.10.2012</td><td>Along with Six Monthly Compliance Report dated 19.11.2014 &amp; 19.05.2017.</td></tr> <tr> <td>CTE-64900</td><td>26.09.2014</td><td>Along with Six Monthly Compliance Report dated 12.05.2015 &amp; 19.05.2017.</td></tr> <tr> <td>CTE-74330</td><td>13.01.2016</td><td>Along with Six Monthly Compliance Report dated 23.05.2016 &amp; 19.05.2017.</td></tr> <tr> <td>CTE-77767</td><td>16.04.2016</td><td>Along with the Six Monthly Compliance Report dated 21.11.2016 &amp; 19.05.2017.</td></tr> <tr> <td>CTE-101590</td><td>20.05.2019</td><td>Along with the Six Monthly Compliance Report dated 27.11.2019</td></tr> <tr> <td>CTE-115984</td><td>04.12.2021</td><td>Along with the Six Monthly Compliance Report October 2021-March 2022 period. Email dated 31.05.2022</td></tr> </tbody> </table> <p><i>The port is in operation with valid CC&amp;A (Consent to Operate).</i></p>	Consent No.	Issued On	Submitted To MoEF&CC & other concern authorities on	CTE_49766	05.10.2012	Along with Six Monthly Compliance Report dated 19.11.2014 & 19.05.2017.	CTE-64900	26.09.2014	Along with Six Monthly Compliance Report dated 12.05.2015 & 19.05.2017.	CTE-74330	13.01.2016	Along with Six Monthly Compliance Report dated 23.05.2016 & 19.05.2017.	CTE-77767	16.04.2016	Along with the Six Monthly Compliance Report dated 21.11.2016 & 19.05.2017.	CTE-101590	20.05.2019	Along with the Six Monthly Compliance Report dated 27.11.2019	CTE-115984	04.12.2021	Along with the Six Monthly Compliance Report October 2021-March 2022 period. Email dated 31.05.2022
Consent No.	Issued On	Submitted To MoEF&CC & other concern authorities on																					
CTE_49766	05.10.2012	Along with Six Monthly Compliance Report dated 19.11.2014 & 19.05.2017.																					
CTE-64900	26.09.2014	Along with Six Monthly Compliance Report dated 12.05.2015 & 19.05.2017.																					
CTE-74330	13.01.2016	Along with Six Monthly Compliance Report dated 23.05.2016 & 19.05.2017.																					
CTE-77767	16.04.2016	Along with the Six Monthly Compliance Report dated 21.11.2016 & 19.05.2017.																					
CTE-101590	20.05.2019	Along with the Six Monthly Compliance Report dated 27.11.2019																					
CTE-115984	04.12.2021	Along with the Six Monthly Compliance Report October 2021-March 2022 period. Email dated 31.05.2022																					
ii.	<p>The action plan on the issues raised during public hearing shall be submitted to the Pollution Control Board. The action plan shall be implemented without fail. Report on compliance shall be submitted to the Regional Office, MOEF along with the six-monthly reports.</p>	<p><b>Complied</b> Public hearing (PH) was conducted on 14.08.2012. All the issues have been addressed adequately and to the satisfaction of the stakeholders. The action taken for implementation of the issues are being submitted to the Ministry as well as Gujarat Pollution Control Board along with the Six-Monthly EC Compliance report. The key points raised during PH were: -</p> <ol style="list-style-type: none"> <li>1) Preference to be given to the local people for employment and transport &amp; other contracts. M/s. AHPL is giving preference to the locals for contracts, such as M/s. Hazira Vikas Samiti is engaged for providing transport facilities to employees. M/s. AHPL also giving preference for skilled local candidates for employment as per suitable requirements. As on 30<sup>th</sup> September 2023 total <b>179 out of 207</b> on roll employees are from Gujarat.</li> <li>2) Villagers were anxious about their displacement due to port development. M/s. AHPL has developed the port in uninhabited land area by reclamation and there is no acquisition of private property.</li> </ol> <p>The details action status of all other issues raised during the public hearing is enclosed as <b>Annexure-1</b></p>																					



S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023
iii.	All the recommendations of SCZMA shall be complied with.	<b>Being Complied</b> All the recommendations of the Gujarat Coastal Zone Management Authority (GCZMA) are being complied. Compliance status of the conditions stipulated in GCZMA recommendations vide letter dated 11/05/2012 bearing No.: ENV-10-2012-30-E is enclosed as <b>Appendix-1</b> .
iv.	Periodical study on shore line changes shall be conducted and mitigation carried out if necessary. The details shall be submitted along with six monthly monitoring reports.	<b>Complied.</b> Shorelines change study was conducted through NIO, Vizag during the period from November 2014 to December 2015. Report of the shoreline change study was submitted along with compliance report dated 21.11.2016. Study confirms that there is no significant change in the shoreline near by the port except for the approved layout of the AHPL. The report did not warrant any mitigation measures for protection of shoreline. A study on Shoreline Change Assessment in 10 km area around the port has been carried out by Gujarat Institute of Desert Ecology. Study also confirms that there is no significant change in the shoreline near by the port except for the approved layout of the AHPL. The report did not warrant any mitigation measures for protection of shoreline. The report has been submitted with <b>Six-monthly EC compliance report</b> submitted on 30.11.2022 through E mail.
v.	Oil spills if any shall be properly collected and disposed as per Rules. Proper Oil Contingency Management Plan shall be put in the place.	<b>Complied.</b> <ul style="list-style-type: none"> <li>There was no Oil Spill during the compliance period. Also no oil spill has been occurred till date at the port and in nearby area.</li> <li>Oil Spill Contingency Plan has been prepared and the same was approved by Indian Coast Guard (Letter No.: 7563, dated 09.01.2014).</li> <li>The same has been implemented at site to properly collect and dispose oil spills (if any).</li> <li>The last Mock drill on scenario of Oil Spill was jointly organized with Shell LNG Terminal-Hazira, Reliance Industries Limited- Petrochemicals-Hazira, Sun Petro and CIL-Hazira on <b>24<sup>th</sup> March 2023</b>.</li> </ul> <p><i>Photographs of a Joint oil Spill Mock drill</i></p>  <p>EMP and DMP shall Mobilization of Tier 1 and Tier 2 Equipment -BOOM</p>

S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023																												
		<div></div> <div>Mobilization of Tier 1 and Tier 2 Equipment</div> <div></div> <div>Beach clean-up activity</div>																												
vi.	The detailed plan with budgetary provisions for the CSR shall be submitted to the ministry.	<div><b>Complied.</b><ul style="list-style-type: none"><li>CSR activities are carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development.</li><li>Detail of the CSR activities along with budgetary provisions and progress are regularly submitted to MoEF &amp; CC as part of six-monthly compliance reports.</li><li>The budget of current Financial Year for CSR activities and expenditure in the compliance period is as under-</li></ul></div> <table><tr><th>Sr. No.</th><th>Vertical</th><th>Approved Budget for FY 2023-24 (In Lacs Rupees)</th><th>Utilization amount (till Sep'23) (In Lacs Rupees)</th></tr><tr><td>1</td><td>Education</td><td>99.11`</td><td>43.75</td></tr><tr><td>2</td><td>Community Health</td><td>16.70</td><td>3.09</td></tr><tr><td>3</td><td>Sustainable Livelihood Development</td><td>65.97</td><td>19.47</td></tr><tr><td>4</td><td>Community Infrastructure Development</td><td>46.77</td><td>3.60</td></tr><tr><td>5</td><td>General Management and Administration for CSR activities</td><td>15.10</td><td>12.50</td></tr><tr><td colspan="2">Total</td><td>243.65</td><td>82.42</td></tr></table> <div><ul style="list-style-type: none"><li>The status of the CSR activities carried out during the Compliance Period is enclosed as <b>Annexure-2.</b></li></ul></div>	Sr. No.	Vertical	Approved Budget for FY 2023-24 (In Lacs Rupees)	Utilization amount (till Sep'23) (In Lacs Rupees)	1	Education	99.11`	43.75	2	Community Health	16.70	3.09	3	Sustainable Livelihood Development	65.97	19.47	4	Community Infrastructure Development	46.77	3.60	5	General Management and Administration for CSR activities	15.10	12.50	Total		243.65	82.42
Sr. No.	Vertical	Approved Budget for FY 2023-24 (In Lacs Rupees)	Utilization amount (till Sep'23) (In Lacs Rupees)																											
1	Education	99.11`	43.75																											
2	Community Health	16.70	3.09																											
3	Sustainable Livelihood Development	65.97	19.47																											
4	Community Infrastructure Development	46.77	3.60																											
5	General Management and Administration for CSR activities	15.10	12.50																											
Total		243.65	82.42																											

S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023
vii.	All the recommendation of the EMP and DMP shall be complied within letter and spirit.	<p><b>Complied.</b></p> <ul style="list-style-type: none"> <li>Recommendation given in EMP is being complied in letter and spirit. Status of the same is enclosed as <b>Annexure-3</b></li> <li>AHPL is an ISO 14001: 2015, ISO 9001:2015, ISO 48001: 2018 and ISO 50001: 2018 certified company. Certificates are attached as Annexure 5</li> <li>AHPL has developed and implemented DMP. Regular mock drill to ensure the compliance and preparedness is being done. <ul style="list-style-type: none"> <li>Last Mock Drill (On Site) was conducted on: 26.08.2023, the scenario was Multiple Cargo Vessel Operation is going on at the jetty. All of sudden there was splash of cargo from the flexible hose connected to jetty manifold. There was heavy leak and Splash on the jetty.</li> <li>Last Update of ERP &amp; DMP: 28.03.2022 and the updated copy was submitted to Joint Director, Industrial Health and Safety, Surat on 20.06.2022.</li> <li>Copy of the Schematic of ERP &amp; DMP communication flow is submitted along with the six-monthly compliance report dated <b>19.05.2017</b>. The Copy of updated ERP &amp; DMP was submitted to the authorities along with Six-monthly Compliance report as Annexure 5 through e mail dated 28.05.2021.</li> </ul> </li> </ul>
viii.	Periodical monitoring of the sea water quality at the outlet shall be carried out to check the discharge is meeting the standard and not causing any impact to marine life.	<p><b>Complied.</b></p> <ul style="list-style-type: none"> <li>Marine water quality is being monitored through M/s. Pollucon Laboratories, Surat (a MoEF&amp;CC recognized and NABL accredited laboratory).</li> <li>The sea surface and bottom water quality is being monitored periodically. The trends with respect to baseline is being observed to ensure that the quality of sea water is not changing significantly.</li> <li>Monitoring of sea water quality at three locations is being done on monthly basis. Copy of the Sea Water Quality Monitoring /Analysis Reports for the period of April 2023 to September 2023 is enclosed as Annexure-4D.</li> <li>From the monitoring report it is evident that there is no significant change in the sea water quality with respect to standards of baseline level which could have impact on the marine life.</li> <li>AHPL has not discharged any treated/untreated water in the sea.</li> </ul>
ix.	Transport of cargo shall in closed system and dust control viz. water sprinkler, along conveyor and transfer points shall be provided.	<p><b>Complied.</b></p> <p>Following control measures are in place and effectively working at port to control fugitive dust: -</p> <ol style="list-style-type: none"> <li>Transportation of coal from jetty to coal storage yard through 1.7 Km. long covered conveyor belt.</li> <li>Water sprinklers in the coal yard and other dry cargo operation area</li> <li>Dust arresting sprinklers are installed on Coal Discharge Chute</li> <li>Dust Suppression System / Spray Nozzles in Conveyor System and Discharge Chute,</li> <li>Water spray through Water Browsers,</li> <li>Water Mist Canon / Fog System,</li> <li>Wind Brake Shield of 14 meters high and 1900 meters long,</li> <li>Transportation of cargo from port to hinterland is being done through dumpers / trucks covered with tarpaulin,</li> <li>Regular cleaning of roads through Road Sweeping Machines, and</li> <li>Company has set up dedicated greenbelt area for plantation at periphery / avenue plantation / landscaping etc. Total greenbelt area developed so far is approx. 78.79 ha within the port premises.</li> </ol>

S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023
		The photographs of Covered Conveyor belts, Mist Canyon and water sprinkling system, Green Belt area, Wind break shield, Road sweeping machines are attached herewith as <u><a href="#">Annexure 6</a></u>
x.	Construction activity shall be carried out strictly as per the provisions of CRZ notification 2011. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone.	<b>Complied.</b> <ul style="list-style-type: none"> <li>No construction work other than those permitted in CRZ Notification has been done.</li> <li>Development of the port and other ancillary facility is being done as per the approval received under CRZ Notification, 2011 and EIA Notification, 2006.</li> </ul>
xi.	The project shall be executed in such a manner that there shall not be any disturbance to the fishing activity.	<b>Complied.</b> <ul style="list-style-type: none"> <li>AHPL is regularly working with fishermen to understand their needs and provide required support as part of CSR activities. AHPL is carrying out various CSR activities in the vicinity of port through Adani Foundation (AF), in the field of Education, Community Health, Sustainable livelihood development and Community Infrastructure development and also particular for fishermen community since 2012, the support was extended for providing gears to fishermen, house repairing and construction of house for Halpati community, education to kids from Halpati community and health camps. An significant amount of <i>1.88 Cr was spent during last six years</i> on various activities specifically for fishermen community in and around the port area. Apart from this, our Foundation team is closely working with Children of Halpati community for enrollment in school and mainstreaming them.</li> </ul>
xii.	It shall be ensured that there is no displacement of people, houses or fishing activity as a result of the project.	<b>Complied.</b> <ul style="list-style-type: none"> <li>There is no displacement of people, houses or fishermen as the port is being developed on reclamation land and land allotted by Government also there is no acquisition of private land. Majority of fishing activities are in the river TAPI estuary region which is approx. 3-4 KM away from the project site. There are few "PAGADIA" fishermen doing fishing near the project area. They are continuing with their activities without any disturbance</li> </ul>
xiii.	The project proponent shall set up separate Environment Management Cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.	<b>Complied.</b> <ul style="list-style-type: none"> <li>Environment Management Cell has been set up with qualified staff to ensure the effective implementation of environmental safeguards at the Port. The Head of Environment Management Cell is CEO of the Port.</li> <li>In addition to the site Environment Management Cell a well-established corporate environment cell also ensures effective implementation of the environmental safeguards.</li> <li>Environment Management Cell Organogram is enclosed as <u><a href="#">Annexure-7</a></u></li> </ul>
xiv.	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.	<b>Complied.</b> <ul style="list-style-type: none"> <li>Separate budget has been allocated for the Environment Management. Allocated budget for the FY: 2023-24 is INR 732.81 Lacs and total expenditure during the compliance Period is INR 402.441 Lakhs regarding environment management.</li> <li>Detail of the environment budget of the current FY and expenditure incurred during compliance period is enclosed as <u><a href="#">Annexure-8</a></u></li> <li>Environment budget is not being diverted to any other purpose.</li> </ul>
7.	<b>General Conditions</b>	

S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023
i.	Appropriate measures must be taken while undertaking digging activities to avoid any degradation of water quality.	<b>Complied.</b> <ul style="list-style-type: none"> <li>No digging activities were carried out during the compliance period.</li> <li>No major digging activities were carried out. Proper care is taken to ensure that no excavated material is mixed with the water. Entire excavated material is being used in leveling and grading of project area.</li> <li>Marine, Surface and Ground Water quality is being monitored through M/s. Pollucon Laboratories Pvt. Ltd., Surat (a MoEF &amp; CC and NABL accredited laboratory) on monthly basis at 3 locations in Basin area.</li> <li>Reports show that there are no impacts on the water quality. Copy of the water monitoring reports for the period, <b>April 2023 to September 2023</b> is enclosed as <b><u>Annexure-4B, 4C, 4D</u></b> for ground, surface, and marine water quality, respectively.</li> </ul>
ii.	Full support shall be extended to the officers of this Ministry /Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigation measures and other environmental protection activities.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>AHPL is regularly submitting six monthly compliance reports which comprise compliance to the conditions stipulated in Environment and CRZ clearance, action taken report of Environment Management Plan, environment monitoring reports etc.</li> <li>Last report was submitted through e mail on 06.01.2023 to all concerned authorities.</li> <li>Whenever any authorities such as MoEF&amp;CC, GPCB and GMB etc. visit the port, full support is extended and AHPL provides all additional information seek by them during the inspection.</li> <li>Last visit by representative of MoEF &amp; CC, IRO, Gandhinagar visited AHPL Hazira on 18.02.2022. We have extended all required supports during his visit.</li> <li>Mr. Unnat Shah and Mr. Bhavesh Prajapati, AEE, GPCB-Surat Regional Office have visited the Port on 01.08.2023. All required supports are provided during the visit.</li> </ul>
iii.	A six-monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>Six monthly monitoring reports regarding the implementation of the stipulated conditions are regularly submitted to the IRO, MoEF &amp; CC, Gandhinagar and other authorities the last report Last report was submitted through e mail on 01.06.2023. The copy of same is also uploaded on company website. The link is <a href="http://www.adaniports.com/ports-downloads">http://www.adaniports.com/ports-downloads</a></li> </ul>
iv.	Ministry of Environment & Forests or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary subsequently, if deemed necessary for environmental protection, which shall be complied with.	Noted and agreed to comply
v.	The Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.	Noted and agreed to comply
vi.	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to	<b>Complied</b> <p>Name of the port was changed from Adani Hazira Port Private Limited to Adani Hazira Port Limited and the letter received from MoEF&amp;CC regarding the name change was submitted with last EC compliance report as Annexure 9 on 28.05.2021.</p>



S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023
	Ministry of Environment and Forests.	
vii.	The project proponents shall inform the Regional Office as well as the Ministry the date of financial closure and final approval of the project by the concerned authorities and the date of start of Land Development Work.	<b>Complied</b> Financial Closure date was 29 <sup>th</sup> September 2011. Approval from GMB to commence work was obtained on 09 <sup>th</sup> April, 2010 vide letter No.: GMB/N/PVT/923(10)/42/458. Copy of the same has been submitted to the MoEF & CC and other concerned authorities along with the six monthly compliance report dated 19.05.2017.
viii.	A copy of the clearance letter shall be marked to concerned Panchayat/ Local NGO, if any from whom any suggestions/ representations has been received while processing the proposal.	<b>Complied.</b> Copy of the clearance letter was sent to the concerned Panchayat and local NGO. Copy of the RPAD receipt were submitted to MoEF&CC along with six monthly compliance report dated 27.11.2013 and again along with the six-monthly compliance report dated 19.05.2017.
ix.	State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industries Center and Collector's Office/Tehsildar's Office for 30 days.	This condition does not belong to AHPL.
8.	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, the Public Liability (Insurance) Act 1991 and EIA notification 1994, including the amendments and rules thereafter.	Noted and Complying with the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act 1986, the Public Liability (Insurance) Act 1991 and EIA notification 2006, including the amendments. AHPL has obtained: - <ul style="list-style-type: none"> <li>Environmental and CRZ Clearance issued by MoEF &amp; CC, New Delhi vide letter No.: 11-150/2010-IA.III dated 03<sup>rd</sup> May, 2013.</li> <li>Consolidated Consent and Authorization under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981 vide Consent Order No.: AWH-118804 valid till 12.07.2027 was submitted on 30.11.2022.</li> <li>Public Liability Insurance (PLI) vide Policy No.: 41078151, IFFCO TOKIO General Insurance Company Limited valid up to 31<sup>st</sup> March, 2024. Attached herewith as <b>Annexure 9</b></li> </ul>
9.	All other statutory clearance such as the approvals for storage of diesel from Chief Controller of Explosive, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponent from the respective competent authorities.	<b>Complied.</b> All applicable clearances from respective authorities have been obtained i.e.: - <ol style="list-style-type: none"> <li><b>PESO License from Chief Controller of Explosive, Nagpur</b> vides Order No.: P/HQ/GJ/15/5294 (P270337), Renewed and valid till 31/12/2025. Copy of the PESO License was submitted with last Six Monthly EC Compliance Report.</li> <li><b>License to work a Factory</b> Adani Hazira Port Pvt. Ltd. (Liquid Terminal) from Director of Industrial Safety and Health, Govt. of Gujarat their vide Registration No.: 3502 / 51410 / 2013 and License No.: 18757, Renewed on 03-11-2018, valid till 23<sup>rd</sup> December 2023. Copy of the license to work a factory is submitted with the Six-monthly EC compliance Report AHPL/MoEFF&amp;CC 2019-20/001 dated 27.11.2019</li> <li>Fire NOC for Liquid Terminal- Obtained NOC from Fire Officer, Surat, (Latest on 7<sup>th</sup> March 2019) and NOC from commissioner of Police (Dated-12<sup>th</sup> May 2019)</li> </ol>



S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023
10.	<p>The project proponent shall advertise in at least two local newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environment and CRZ clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen at Website of the Ministry of Environment &amp; Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a>. The advertisement should be made within 10 days from the date of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office of this Ministry at Bhopal.</p>	<p><b>Complied.</b></p> <ul style="list-style-type: none"> <li>• Advertisements were published in Gujarat News Paper "Gujarat Mitra" and English News Paper "The Times of India" on 13/05/2013 (within 10 days of receipt of EC &amp; CRZ clearance).</li> <li>• Copy of the advertisement is submitted to MoEF&amp;CC along with the six-monthly compliance report dated 27<sup>th</sup> November, 2013.</li> </ul>
11.	<p>This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No.: 460 of 2004 as may be applicable to this project.</p>	<p><b>Noted.</b></p>
12.	<p>Status of Compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.</p>	<p><b>Complied.</b></p> <p>Compliance report of conditions stipulated in Environment and CRZ Clearance is being uploaded periodically on the company website i.e.: <a href="http://www.adaniports.com/ports-downloads">http://www.adaniports.com/ports-downloads</a></p>
13.	<p>Any appeal against this clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.</p>	<p><b>Noted.</b></p>
14.	<p>A copy of the clearance letter shall be sent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the Local NGO, if any from whom suggestions/ representations if any, were received while processing the proposal. The Clearance letter shall also be put on the website</p>	<p><b>Closed,</b></p> <ul style="list-style-type: none"> <li>• Copy of the clearance letter was sent to the concerned Panchayat and local NGO from whom the suggestions/ representations received.</li> <li>• Copy of the RPAD receipt is submitted to MoEF &amp; CC along with Six Monthly Compliance Report dated 27.11.2013 and again along with the six monthly compliance report dated 19.05.2017.</li> <li>• Clearance letter is available on website at <a href="http://www.adaniports.com/ports-downloads">http://www.adaniports.com/ports-downloads</a></li> </ul>

S. No.	Stipulated Conditions	Compliance Status as on 30.09.2023
	of the company by the proponent.	
15.	The Proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	<p><b>Complied.</b></p> <p>The six monthly compliance report comprising of the status of compliance of the stipulated EC conditions, including results of monitored data is being uploaded on the company website at <a href="http://www.adaniports.com/ports-downloads">http://www.adaniports.com/ports-downloads</a></p> <p>Also the compliance report was submitted to following:</p> <ol style="list-style-type: none"> <li>1. IRO -MoEF&amp;CC, Gandhinagar</li> <li>2. MoEF &amp; CC, New Delhi,</li> <li>3. DoEF, Gandhinagar,</li> <li>4. Zonal Office - CPCB, Vadodara,</li> <li>5. HO - GPCB, Gandhinagar, and</li> <li>6. RO - GPCB, Surat.</li> </ol> <p>Last report was submitted on 01.06.2023 through E mail.</p>
16.	The Environmental Statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986, as amended subsequently, shall also be put on the website of the company along with status of compliance of EC Conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.	<p><b>Complied.</b></p> <p>The Environment Statement in Form-V for the Financial Year: 2022-23 is submitted to GPCB vide dated 30.06.2023 and attached herewith. As <b>Annexure 9</b></p> <p><a href="http://www.adaniports.com/ports-downloads">http://www.adaniports.com/ports-downloads</a></p>

**APPENDIX-1:**

**COMPLIANCE TO THE CONDITIONS STIPULATED IN CRZ RECOMMENDATIONS**

**ISSUED BY FORESTS & ENVIRONMENT DEPARTMENT,**


**GOVERNMENT OF GUJARAT TO MOEF & CC, NEW DELHI**

**VIDE LETTER NO.: ENV-10-2012-30-E, DATED 11<sup>TH</sup> MAY, 2012**

**FOR MODIFICATION / EXPANSION OF MULTI - CARGO PORT FACILITY AT HAZIRA, DIST. - SURAT BY M/S. ADANI**

**HAZIRA PORT PVT. LIMITED**

**Appendix -1:** Compliance to the conditions stipulated in CRZ recommendation issued by Forests & Environment Department, Government of Gujarat to MoEF & CC, New Delhi vide letter No.: ENV-10-2012-30-E dated 11<sup>th</sup> May, 2012 for modification / expansion of Multi-Cargo Port Facility at Hazira, Dist. - Surat by M/s. Adani Hazira Port. Limited: -

S. No.	Conditions	Compliance Status
<b>A.</b>	<b>Specific Condition</b>	
1.	The provision of CRZ Notification 2011 shall be strictly adhered by M/s. AHPPL. No activity in contradiction to the provision of CRZ Notification shall be carried out by M/s. AHPPL.	<b>Complied.</b> <ul style="list-style-type: none"> <li>Construction activities are carried out as as per the provisions of CRZ Notification, 2011.</li> <li>No construction work other than those permitted in CRZ Notification has been done.</li> <li>Development of the port and other ancillary facility is being done as per the approval received under CRZ Notification, 2011 and EIA Notification, 2006 and subsequent amendments.</li> </ul>
2	M/s. AHPPL shall not construct any storage facilities for material / chemicals in the CRZ area except for those permissible as per Annexure - II of CRZ Notification 2011 also for other hazardous chemicals, outside CRZ Areas, the AHPPL shall consult SDMA for Disaster Management Plan.	<b>Complied.</b> <ul style="list-style-type: none"> <li>Only permissible activities being carried out in CRZ area.</li> <li>Disaster Management Plan has been prepared prior to the commissioning of multi cargo port.</li> <li>- DMP has been submitted to GSDMA vide letter dated 20.10.2012.</li> <li>- Comments were received from authority vide letter no. GSDMA /SM / Ind.safety/ 770560 dated 03.12.2012.</li> <li>- Suggestions were incorporated and revised plan was submitted to GSDMA on 23.05.2014.</li> </ul> <p>Last Mock Drill was conducted on 26.08.2023. The scenario was, Multiple Cargo Vessel Operation is going on at the jetty. All of sudden there was splash of cargo from the flexible hose connected to jetty manifold. There was heavy leak and Splash on the jetty.</p>  <p>Last Update of ERP &amp; DMP: 28.03.2022</p> <ul style="list-style-type: none"> <li>Last submission of ERP &amp; DMP to Chief Controller of Explosive on 29<sup>th</sup> March 2022 and Joint Director Industrial Safety and Health on 20.06.2022.</li> </ul>
3.	All necessary permissions from different Government Departments / agencies shall be	<b>Complied.</b>

S. No.	Conditions	Compliance Status
	obtained by M/s. AHPPL before commencing the activities.	All the statutory permissions from the concerned statutory authorities are obtained i.e.: - <ul style="list-style-type: none"> <li>- Environment and CRZ Clearance from MoEF &amp; CC, GOI vide order No.: F.No.:11-150/2010-IA-III dated 03.05.2013,</li> <li>- CTE &amp; CC&amp;A from Gujarat Pollution Control Board (For details Please refer EC condition 9)</li> <li>- PESO License from Chief Controller of Explosive, Nagpur License to work a Factory Adani Hazira Port Ltd. (Liquid Terminal) from Director of Industrial Safety and Health, Govt. of Gujarat. Please refer EC condition 9 for details.</li> </ul>
4.	The AHPPL shall ensure that there shall be no damage to the existing mangrove patches near the site and also ensure the free flow of water to avoid damage to the mangrove.	<b>Noted and complied with.</b> There are no adverse impacts on mangrove as well as flow of water with respect to development activities.
5.	No dredging, reclamation or any other project related activities shall be carried out in CRZ area categorized as CRZ-I (A) and it shall have to be ensured that the mangrove habitats and other ecologically important and significant areas, if any in the region are not affected due to any of the project activities.	<b>Complied.</b> There is no dredging and reclamation activities are being carried out in CRZ I (A) area. Development of the port and other ancillary facility is being done as per the approval received under CRZ Notification, 2011 and EIA Notification, 2006 and subsequent amendments. The mangrove habitats near by the port are being protected by AHPL.
6.	The dredging material shall be disposed of at the location already approved by the Ministry of Environment and Forests, Government of India.	<b>Complied.</b> As per communication from MoEF&CC dated 12 <sup>th</sup> November 2003 bearing letter No.: J-16011/ 11/2003-IA-III- Hazira Port Pvt Ltd conditions states "dumping of dredged spoils should be dumped at the sites A & C as per the following coordinates: - (A) 21°03' to 21°05' N & 72°28' to 72°30' E (C) 21°03' to 21°05' N & 72°30' to 72°32' E The maintenance dredging is being carried out through Water Injection dredger in which no Dredging material is generated. Some part of dredging is being carried out through Cutter Section Dredger and in this process Dredging material is being generated. No disposal has been done till date. All the dredging material is being utilized for level rising, reclamation and apart from the above activity, if any excess material generated will be

S. No.	Conditions	Compliance Status
		disposed of at the location already approved by the MoEF&CC.
7.	All the recommendations and suggestions given by M/s. NIO and Cholamandalam MS Risk Services Ltd, Chennai in their EIA reports for conservation / protection and betterment of environment shall be implemented strictly by M/s. AHPL.	<b>Complied.</b> All the recommendations and suggestions for conservation/protection and betterment of environment are being implemented strictly. Recommendation given in EMP is being complied in letter and spirit. Status of the same is enclosed as <u><b>Annexure-3.</b></u>
8.	The construction and operational activities shall be carried out in such a way that there is no negative impact on mangroves, if any and other important coastal / marine / habitats. The construction activities shall be carried out only under the guidance / supervision of reputed institute / organization.	<b>Complied.</b> There are no mangroves and other important coastal / marine / habitats presents within the port development area. There is no construction activity in the compliance period. The Port development work is supervised by Gujarat Maritime Board (GMB).
9.	M/s. AHPPL shall strictly ensure that no creeks or rivers are blocked due to any activity at Shipyard.	<b>Complied.</b> All the activities are carried out as per EC & CRZ clearance and no creeks are blocked due to development activities. Shipyard is not envisaged in our proposal.
10.	The construction debris and / or any other type of waste shall not be disposed of into the sea, creek or in CRZ areas. The debris shall be removed from construction site immediately after the construction is over.	<b>Complied</b> Construction and Demolition waste is being managed as per Construction and Demolition waste rules 2016.
11.	The construction camps shall be located outside the CRZ area and the construction labour shall be provided with the necessary amenities, including sanitation, water supply and fuel and it shall be ensured that the environmental conditions are not deteriorated by construction labours.	<b>Complied.</b> During construction phase laborers have been managed through contractors and they are from surrounding villages so they stay in their own residential facilities in the surrounding villages. Drinking water, toilets and rest shelters are being provided to the labors during work.
12.	M/s. AHPPL shall prepare and regularly update their Local Oil Spill Contingency and Disaster Management Plan in consonance with National Oil Spill and Disaster Contingency Plan and shall submit the same	<b>Complied.</b> <ul style="list-style-type: none"> <li>Oil Spill Contingency Plan is prepared and the same was approved by Indian Coast Guard (Letter No.: 7563, dated 09.01.2014).</li> <li>Disaster Management Plan was prepared prior to the commissioning of multi cargo port.</li> </ul>



S. No.	Conditions	Compliance Status
	to this department after having it vetted through Indian Coast Guard.	<ul style="list-style-type: none"> <li>DMP has been submitted to GSDMA vide letter dated 20.10.2012.</li> <li>Comments were received from authority vide letter no. GSDMA /SM / Ind.safety/ 770560 dated 03.12.2012.</li> <li>Suggestions were incorporated and revised plan was submitted to GSDMA on 23.05.2014.</li> <li>Regular mock drill to ensure the compliance and preparedness is being done.</li> </ul> <p>Last Mock Drill (On Site) was on :26.08.2023. Last Update of ERP &amp; DMP : 28.03.2022 Last submission of ERP &amp; DMP to Chief Controller of Explosive on 29.03.2022</p>
13.	M/s. AHPPL shall bear the cost of external agency that may be appointed by this department for supervision / monitoring of proposed activities and the environment impact of the proposed activities.	Noted and agreeing to bear the cost of external agency, if any that may be appointed by this department.
14.	The jetty and most of the approach would be supported on piles allowing adequate flow of water without significant obstruction.	<b>Complied.</b> Jetty approach is supported by piles allowing adequate flow of water.
15.	The ground water shall not be tapped within the CRZ areas by the AHPPL to meet with the water requirements in any case.	<b>Being Complied</b> Ground water is not being used for any purpose in the Port. The industrial water requirement is being met through 2000KL per day of treated wastewater from M/s. KRIBHCO and domestic water requirement is met through tanker water.
16.	M/s. AHPPL shall take up massive greenbelt development activities in consultation with Forest Dept. / GEER Foundation / Gujarat Ecology Commission. A comprehensive plan for this purpose has to be submitted to the Forests and Environment Department.	<b>Being Complied</b> The Green Belt is being developed by AHPL. The total Green Belt area developed till 30 <sup>st</sup> SEPTEMBER 2023 is 78.79 Ha. Photograph of Green Belt area is attached herewith as <b>Annexure 6</b>
17.	Mangrove plantation in 200 Ha. shall be carried out in consultation with Gujarat Ecology Commission / Forest Dept. by M/s. AHPPL with in a period of two years from the issuance of CRZ clearance by MoEF, GoI and an action plan in this regard shall be submitted to this Department along with satellite images and GPS readings with Latitudes and Longitudes.	<b>Complied</b> Company has carried out mangrove afforestation in an area of 200 hectares i.e.: 50 hectares in Kantiyajal and 150 hectares in Village Nada-Devla of District - Bharuch and same is completed. Consolidated report on mangrove plantation on an area of 200 hectares at Village: Kantiyajal, Taluka: Hansot and Village: Nada-Devla, Taluka: Jambusar, District: Bharuch (Gujarat) developed by M/s. Saline Area Vitalization Enterprise (SAVE) Limited, Ahmedabad. Supporting

S. No.	Conditions	Compliance Status																								
		documents of the same submitted to MoEF & CC and other authorities along with the six-monthly compliance report dated 20.11.2017.  The ecological health assessment of the mangrove plantation is being carried out by Gujarat Institute of Desert Ecology.																								
18.	The AHPPL shall have to take up bio-shielding development programme as part of CSR in consultation with Forest Department / PCCF and action plan in this regard shall have to be submitted to the MoEF - GoI and this Department.	Complied  AHPL has developed Bio-Shield at Village - Tankari Bandar, Taluka - Jambusar, District - Bharuch (Gujarat) in an area of 18 hectares with the help of a local NGO named Saline Area Vitalization Enterprise (SAVE) Limited.  The ecological health assessment of the Bioshield plantation was carried out by Gujarat Institute of Desert Ecology.																								
19.	M/s. AHPPL shall have to contribute financially for taking up the socio-economic upliftment activities in this region in consultation with Forest and Environment Dept. and the District Collector / District Development Officer.	<b>Being Complied</b>  CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development.  Appropriate financial contribution is being made to the Schemes promoted by District Authorities and Forest & Environment Department, GoG are also included. Please refer the <u><b>Annexure-2</b></u> for the status of the CSR activities planned and carried out during the compliance period. <table><tr><th>Sr. No.</th><th>Vertical</th><th>Approved Budget for FY 2023-24 (In Lacs Rupees)</th><th>Utilization amount (In Lacs Rupees)</th></tr><tr><td>1</td><td>Education</td><td>99.11</td><td>43.75</td></tr><tr><td>2</td><td>Community Health</td><td>16.70</td><td>3.09</td></tr><tr><td>3</td><td>Sustainable Livelihood Development</td><td>65.97</td><td>19.47</td></tr><tr><td>4</td><td>Community Infrastructure Development</td><td>46.77</td><td>3.60</td></tr><tr><td>5</td><td>General Management and Administratio</td><td>15.10</td><td>12.50</td></tr></table>	Sr. No.	Vertical	Approved Budget for FY 2023-24 (In Lacs Rupees)	Utilization amount (In Lacs Rupees)	1	Education	99.11	43.75	2	Community Health	16.70	3.09	3	Sustainable Livelihood Development	65.97	19.47	4	Community Infrastructure Development	46.77	3.60	5	General Management and Administratio	15.10	12.50
Sr. No.	Vertical	Approved Budget for FY 2023-24 (In Lacs Rupees)	Utilization amount (In Lacs Rupees)																							
1	Education	99.11	43.75																							
2	Community Health	16.70	3.09																							
3	Sustainable Livelihood Development	65.97	19.47																							
4	Community Infrastructure Development	46.77	3.60																							
5	General Management and Administratio	15.10	12.50																							

S. No.	Conditions	Compliance Status				
			n for CSR activities			
		Total		243.65	82.42	
20.	A separate budget shall be earmarked for environment management and socio-economic activities including green belt development / mangrove plantation and details thereof shall be furnished to this Department as well as the MoEF, Gol. The details with respect to the expenditure from this budget head shall also be furnished along with the compliance report.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>Environmental Management Plan is in place and the funds earmarked are being utilized for effective implementation of environmental safeguards and environment monitoring. Key components are Environment monitoring, Mangrove plantation, environmental studies etc.</li> <li>Please refer the <b>Annexure-8</b> for details of budget and Expenditure for Environment Management for the compliance period.</li> <li>CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development.</li> <li>Please refer the <b>Annexure-2</b> for the status of the CSR activities planned and carried out during the compliance period.</li> </ul>				
21.	A separate Environment Management Cell with qualified personnel shall be created for environmental monitoring and management during construction and operational phases of the project.	<b>Complied.</b> <ul style="list-style-type: none"> <li>Environment Management Cell has been set up with qualified staff to ensure the effective implementation of environmental safeguards.</li> <li>In addition to the site Environment Management Cell a well-established corporate environment cell also ensures effective implementation of the environmental safeguards.</li> <li>Please refer the <b>Annexure-7</b> for Environment Management Cell Organogram.</li> </ul>				
22.	Environment Audit Report including the changes, if any, with respect to baseline environmental quality in the coastal and marine environment shall be submitted every year by M/s. AHPL to this Department as well as MoEF, Gol.	<b>Complied.</b> <ul style="list-style-type: none"> <li>Regular Environmental Monitoring are being carried out through a GPCB approved environment auditor M/s. Pollucon Laboratories, Surat (a MoEF&amp;CC and NABL accredited laboratory) and others concerned authorities along with Six Monthly Compliance Report.</li> <li>No significant changes observed with respect to past monitoring results.</li> </ul>				
23.	A six monthly report on compliance of the conditions mentioned in this letter shall have to be furnished by M/s. AHPL on a regular basis to this Department as well as MoEF, Gol.	<b>Noted and complied with.</b> <ul style="list-style-type: none"> <li>Six monthly compliance reports are being submitted to all the concerned authorities on regular basis.</li> <li>Last report was submitted on 01.06.2023 through E mail.</li> </ul>				
24.	Any other condition that may be stipulated by this Department / MoEF, Gol from time to time for environment protection / management purpose shall have to be complied with by M/s. AHPL.	Noted and comply with the additional conditions stipulated by the MoEF & CC, if any.				

Annexure 2

Details Of The CSR Activities Along With Budgetary Provisions And Expenditures For the Compliance Period April  
2023 to September 2023

Details of CSR Budget Expenditure:

Sr. No.	Vertical	Approved Budget for FY 2023-24 (In Lacs Rupees)	Utilization amount (In Lacs Rupees)
1	Education	99.11`	43.75
2	Community Health	16.70	3.09
3	Sustainable Livelihood Development	65.97	19.47
4	Community Infrastructure Development	46.77	3.60
5	General Management and Administration for CSR activities	15.10	12.50
Total		243.65	82.42

## Details of CSR Expenditure of last three Financial Years

S.NO	FY	Budget (In INR Lacs)	Expenditure (In INR Lacs)
1	2020-21	255.13	223.61
2	2021-22	668.89	469.35
3	2022-23	477.1	399.06



## ADANI HAZIRA PORT LIMITED

## Half Yearly Report of Adani Foundation – Hazira (H1-FY 2023-24)

Adani Foundation is working as a CSR wing of Adani Group and the CSR activities are being conducted in the four major thrust areas.

## Four Major Thrust Areas of our CSR Activities:



## A. Education:

## • UTTHAN PROJECT :

The future of India depends upon the quality of education imparted to our children. We believe that it is the joint responsibility of the Government and citizens to improve school education. With an aim to enhance the quality of primary education in Surat District, Adani Foundation has implemented this Utthan Project in 10 Government Primary Schools of Hazira area from December-2019. The project is running successfully. Under this project focus is on progressive learners (PRIYA VIDYARTHI) and celebrate their progress, make learning joyful, provides adequate resources and facilities, strengthen the curricula to provide basic skills, especially in the areas of literacy, numeracy and skills for life and focus on Teachers' capacity building. 4196 students of 32 Government Primary Schools are benefitted under project Utthan of 03 Blocks and 30 villages of Surat district. 1360 progressive students and 3744 competencies are identified by Utthan Sahayaks

## • NAVCHETAN VIDHYALAY - JUNAGAM:

- Adani Foundation has been sponsoring this primary school in nearby village Junagam (Shivrampur) academically & administratively for last 9 years. The number of students are increasing every year in the school which is against the normal trend of reducing students in primary schools in rural area. The ratio of boys and girls are also at par, which shows the good academic facilities provided by Adani Foundation has motivated village people to send their girl child to school. 413 students are studying from KG to Class VIII.





Udan :

- Total 13 institution were engaged & 598 participants visited AHPL & AWL, Hazira during compliance period.
- 01 expert session was arranged during this month.
- B. Sustainable Livelihood Development:

- Project KAMDHENU

Adani Foundation has signed MoU with BAIF for designing and implementing its activities related to Animal Husbandry. Under this project, awareness is created for best livestock management practices. Different types of trainings are imparted to cattle owners. Artificial Insemination (AI) is one of the very popular and most demanding activity under this project. Also to save energy and to do sustainable irrigation, the process for providing solar pump is initiated. Two dedicated centres are set up at Junagam (Shivrampur) and Barbodhan to undertake various activities by BAIF in nearby villages. The activities covered under this project are listed below:

- a) Trainings/Meetings to adopt best livestock practices
- b) Exposure Visits
- c) Calf rearing
- d) Deworming
- e) Infertility Camps
- f) Model Fodder Plot Development
- g) Sex Sorted Semen
- h) Artificial Insemination
- i) Vaccination for livestock
- j) Mineral Mixer



Adani Foundation is working with SHGs groups in nearby 8 villages. The focus is on development of new SHGs and to empower them/make them self-sustained. Exposure visits are conducted for SHGs and material support is extended by Adani Foundation

- **Community Health:**

The Adani Foundation firmly believe that improving the health of citizens can directly result in economic growth of the nation. Healthy people can utilise growth opportunities made available to them in a better way. Adani Foundation have committed itself to raising the standards of and strengthening healthcare systems in and around our operational village in Hazira area to ensure healthy lives and promote well-being at all ages in alignment with Sustainable Development Goals of the UN.

**CSR Budget and It's Utilization Ststus**

(All Amount in Lacs)									
Vertical	Annual Budget	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Utilization	Utilization in %
General Management and Administration	15.10	2.42	1.33	1.35	4.67	1.37	1.36	12.50	82.81%
Education	48.61	1.79	3.53	8.28	5.10	4.79	2.66	26.14	53.78%
Community Health	16.70	0.76	0.46	0.46	0.46	0.46	0.46	3.09	18.50%
Sustainable Livelihood Development	65.97	6.92	1.45	1.02	6.11	0.91	3.05	19.47	23.39%
Community Infrastructure Development	46.77	0.47	0.47	0.47	0.62	0.47	1.08	3.60	7.70%
Utthan	50.50	2.11	2.48	2.44	2.64	4.62	3.32	17.61	34.87%
<b>Total</b>	<b>243.65</b>	<b>14.48</b>	<b>9.73</b>	<b>14.03</b>	<b>19.61</b>	<b>12.63</b>	<b>11.94</b>	<b>82.42</b>	<b>31.59%</b>

**Annexure-3:**

**Compliance Status of EMP as mentioned in the Integrated EIA Report, Sep. 2012:**

S. No.	EMP Conditions	Compliance Status as on 30 <sup>th</sup> September 2023
I.	<b>AS PER TERRESTRIAL ENVIRONMENTAL IMPACT ASSESSMENT REPORT: -</b>	
A	<b>CONSTRUCTION PHASE:-</b>	
1.	<b>Dredged Soils Management Plan:</b> AHPL has been permitted to dredge about 37 million cubic meter of soil, which shall be reused for backfilling in the project site. The dredged soil samples will be collected and analysed periodically for designated pollutants as per the recommendations of statutory authorities.	<b>Complied.</b> No disposal was done till date. All the dredging material was utilized for level raising, reclamation. If any excess material generated will be disposed of at the location already approved by the MoEF&CC.
2.	<b>Air Quality Management:</b> Fugitive dust will be generated during construction phase of the project due to handling of wet dredged and excavated soils. Dust control program will be implemented to reduce the dust generation during construction at project site. Water sprinkling will be adopted on haulage roads and construction site.	<b>Being Complied</b> Water sprinkling was being done on haulage roads on regular basis.
3.	<b>Noise Control Programs:</b> 1. Onsite fabrication activities should be undertaken at a designated location, which should be located away from the office buildings and any other working areas. 2. In case noise emissions from the fabrication activities exceed a level of 85 dB (A) at the fence-line of the fabrication yard, temporary noise barrier can be installed. 3. Portable diesel engine generators and diesel engine driven compressors, if any, should be covered with noise enclosures.	<b>Complied</b> Fabrication activities was done at a designated location away from the office buildings and working areas. <b>Complied</b> Noise level was below 85 dB(A) during the fabrication. Currently no fabrication activities are going on. <b>Complied.</b> In-built noise enclosures are available in portable diesel engine generators and diesel engine driven compressors to reduce the noise level.
4.	<b>Sewage Management Program:</b> Sewage generated from the construction site will be treated in modular STP and shall be used for green belt development / landscaping after achieving prescribed standards by GPCB.	<b>Being Complied</b> Sewage generated from the construction site is being treated in STP and treated water is being used for greenbelt development.
5.	<b>Solid and Hazardous Waste Management Program:</b> The solid waste generated should be segregated and categorized under various rules such as HWM 2008, SWM 2000, the Batteries Rules 2001 including processing of used oil by authorized recyclers should be carried out by the rules and procedures prescribed by CPCB and also meet the requirements of GPCB.	<b>Being Complied</b> All the wastes are being segregate at source and handled as per applicable rules/ guidelines and disposed off through GPCB approved agency.
6.	<b>Construction Phase Storm Water Runoff:</b> It has been recommended to adopt soil stabilization plans and storm water sedimentation basins to control the silt before discharging the storm water into sea.	<b>Complied</b> Separate storm water drain was developed to discharge the storm water.
7.	<b>Sanitation:</b> The facilities presently available with the nearby villages will continued to be used during construction activities and no major sanitation problem is expected during construction period. The workers at the project site will be provided with proper sanitation arrangement.	<b>Complied</b> Proper sanitation arrangements were available for workers at project site.
B.	<b>OPERATION PHASE: -</b>	
1.	<b>Air Quality Management:</b>	
i.	<b>Cargo-Handling Equipment:</b> 1. Retrofitting the old equipment to meet the vehicular emission standards.	<b>Being Complied</b> All the deployed vehicles and equipment are PUC certified.

	2. All the vehicles and equipment will be certified with PUC norms shall be deployed.	
ii.	<b>Standby Diesel Generators:</b> DG Sets will be operated on clean diesel fuel with sulphur content less than 0.5%. Minimum stack height of 30m will be provided to disperse the gases into the atmosphere as per the guidelines suggested by Central Pollution Control Board.	<b>Being Complied</b> DG Sets are being operated only in case of power failure, DG are operated on clean diesel fuel with sulphur content less than 0.5% and provided the adequate stack height are being provided as per CPCB/GPCB norms to disperse the gases into the atmosphere.
iii.	<b>Fugitive Coal Dust Control Program:</b> The management of AHPL has proposed to adopt the following fugitive coal dust control measures: - <b>a. Dry Fog System</b> - A new, proven and cost effective technique to control dust is "Dry Fog" system to suppress the dust from the air. The name fog is just what it implies small droplets of water injected into the air. Fogging works by releasing very small droplets of water into the air. Airborne dust particles adhere to the water droplet and agglomerate. If the fog is generated in the right way, by using pressurized water, the energy required can be very low between 2 to 3 kW for a system requiring hundreds of nozzles, e.g.: A large stockpile tripper conveyor - giving considerable operating cost savings when compared to other techniques, The sprinkler droplet sizes should be maintained less than 100 microns. <b>b. Sprinklers:</b> Once stockpiled, water can be sprayed on the stockpiles to keep them damped down. Swivelling sprinklers should be used along the lengths of the stockpile with caution, however, as the volume of water required can be significant, causing drainage and run-off treatment problems.	<b>Complied.</b> Following control measures are in place and effectively working at port to control fugitive dust: - 1. Transportation of coal from jetty to coal storage yard through 1.7 Km. long conveyor belt with hood. 2. Water sprinklers in the coal yard, 3. Dust Suppression System / Spray Nozzles in Conveyor System and Discharge Chute, 4. Water spray through Water Browsers, 5. Water Mist Canon / Fog System, 6. Wind Brake Shield of 14 meters high and 1900 meters long, 7. Transportation of cargo from port to hinterland is being done through dumpers / trucks covered with tarpaulin, 8. Regular cleaning of the roads through Road Sweeping Machines, and 9. Company has set up dedicated greenbelt area for plantation at periphery / avenue plantation / landscaping etc. Total greenbelt area developed so far is approx. 78.79 ha within the port premises.
2.	<b>Noise Control Program:</b> The following source noise control plans have been suggested: - ➤ Covering of sound intensive components with insulation. ➤ Using noise absorbing building materials if required for housing compressors and diesel generators etc. as per the guidelines suggested by Central Pollution Control Board. ➤ Adopting low noise driving (Eco-driving) ➤ Using silent exhaust pipes for major diesel engine vehicles and heavy trucks operated inside the port. ➤ Planting trees which act as barrier to arrest dispersion of noise levels. ➤ Using electricity powered equipment inside the port instead of diesel powered ones will be explored to the extent possible.	<b>Complied.</b> <ul style="list-style-type: none"> <li>All the sound intensive components (DG Set and Compressor) are with acoustic enclosures.</li> <li>Green belt development is in progress.</li> <li>All RTGs and Quay Cranes are electricity operated.</li> </ul>
3.	<b>Waste Water Management:</b> Port handling operations would generate wastewater from the following sources: - 1. Ship ballast water, 2. Ship deck wastewater including sewage, 3. Rejects from desalination plant, 4. Workshop and vehicle maintenance shop wastewater, 5. Leachate from coal stock yard,	<b>Being Complied</b> <ul style="list-style-type: none"> <li>AHPL is not accepting Ballast/ Sewage water from Ships.</li> <li>Desalination plant not yet installed.</li> <li>There is no effluent generation from workshop. Vehicle maintenance is not done in port premises.</li> <li>There is no leachate from dump pond.</li> </ul>

	<p>6. Floor cleaning and tank cleaning wastewater from the liquid tank farm,</p> <p>7. Sewage from port facilities. The proposed wastewater treatment and reuse program has been presented hereunder: -</p> <p>A variety of vessels use the waters within the port, including bulk coal ships, tugs and line boats. Discharges from bulk ships are not expected to occur within the port because these large ships normally have on-board storage and sewage treatment plants, allowing discharge of treated effluent at sea as per the provision of MARPOL.</p> <ul style="list-style-type: none"> <li>➤ Except monsoon, leachate from coal stock yard is not envisaged. However small quantities, if any, will be treated in the effluent treatment plant. Wastewater from vehicle work-shops will also be treated in the proposed onsite effluent treatment plant.</li> <li>➤ As far as possible all chemical spills at liquid handling facilities will be treated with dry spill absorbing material and water will not be used. Spillage if any occurs will be treated in a dedicated onsite wastewater treatment plant, which consists of an oil removal unit, primary chemical treatment unit and biological treatment units followed by activated carbon unit. Biologically treated wastewater will be further treated in the central sewage treatment plant. Treated wastewater will be used for dust suppression and horticulture applications at the facility. No treated wastewater will be discharged outside the port facilities.</li> </ul>	<ul style="list-style-type: none"> <li>- Tank cleaning wastewater is being treated into ETP.</li> <li>- Domestic waste water is being treated in the STP and then used for horticulture purpose within the port premises.</li> </ul> <p><b>Complied.</b> Dedicated coal dump pond is provided to collect the runoff (if any) from coal yard and it is further reused for dust suppression purpose into coal yard.</p> <p><b>Complied with.</b> No spill has occurred till date. If, spills occurred, spilled material/chemical will be treated into ETP and treated wastewater will be reused in greenbelt development / plantation purpose.</p>
4.	<p><b>Storm Water Management Plan:</b></p> <ul style="list-style-type: none"> <li>➤ Storm water from the coal stockpile area will be passed through a series of sediment traps to remove the majority of the coal sediment before discharging into the natural drains. It has been proposed to construct a garland drain for all bulk storage facilities to avoid silting into the marine eco-system.</li> <li>➤ All liquid storage tanks will be provided with dykes to avoid any cross contamination of storm water from chemical spills. Storm water drains shall be designed in order to avoid any flooding of the coal stock yard and liquid chemical tank farm areas.</li> </ul>	<p><b>Complied</b> Garland drain for all bulk storage facilities are provided to avoid silting into the marine eco-system. Storm water from the coal stockpile area is collected into dump ponds to remove the coal sediment.</p> <p><b>Complied.</b> All liquid storage tanks are provided with dykes to avoid any cross contamination of storm water from chemical spills. Storm water drains and effluents drains are separate.</p>
5.	<p><b>Solid and Hazardous Waste Management:</b></p> <ul style="list-style-type: none"> <li>➤ Solid wastes generated from the port handling facilities consist of packaging waste such as wood, paper/carton, steel scrap etc.</li> </ul>	<p><b>Complied.</b></p> <ul style="list-style-type: none"> <li>- Solid wastes generated during port development i.e.: construction &amp; demolition wastes are reused for level rising of low lying area within the port premises. Kitchen/ Food, Horticulture/Garden wastes are being sent to Organic Waste Converter (OWC) to convert it into compost and reused as manure in greenbelt/plantation.</li> <li>- Packaging materials generated from the cargo handling i.e.: Wood, Paper/Carton,</li> </ul>



	<p>Steel Scrap, Plastic/Tarpaulin etc. are collected and sold out to recyclers.</p> <p><b>Complied.</b> All the wastes are segregated at source and stored at a dedicated Hazardous Waste storage shed/yard.</p> <p><b>Complied.</b> Recyclable waste is being collected and disposed of through CPCB/GPCB registered recyclers.</p> <p><b>Complied.</b> No spill has occurred till date.</p> <p><b>Complied.</b> Recyclable wastes is being collected and disposed off through CPCB/GPCB registered recyclers.</p> <p><b>Complied.</b> All the wastes are stored at a dedicated hazardous waste storage shed/yard.</p> <p><b>Being Complied</b> All the wastes are being segregate at source and handled as per applicable rules/guidelines.</p>	
6.	<p><b>Greenbelt and Plantation:</b></p> <ul style="list-style-type: none"> <li>AHPL will develop thick green belt plantation in and around the proposed project facility covering 81.27 Ha. Efforts will be taken to increase the green cover in and around the project boundary using local species with a view to ameliorating project related disturbances and enhancing the ecological value of the area. Greenbelt would be developed as per the CPCB guidelines.</li> <li>A capital cost of Rs. 1.62 Crore and an annual recurring budget of Rs. 0.65 Crore will be earmarked for this purpose.</li> </ul>	<p><b>Complied</b> Company has set up dedicated greenbelt area for plantation at periphery / avenue plantation / landscaping etc. Total greenbelt area developed so far is approx. 78.79 ha till 30<sup>th</sup> September 2023</p> <p>Horticulture budget for FY 2023-24 is Rs. 149 Lakhs and expenditure during compliance period is INR 78.01 Lakhs.</p>
7.	<p><b>Community Development Plan:</b> AHPL has identified focused areas for community development and implement developmental program. The identified activities under CSR program are as follows: -</p> <ol style="list-style-type: none"> <li>Infrastructure development for educational facilities like building of schools, computer rooms, multipurpose activity halls</li> <li>Supporting education through distribution of stationary, scholarships, science kits, bicycles to children, conducting education camps, competitions.</li> <li>Strengthening the community health by arranging health camps, AID awareness camps, providing financial support to senior citizens and poor people, building dispensaries and mobile dispensaries.</li> </ol>	<p><b>Complied.</b></p> <ul style="list-style-type: none"> <li>CSR activities carried out by Adani Foundation in four verticals i.e.: - (1) Education, (2). Community Health, (3). Sustainable Livelihood and (4). Rural Infrastructure Development.</li> <li>Detail of the CSR activities along with budgetary provisions and progress are regularly submitted to MoEF &amp; CC as part of six monthly compliance reports.</li> <li>Please refer the <b>Annexure-2</b> for the status of the CSR activities during the Financial Year: 2023-24.</li> </ul>

	4. Improvement of rural sanitation by conducting mass awareness campaign, helping villagers for constructing and maintaining household toilets, school toilets. 5. Improvement in animal husbandry and agriculture by arranging camps for farmers and cattle owners, conducting programs to use new irrigation technologies, organic farming, and free fodder supply. 6. Organizing need based skill development program to women and youth for their empowerment. 7. Rural infrastructure development by construction of rainwater harvesting ponds, check dams, roads, bus stops, drainage systems, fish landing shed, solar street lamps. AHPL has committed to spend about Rs. 8.21 Crore in the first five years of the operation towards various rural upliftment and community development programs and tentative budget has been presented in the below table - Budgeted Expenditure for CSR and Community Development Activities:-	<table><tr><th>S.NO</th><th>FY</th><th>Budget (In INR Lacs)</th><th>Expenditure (In INR Lacs)</th></tr><tr><td>1</td><td>2020-21</td><td>255.13</td><td>223.61</td></tr><tr><td>2</td><td>2021-22</td><td>668.89</td><td>469.35</td></tr><tr><td>3</td><td>2022-23</td><td>477.1</td><td>399.06</td></tr></table>				S.NO	FY	Budget (In INR Lacs)	Expenditure (In INR Lacs)	1	2020-21	255.13	223.61	2	2021-22	668.89	469.35	3	2022-23	477.1	399.06				
		S.NO	FY	Budget (In INR Lacs)	Expenditure (In INR Lacs)																				
		1	2020-21	255.13	223.61																				
		2	2021-22	668.89	469.35																				
		3	2022-23	477.1	399.06																				
<table><tr><th>S. No.</th><th>Descriptions</th><th>Budgeted Amount For 1<sup>st</sup> 5 year Period (Amount rupees in Crore)</th></tr><tr><td>1</td><td>Education</td><td>2.29</td></tr><tr><td>2</td><td>Community Health</td><td>1.18</td></tr><tr><td>3</td><td>Sustainable Livelihood Activities</td><td>1.43</td></tr><tr><td>4</td><td>Rural Infrastructure Development</td><td>2.04</td></tr><tr><td>5</td><td>Entry Point Activities</td><td>1.27</td></tr><tr><td colspan="2">Total</td><td>8.21</td></tr></table>		S. No.	Descriptions	Budgeted Amount For 1 <sup>st</sup> 5 year Period (Amount rupees in Crore)	1	Education	2.29	2	Community Health	1.18	3	Sustainable Livelihood Activities	1.43	4	Rural Infrastructure Development	2.04	5	Entry Point Activities	1.27	Total		8.21			
S. No.	Descriptions	Budgeted Amount For 1 <sup>st</sup> 5 year Period (Amount rupees in Crore)																							
1	Education	2.29																							
2	Community Health	1.18																							
3	Sustainable Livelihood Activities	1.43																							
4	Rural Infrastructure Development	2.04																							
5	Entry Point Activities	1.27																							
Total		8.21																							
II.	MARINE ENVIRONMENT MANAGEMENT PLAN:																								
A.	<b>CONSTRUCTION PHASE: -</b> ➤ The dredge spoil generated during capital dredging will be used for land reclamation for the port development and associated utilities. ➤ Unused dredged material will be disposed off at approved dump sites to the north of port area including dredged soil generated through maintenance dredging. ➤ Appropriate dredging methodology shall be adopted to control the generation of high levels of suspended solids. If the suspended solids concentration increases, the dredging operation should be stopped till the normal conditions are achieved. ➤ General clean up along the corridor used for construction related activities, adjacent intertidal areas, creeks etc. should be undertaken and all the discarded materials must be removed from the site and aesthetic quality of the surroundings to be restored, once the construction activities are completed.		<b>Complied.</b> No disposal has been done till date. All the dredging material is being utilized for level raising, reclamation. <b>Complied</b> If any excess material generated will be disposed of at the location already approved by the MoEF&CC. <b>Noted &amp; Being Complied</b> Monitoring of turbidity level in the sea water is being done and there is no abnormal increase observed.  <b>Being Complied.</b> Clean up of the area is regularly being done.																						
B.	<b>OPERATION PHASE: -</b> The following mitigation measures are recommended during port operation: - ➤ Sewage generated from the port operations will be treated in sewage treatment plant and treated water shall be used for horticulture and green belt development.		<b>Complied.</b> Sewage generated from the port operations is being treated in STP and treated water is being used for horticulture and green belt development. <b>Complied.</b>																						

<ul style="list-style-type: none"> <li>➤ All the solid waste generated from the port will be properly segregated, stored and disposed as per the applicable statutory requirement.</li> <li>➤ All the structures shall be designed in such a way that it should not restrict the prevailing tidal ingress in the creek and mangrove habitats in the vicinity to ensure good health condition.</li> <li>➤ Coastline between Suwali Point and Tapti Estuary mouth and around the port area will be periodically surveyed to assess erosion and accretion. Should the need arises the corrective action in terms of shore stabilization shall be undertaken.</li> </ul>	<p>All the solid waste generated from the port is properly segregated, stored and disposed as per the applicable rules.</p> <p><b>Being Complied</b></p> <p>Free flow to the mangrove is not restricted by any of our activity.</p> <p><b>Complied.</b></p> <p>Shoreline change study was conducted by NIO, Vizag during the period from November 2014 to December, 2015 Study confirms that there is no significant change in the nearby shoreline except for the approved layout of the AHPL. The report did not warrant any mitigation measures.</p> <p>Shoreline Change Assessment in the port boundary and nearby the area of 10 km radius is conducted by Gujarat Institute of Desert Ecology. The report was submitted to the authority with last EC compliance report.</p> <p><b>Noted and Being Complied.</b></p> <p>There is no oil spill till date.</p> <p><b>Complied.</b></p> <p>Oil Spill Contingency Plan has been prepared and the same was approved/vetted by Indian Coast Guard (Letter No.: 7563, dated 09.01.2014).</p> <p><b>Noted and Being Complied</b></p> <p>No effluent is being discharged.</p> <p><b>Complied.</b></p> <p>Please refer the <u><b>Annexure-4D</b></u> for the Sea Water Quality Monitoring / Analysis Reports for the compliance period April 2023 to September 2023. AHPL is not discharging any effluent outside the port premises.</p>
<ul style="list-style-type: none"> <li>➤ All the minor and major spillages of chemicals will be effectively controlled with appropriate tools and equipments.</li> <li>➤ An oil/chemical spill management plan shall be evolved and be in place for tier-1 (100t) and tier-2 (700t) spills in consultation with Gujarat Maritime Board/Coast Guard.</li> <li>➤ All the marine outfall shall meet the Gujarat Pollution Control Board Effluent Discharge Criteria for Seawater Disposal Standards.</li> <li>➤ Monitoring of water area of the port and effluent disposal sited shall be studied for pH and Corg, Suspended Solids, DO, BOD in order to identify for deviations if any from the baseline environmental quality.</li> <li>➤ The mitigation measures suggested for effluent release and maintaining of effluent disposal sites should also be adopted for effluent release by NIKO should be implemented.</li> </ul>	

\*\*\*

**ANNEXURE-4****Environmental Monitoring / Analysis Results For The Period From April 2023 to September 2023**



**4A. AMBIENT AIR QUALITY MONITORING (APRIL - 2023 TO SEPTEMBER - 2023)**
**TABLE-1.1: AIR QUALITY MONITORING RESULTS AT NEAR PORT GATE NO.: 2**

SR. NO.	DATE OF SAMPLING	LOCATION-1: NEAR PORT GATE NO.: 2 (N 21° 05.426'E 72° 37.739')											
		PM <sub>10</sub>	PM <sub>2.5</sub>	Pb	BaP	As	Ni	CO	C <sub>6</sub> H <sub>6</sub>	NH <sub>3</sub>	SO <sub>2</sub>	NO <sub>x</sub>	O <sub>3</sub>
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
1	03/04/2023	79.73	44.38	0.70	ND*	2.46	10.22	0.86	ND*	29.15	20.40	30.55	29.38
2	06/04/2023	73.13	37.43	ND*	ND*	ND*	ND*	0.94	ND*	33.37	17.24	37.67	25.57
3	10/04/2023	82.47	42.35	0.77	ND*	2.56	10.51	0.50	ND*	31.83	12.58	22.92	30.45
4	13/04/2023	71.39	32.10	ND*	ND*	ND*	ND*	0.47	ND*	34.78	18.20	34.56	28.56
5	17/04/2023	90.37	52.42	0.68	ND*	2.68	10.73	0.61	ND*	36.28	21.31	40.27	26.91
6	20/04/2023	74.11	40.21	ND*	ND*	ND*	ND*	0.73	ND*	23.82	25.30	36.25	19.81
7	24/04/2023	83.87	48.63	0.53	ND*	2.34	10.86	0.54	ND*	25.63	19.52	28.53	24.79
8	27/04/2023	77.44	41.35	ND*	ND*	ND*	ND*	0.80	ND*	22.41	14.79	26.58	20.88
9	01/05/2023	85.43	50.23	0.72	ND*	2.46	10.35	0.77	ND*	35.69	22.34	36.67	22.49
10	04/05/2023	70.39	36.24	ND*	ND*	ND*	ND*	0.64	ND*	25.69	18.24	18.60	28.58
11	08/05/2023	83.49	44.63	ND*	ND*	ND*	ND*	0.68	ND*	28.77	24.55	38.64	24.37
12	11/05/2023	64.86	33.20	ND*	ND*	ND*	ND*	0.81	ND*	30.89	19.75	35.78	29.65
13	15/05/2023	82.63	47.56	0.62	ND*	2.20	10.76	0.76	ND*	33.88	25.66	41.55	27.12
14	18/05/2023	75.62	43.55	ND*	ND*	ND*	ND*	0.45	ND*	40.22	16.64	28.72	30.26
15	22/05/2023	81.66	49.24	0.75	ND*	2.36	10.46	0.86	ND*	36.23	21.23	33.72	26.24
16	25/05/2023	88.62	52.62	ND*	ND*	ND*	ND*	0.94	ND*	38.13	10.80	44.22	23.68
17	29/05/2023	73.84	37.33	ND*	ND*	ND*	ND*	0.63	ND*	44.24	23.49	37.24	25.83
18	01/06/2023	80.46	42.71	ND*	ND*	ND*	ND*	0.94	ND*	39.89	14.31	29.76	28.63
19	05/06/2023	89.37	51.92	0.77	ND*	2.56	10.39	0.71	ND*	42.48	16.73	31.76	23.52
20	08/06/2023	70.49	36.54	ND*	ND*	ND*	ND*	0.81	ND*	36.57	22.65	44.25	14.45
21	12/06/2023	91.25	54.29	0.56	ND*	2.34	10.74	0.65	ND*	26.85	12.18	38.58	25.41
22	15/06/2023	76.71	45.64	ND*	ND*	ND*	ND*	0.93	ND*	38.15	24.24	42.48	22.42
23	19/06/2023	85.82	50.54	ND*	ND*	ND*	ND*	0.84	ND*	22.67	15.81	25.37	27.92
24	22/06/2023	92.42	53.61	0.69	ND*	2.46	10.23	0.48	ND*	34.39	18.40	32.44	21.41
25	26/06/2023	75.71	38.67	ND*	ND*	ND*	ND*	0.52	ND*	28.67	23.51	40.28	18.58
26	29/06/2023	66.27	28.47	ND*	ND*	ND*	ND*	0.86	ND*	32.18	17.54	21.93	24.27
27	03/07/2023	70.32	38.48	ND*	ND*	ND*	ND*	0.69	ND*	27.28	19.97	37.52	24.18


**Authorized Signatory**

● FSSAI Approved Lab   ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986   ● GPCB approved schedule II auditor   ● ISO 14001 : 2004   ● OHSAS 18001 : 2007   ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
 Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





28	06/07/2023	75.79	44.31	ND*	ND*	ND*	ND*	0.37	ND*	36.15	23.13	40.28	15.36
29	10/07/2023	80.24	47.42	ND*	ND*	ND*	ND*	0.72	ND*	24.53	16.87	28.39	19.43
30	13/07/2023	86.23	51.27	0.75	ND*	2.34	10.33	0.93	ND*	41.43	21.58	36.55	27.28
31	17/07/2023	72.45	35.60	ND*	ND*	ND*	ND*	0.82	ND*	31.58	18.85	32.43	23.92
32	20/07/2023	63.66	27.84	ND*	ND*	ND*	ND*	0.71	ND*	28.66	22.46	39.24	25.72
33	24/07/2023	69.66	37.52	ND*	ND*	ND*	ND*	0.79	ND*	20.87	17.79	35.47	22.16
34	27/07/2023	64.22	28.43	ND*	ND*	ND*	ND*	0.65	ND*	33.53	15.52	29.33	20.87
35	31/07/2023	83.48	46.28	0.56	ND*	2.11	10.74	0.55	ND*	35.19	9.23	25.55	29.45
36	03/08/2023	76.23	44.34	0.60	ND*	2.26	10.46	0.74	ND*	45.66	23.62	35.73	14.55
37	07/08/2023	69.66	37.65	ND*	ND*	ND*	ND*	0.65	ND*	37.76	18.30	33.45	25.32
38	10/08/2023	78.65	45.66	ND*	ND*	ND*	10.61	0.61	ND*	42.82	13.73	36.28	28.70
39	14/08/2023	88.31	50.24	0.82	ND*	2.42	10.50	0.77	ND*	34.35	25.60	40.38	23.27
40	17/08/2023	73.51	42.34	ND*	ND*	ND*	ND*	0.66	ND*	16.59	22.45	34.58	21.82
41	21/08/2023	81.27	49.37	0.68	ND*	2.20	10.23	0.63	ND*	31.01	19.79	29.56	26.22
42	24/08/2023	75.12	39.13	ND*	ND*	ND*	ND*	0.53	ND*	27.26	24.22	24.90	24.25
43	28/08/2023	68.39	36.27	ND*	ND*	ND*	ND*	0.72	ND*	43.65	16.59	31.61	17.57
44	31/08/2023	74.36	47.53	ND*	ND*	ND*	ND*	0.60	ND*	23.64	21.86	37.60	20.37
45	04/09/2023	72.45	43.17	ND*	ND*	ND*	ND*	0.86	ND*	41.61	21.60	32.28	29.42
46	07/09/2023	66.12	35.43	ND*	ND*	ND*	ND*	0.81	ND*	27.07	24.26	29.67	27.26
47	11/09/2023	70.01	41.48	ND*	ND*	ND*	ND*	0.88	ND*	44.95	15.47	25.65	18.57
48	14/09/2023	64.37	34.34	ND*	ND*	ND*	ND*	0.40	ND*	39.41	17.69	38.45	13.16
49	18/09/2023	86.54	45.23	0.73	ND*	2.21	10.58	0.70	ND*	42.26	10.87	28.36	26.52
50	21/09/2023	79.67	47.24	ND*	ND*	ND*	ND*	0.87	ND*	30.44	16.55	23.63	22.50
51	25/09/2023	83.44	52.05	0.68	ND*	2.42	10.33	0.90	ND*	36.35	20.26	30.75	25.70
52	28/09/2023	69.58	37.65	ND*	ND*	ND*	ND*	0.57	ND*	29.91	18.21	21.37	23.41

**Observation** Above given Results are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-Idt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

ND\*: Not Detected - Lead as Pb ( $\mu\text{g}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Carbon Monoxide as CO ( $\text{mg}/\text{m}^3$ ): 0.01

ND\*: Not Detected - Benzene as  $\text{C}_6\text{H}_6$  ( $\mu\text{g}/\text{m}^3$ ): 2

ND\*: Not Detected - Benzo (a) Pyrene (BaP) - Particulate Phase only ( $\text{ng}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Arsenic as As ( $\text{ng}/\text{m}^3$ ): 2

ND\*: Not Detected - Nickel as Ni ( $\text{ng}/\text{m}^3$ ): 5

**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

● GPCB approved schedule II auditor

● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: [www.polluconlab.com](http://www.polluconlab.com), E. mail: [pollucon@gmail.com](mailto:pollucon@gmail.com), [info@polluconlab.com](mailto:info@polluconlab.com)



**TABLE-1.2: AIR QUALITY MONITORING RESULTS AT HSE BUILDING TERRACE**

SR. NO.	DATE OF SAMPLING	LOCATION-2: HSE BUILDING TERRACE (N 21° 05.043' E 72° 38.491')											
		PM <sub>10</sub>	PM <sub>2.5</sub>	Pb	BaP	As	Ni	CO	C <sub>6</sub> H <sub>6</sub>	NH <sub>3</sub>	SO <sub>2</sub>	NO <sub>x</sub>	O <sub>3</sub>
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
1	03/04/2023	51.95	34.58	ND*	ND*	ND*	ND*	0.72	ND*	11.29	7.29	16.41	17.25
2	06/04/2023	62.45	23.80	ND*	ND*	ND*	ND*	0.53	ND*	21.55	19.23	28.12	11.57
3	10/04/2023	72.48	37.52	ND*	ND*	ND*	ND*	0.17	ND*	19.81	16.19	15.68	15.77
4	13/04/2023	61.66	25.67	ND*	ND*	ND*	ND*	0.42	ND*	15.56	13.23	23.26	22.55
5	17/04/2023	54.12	31.67	ND*	ND*	ND*	ND*	0.26	ND*	20.14	11.28	24.59	20.21
6	20/04/2023	63.29	36.25	ND*	ND*	ND*	ND*	0.40	ND*	17.34	9.12	17.57	13.69
7	24/04/2023	57.75	33.84	ND*	ND*	ND*	ND*	0.15	ND*	10.62	12.26	19.52	16.24
8	27/04/2023	71.69	35.43	ND*	ND*	ND*	ND*	0.71	ND*	16.26	8.54	22.36	10.29
9	01/05/2023	52.21	28.69	ND*	ND*	ND*	ND*	0.36	ND*	22.69	11.35	26.51	18.23
10	04/05/2023	65.64	24.40	ND*	ND*	ND*	ND*	0.22	ND*	19.54	9.68	14.38	14.24
11	08/05/2023	57.58	38.42	ND*	ND*	ND*	ND*	0.38	ND*	16.14	7.97	17.65	19.85
12	11/05/2023	45.61	16.91	ND*	ND*	ND*	ND*	0.57	ND*	18.95	15.20	28.63	25.69
13	15/05/2023	78.68	35.35	ND*	ND*	ND*	ND*	0.15	ND*	10.14	10.46	25.43	21.28
14	18/05/2023	60.42	25.61	ND*	ND*	ND*	ND*	0.27	ND*	13.13	8.93	18.25	17.56
15	22/05/2023	47.84	21.55	ND*	ND*	ND*	ND*	0.24	ND*	24.69	13.19	23.48	11.63
16	25/05/2023	59.35	23.97	ND*	ND*	ND*	ND*	0.62	ND*	28.66	6.28	33.47	16.19
17	29/05/2023	55.51	32.26	ND*	ND*	ND*	ND*	0.25	ND*	21.81	14.25	26.35	20.15
18	01/06/2023	56.75	25.64	ND*	ND*	ND*	ND*	0.27	ND*	10.35	10.66	22.22	15.38
19	05/06/2023	72.47	41.69	ND*	ND*	ND*	ND*	0.18	ND*	29.27	6.64	18.69	10.47
20	08/06/2023	66.36	30.63	ND*	ND*	ND*	ND*	0.41	ND*	24.73	13.46	21.28	21.53
21	12/06/2023	73.59	39.68	ND*	ND*	ND*	ND*	0.11	ND*	12.74	7.52	15.35	12.65
22	15/06/2023	60.24	26.37	ND*	ND*	ND*	ND*	0.72	ND*	34.24	18.67	38.44	16.36
23	19/06/2023	67.53	31.34	ND*	ND*	ND*	ND*	0.57	ND*	26.68	12.71	19.25	14.30
24	22/06/2023	65.65	34.62	ND*	ND*	ND*	ND*	0.46	ND*	30.45	16.31	26.35	18.69
25	26/06/2023	57.26	29.43	ND*	ND*	ND*	ND*	0.38	ND*	19.26	14.65	24.24	20.65
26	29/06/2023	51.21	19.49	ND*	ND*	ND*	ND*	0.66	ND*	23.45	9.56	17.56	11.75
27	03/07/2023	60.34	33.54	ND*	ND*	ND*	ND*	0.15	ND*	13.64	14.32	23.66	13.57
28	06/07/2023	49.62	28.94	ND*	ND*	ND*	ND*	0.47	ND*	21.28	16.44	30.48	11.88

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





29	10/07/2023	56.57	35.90	ND*	ND*	ND*	ND*	0.19	ND*	12.69	6.84	18.35	14.64
30	13/07/2023	70.59	37.13	ND*	ND*	ND*	ND*	0.60	ND*	31.15	12.82	26.30	21.69
31	17/07/2023	63.87	31.30	ND*	ND*	ND*	ND*	0.23	ND*	23.47	8.39	19.27	18.64
32	20/07/2023	53.54	20.60	ND*	ND*	ND*	ND*	0.36	ND*	15.28	10.38	22.59	12.71
33	24/07/2023	57.24	32.32	ND*	ND*	ND*	ND*	0.16	ND*	10.26	7.64	17.54	10.44
34	27/07/2023	54.36	25.25	ND*	ND*	ND*	ND*	0.27	ND*	16.59	11.25	21.64	17.72
35	31/07/2023	50.34	36.19	ND*	ND*	ND*	ND*	0.52	ND*	18.21	13.24	16.68	15.62
36	03/08/2023	65.45	38.44	ND*	ND*	ND*	ND*	0.52	ND*	16.26	15.33	29.93	11.23
37	07/08/2023	46.37	18.63	ND*	ND*	ND*	ND*	0.26	ND*	27.55	12.66	24.58	13.92
38	10/08/2023	64.25	32.39	ND*	ND*	ND*	ND*	0.57	ND*	30.24	8.68	19.29	22.57
39	14/08/2023	60.36	26.23	ND*	ND*	ND*	ND*	0.55	ND*	21.84	10.67	21.17	15.73
40	17/08/2023	55.88	29.36	ND*	ND*	ND*	ND*	0.33	ND*	13.65	6.38	25.26	10.78
41	21/08/2023	45.54	25.20	ND*	ND*	ND*	ND*	0.40	ND*	17.55	16.39	23.32	18.25
42	24/08/2023	61.62	28.85	ND*	ND*	ND*	ND*	0.32	ND*	23.77	9.14	14.23	12.46
43	28/08/2023	47.87	21.62	ND*	ND*	ND*	ND*	0.48	ND*	14.69	7.35	20.28	19.16
44	31/08/2023	66.16	37.55	ND*	ND*	ND*	ND*	0.30	ND*	11.39	14.51	26.52	14.29
45	04/09/2023	50.85	21.54	ND*	ND*	ND*	ND*	0.48	ND*	23.48	11.29	21.22	23.31
46	07/09/2023	54.23	26.77	ND*	ND*	ND*	ND*	0.72	ND*	13.67	8.43	18.45	15.38
47	11/09/2023	47.68	18.56	ND*	ND*	ND*	ND*	0.30	ND*	16.53	12.48	31.29	11.67
48	14/09/2023	58.64	30.03	ND*	ND*	ND*	ND*	0.79	ND*	22.43	15.37	33.49	24.36
49	18/09/2023	79.21	40.90	ND*	ND*	ND*	ND*	0.52	ND*	18.69	13.65	24.24	12.67
50	21/09/2023	62.74	33.81	ND*	ND*	ND*	ND*	0.27	ND*	26.31	9.09	20.46	16.76
51	25/09/2023	56.21	37.55	ND*	ND*	ND*	ND*	0.23	ND*	12.53	6.91	25.33	18.42
52	28/09/2023	73.38	42.53	ND*	ND*	ND*	ND*	0.37	ND*	17.38	14.78	16.77	10.86

**Observation** Above given Results are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-Idt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

ND\*: Not Detected - Lead as Pb ( $\mu\text{g}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Carbon Monoxide as CO ( $\text{mg}/\text{m}^3$ ): 0.01

ND\*: Not Detected - Benzene as  $\text{C}_6\text{H}_6$  ( $\mu\text{g}/\text{m}^3$ ): 2

ND\*: Not Detected - Benzo (a) Pyrene (BaP) - Particulate Phase only ( $\text{ng}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Arsenic as As ( $\text{ng}/\text{m}^3$ ): 2

ND\*: Not Detected - Nickel as Ni ( $\text{ng}/\text{m}^3$ ): 5

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

● GPCB approved schedule II auditor

● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: [www.polluconlab.com](http://www.polluconlab.com), E. mail: [pollucon@gmail.com](mailto:pollucon@gmail.com), [info@polluconlab.com](mailto:info@polluconlab.com)





**TABLE-1.3: AIR QUALITY MONITORING RESULTS AT CENTRAL WATER PUMP HOUSE**

SR. NO	DATE OF SAMPLING	LOCATION-3: CENTRAL WATER PUMP HOUSE (N 21° 04.697'E 72° 38.420')											
		PM <sub>10</sub>	PM <sub>2.5</sub>	Pb	BaP	As	Ni	CO	C <sub>6</sub> H <sub>6</sub>	NH <sub>3</sub>	SO <sub>2</sub>	NO <sub>x</sub>	O <sub>3</sub>
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
1	03/04/2023	61.31	26.85	ND*	ND*	ND*	ND*	0.69	ND*	25.32	10.59	25.25	10.72
2	06/04/2023	52.11	29.43	ND*	ND*	ND*	ND*	0.48	ND*	11.78	7.50	20.68	14.72
3	10/04/2023	63.49	32.15	ND*	ND*	ND*	ND*	0.24	ND*	23.46	15.25	26.94	20.64
4	13/04/2023	46.88	22.48	ND*	ND*	ND*	ND*	0.16	ND*	14.76	17.63	29.36	24.15
5	17/04/2023	70.26	46.55	ND*	ND*	ND*	ND*	0.52	ND*	17.56	14.48	31.20	12.53
6	20/04/2023	55.96	28.30	ND*	ND*	ND*	ND*	0.27	ND*	21.27	12.38	27.76	16.35
7	24/04/2023	45.39	23.66	ND*	ND*	ND*	ND*	0.18	ND*	15.32	8.33	21.52	13.47
8	27/04/2023	40.29	21.70	ND*	ND*	ND*	ND*	0.65	ND*	19.22	11.55	15.46	18.82
9	01/05/2023	66.39	35.66	ND*	ND*	ND*	ND*	0.58	ND*	11.93	6.58	14.64	11.44
10	04/05/2023	46.54	20.23	ND*	ND*	ND*	ND*	0.30	ND*	15.67	8.57	23.31	16.32
11	08/05/2023	50.36	33.26	ND*	ND*	ND*	ND*	0.41	ND*	21.55	12.46	19.52	17.62
12	11/05/2023	60.86	30.24	ND*	ND*	ND*	ND*	0.26	ND*	16.22	10.67	17.45	10.28
13	15/05/2023	55.34	24.25	ND*	ND*	ND*	ND*	0.65	ND*	20.53	17.66	32.45	18.62
14	18/05/2023	65.01	32.61	ND*	ND*	ND*	ND*	0.16	ND*	32.33	13.41	21.82	20.28
15	22/05/2023	73.66	38.36	ND*	ND*	ND*	ND*	0.34	ND*	12.76	15.70	25.88	15.40
16	25/05/2023	67.63	19.94	ND*	ND*	ND*	ND*	0.48	ND*	22.56	9.29	20.69	21.34
17	29/05/2023	43.52	23.43	ND*	ND*	ND*	ND*	0.52	ND*	18.79	11.20	22.58	13.21
18	01/06/2023	48.28	21.25	ND*	ND*	ND*	ND*	0.32	ND*	31.27	7.50	15.27	23.96
19	05/06/2023	68.64	39.28	ND*	ND*	ND*	ND*	0.55	ND*	26.25	12.66	21.69	18.93
20	08/06/2023	47.33	20.36	ND*	ND*	ND*	ND*	0.76	ND*	29.39	16.90	17.69	15.68
21	12/06/2023	64.62	29.22	ND*	ND*	ND*	ND*	0.44	ND*	17.19	6.56	23.25	17.75
22	15/06/2023	56.25	32.44	ND*	ND*	ND*	ND*	0.29	ND*	22.43	20.21	26.54	25.67
23	19/06/2023	76.28	37.50	ND*	ND*	ND*	ND*	0.63	ND*	19.36	9.15	16.23	10.24
24	22/06/2023	70.82	30.25	ND*	ND*	ND*	ND*	0.49	ND*	24.27	11.63	19.34	19.37
25	26/06/2023	52.66	22.67	ND*	ND*	ND*	ND*	0.36	ND*	13.87	15.67	27.55	24.32
26	29/06/2023	57.56	26.29	ND*	ND*	ND*	ND*	0.24	ND*	28.22	13.26	20.26	14.82
27	03/07/2023	50.25	24.22	ND*	ND*	ND*	ND*	0.29	ND*	22.57	10.63	33.46	15.59
28	06/07/2023	55.67	21.75	ND*	ND*	ND*	ND*	0.40	ND*	17.67	7.50	16.58	17.58



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





29	10/07/2023	46.92	24.00	ND*	ND*	ND*	ND*	0.14	ND*	10.37	9.83	21.28	10.19
30	13/07/2023	54.64	26.58	ND*	ND*	ND*	ND*	0.81	ND*	19.67	17.59	29.26	18.30
31	17/07/2023	60.22	19.21	ND*	ND*	ND*	ND*	0.49	ND*	15.69	11.63	20.29	20.40
32	20/07/2023	47.53	17.10	ND*	ND*	ND*	ND*	0.58	ND*	13.46	8.25	15.54	16.27
33	24/07/2023	59.36	27.57	ND*	ND*	ND*	ND*	0.63	ND*	16.92	12.45	27.77	21.45
34	27/07/2023	49.34	15.27	ND*	ND*	ND*	ND*	0.57	ND*	11.27	14.57	18.68	12.37
35	31/07/2023	70.31	30.31	ND*	ND*	ND*	ND*	0.48	ND*	20.21	6.35	14.31	25.61
36	03/08/2023	44.77	29.57	ND*	ND*	ND*	ND*	0.47	ND*	24.56	16.51	22.56	17.24
37	07/08/2023	53.93	24.18	ND*	ND*	ND*	ND*	0.24	ND*	16.98	6.59	18.69	15.65
38	10/08/2023	49.35	21.22	ND*	ND*	ND*	ND*	0.27	ND*	27.76	11.53	15.56	23.98
39	14/08/2023	66.22	33.66	ND*	ND*	ND*	ND*	0.39	ND*	18.69	14.28	26.26	11.99
40	17/08/2023	61.24	35.43	ND*	ND*	ND*	ND*	0.17	ND*	11.29	9.63	21.60	18.67
41	21/08/2023	65.15	38.66	ND*	ND*	ND*	ND*	0.19	ND*	26.94	12.45	31.42	24.36
42	24/08/2023	43.27	20.85	ND*	ND*	ND*	ND*	0.29	ND*	13.46	7.50	17.35	16.25
43	28/08/2023	62.41	34.64	ND*	ND*	ND*	ND*	0.18	ND*	36.58	10.88	24.35	22.77
44	31/08/2023	52.44	25.42	ND*	ND*	ND*	ND*	0.31	ND*	17.25	8.25	16.27	12.95
45	04/09/2023	56.83	33.67	ND*	ND*	ND*	ND*	0.68	ND*	20.64	18.51	23.46	18.62
46	07/09/2023	48.68	23.51	ND*	ND*	ND*	ND*	0.55	ND*	11.43	11.56	25.58	13.30
47	11/09/2023	53.53	27.21	ND*	ND*	ND*	ND*	0.49	ND*	22.61	7.69	22.46	21.44
48	14/09/2023	44.57	20.57	ND*	ND*	ND*	ND*	0.65	ND*	17.61	12.83	28.21	19.45
49	18/09/2023	50.28	25.69	ND*	ND*	ND*	ND*	0.34	ND*	13.45	6.54	19.39	15.30
50	21/09/2023	55.32	22.45	ND*	ND*	ND*	ND*	0.41	ND*	15.63	14.57	27.22	10.27
51	25/09/2023	61.79	31.90	ND*	ND*	ND*	ND*	0.54	ND*	32.34	8.41	24.57	12.45
52	28/09/2023	52.13	26.68	ND*	ND*	ND*	ND*	0.69	ND*	12.35	17.55	26.31	14.43

**Observation** Above given Results are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-Idt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

ND\*: Not Detected - Lead as Pb ( $\mu\text{g}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Carbon Monoxide as CO ( $\text{mg}/\text{m}^3$ ): 0.01

ND\*: Not Detected - Benzene as  $\text{C}_6\text{H}_6$  ( $\mu\text{g}/\text{m}^3$ ): 2

ND\*: Not Detected - Benzo (a) Pyrene (BaP) - Particulate Phase only ( $\text{ng}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Arsenic as As ( $\text{ng}/\text{m}^3$ ): 2

ND\*: Not Detected - Nickel as Ni ( $\text{ng}/\text{m}^3$ ): 5

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

● GPCB approved schedule II auditor

● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.4: AIR QUALITY MONITORING RESULTS AT CONTAINER TERMINAL**

SR. NO	DATE OF SAMPLING	LOCATION-4: CONTAINER TERMINAL (N 21° 05.187'E 72° 37.774)											
		PM <sub>10</sub>	PM <sub>2.5</sub>	Pb	BaP	As	Ni	CO	C <sub>6</sub> H <sub>6</sub>	NH <sub>3</sub>	SO <sub>2</sub>	NO <sub>x</sub>	O <sub>3</sub>
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
1	03/04/2023	56.23	35.33	ND*	ND*	ND*	ND*	0.23	ND*	22.34	8.60	16.58	17.35
2	06/04/2023	48.35	21.28	ND*	ND*	ND*	ND*	0.25	ND*	25.77	14.52	34.25	24.54
3	10/04/2023	69.25	25.63	ND*	ND*	ND*	ND*	0.21	ND*	17.63	6.46	29.53	22.68
4	13/04/2023	63.17	34.41	ND*	ND*	ND*	ND*	0.58	ND*	10.28	9.49	22.12	14.34
5	17/04/2023	59.48	38.69	ND*	ND*	ND*	ND*	0.56	ND*	23.12	13.59	28.31	23.35
6	20/04/2023	44.72	24.69	ND*	ND*	ND*	ND*	0.39	ND*	15.61	11.43	21.20	20.48
7	24/04/2023	65.63	44.15	ND*	ND*	ND*	ND*	0.33	ND*	13.76	17.59	24.27	10.33
8	27/04/2023	53.74	26.31	ND*	ND*	ND*	ND*	0.68	ND*	11.58	10.25	20.77	15.38
9	01/05/2023	75.72	41.60	ND*	ND*	ND*	ND*	0.82	ND*	25.38	9.56	18.68	10.58
10	04/05/2023	53.68	34.22	ND*	ND*	ND*	ND*	0.40	ND*	12.81	16.21	22.08	19.22
11	08/05/2023	62.65	30.27	ND*	ND*	ND*	ND*	0.32	ND*	30.48	10.27	24.42	21.91
12	11/05/2023	47.29	21.39	ND*	ND*	ND*	ND*	0.39	ND*	21.24	13.29	20.20	18.33
13	15/05/2023	64.32	32.50	ND*	ND*	ND*	ND*	0.73	ND*	27.68	15.35	35.63	22.82
14	18/05/2023	56.63	20.65	ND*	ND*	ND*	ND*	0.18	ND*	23.43	12.18	26.44	13.06
15	22/05/2023	63.16	31.65	ND*	ND*	ND*	ND*	0.72	ND*	15.54	18.45	17.36	16.21
16	25/05/2023	52.64	25.75	ND*	ND*	ND*	ND*	0.80	ND*	17.92	14.59	25.32	12.15
17	29/05/2023	61.66	27.57	ND*	ND*	ND*	ND*	0.33	ND*	28.23	7.61	32.54	23.26
18	01/06/2023	68.51	30.50	ND*	ND*	ND*	ND*	0.40	ND*	34.56	12.93	27.68	12.43
19	05/06/2023	79.13	46.38	ND*	ND*	ND*	ND*	0.31	ND*	37.42	10.26	25.28	16.25
20	08/06/2023	60.33	28.09	ND*	ND*	ND*	ND*	0.19	ND*	21.55	18.28	30.24	11.31
21	12/06/2023	78.47	33.60	ND*	ND*	ND*	ND*	0.60	ND*	23.54	14.32	26.45	22.98
22	15/06/2023	65.32	36.80	ND*	ND*	ND*	ND*	0.88	ND*	32.69	16.50	32.22	20.28
23	19/06/2023	71.62	29.35	ND*	ND*	ND*	ND*	0.53	ND*	14.23	20.41	23.59	23.42
24	22/06/2023	75.43	48.57	ND*	ND*	ND*	ND*	0.54	ND*	20.22	13.91	16.72	25.89
25	26/06/2023	62.62	24.38	ND*	ND*	ND*	ND*	0.22	ND*	16.33	17.16	33.72	14.61
26	29/06/2023	47.52	22.30	ND*	ND*	ND*	ND*	0.17	ND*	25.14	11.50	15.66	18.15
27	03/07/2023	44.36	20.23	ND*	ND*	ND*	ND*	0.53	ND*	25.63	16.59	30.22	17.36
28	06/07/2023	63.48	33.51	ND*	ND*	ND*	ND*	0.26	ND*	29.04	14.51	19.47	20.28



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





29	10/07/2023	68.63	29.43	ND*	ND*	ND*	ND*	0.46	ND*	19.81	11.64	17.23	13.24
30	13/07/2023	74.67	39.51	ND*	ND*	ND*	ND*	0.77	ND*	28.17	15.32	24.26	24.39
31	17/07/2023	54.62	28.63	ND*	ND*	ND*	ND*	0.54	ND*	18.75	9.52	18.29	16.91
32	20/07/2023	43.82	22.61	ND*	ND*	ND*	ND*	0.66	ND*	21.94	13.65	25.35	18.55
33	24/07/2023	52.46	25.66	ND*	ND*	ND*	ND*	0.13	ND*	13.54	19.32	23.48	12.53
34	27/07/2023	45.62	18.06	ND*	ND*	ND*	ND*	0.17	ND*	20.67	12.08	26.88	10.75
35	31/07/2023	64.36	34.96	ND*	ND*	ND*	ND*	0.78	ND*	15.98	10.23	22.66	22.62
36	03/08/2023	51.52	26.55	ND*	ND*	ND*	ND*	0.68	ND*	36.26	8.45	17.53	21.91
37	07/08/2023	58.49	31.58	ND*	ND*	ND*	ND*	0.14	ND*	19.76	11.20	20.36	19.53
38	10/08/2023	67.43	36.40	ND*	ND*	ND*	ND*	0.50	ND*	22.41	19.51	28.47	14.13
39	14/08/2023	71.83	41.53	ND*	ND*	ND*	ND*	0.42	ND*	25.28	12.87	22.83	20.74
40	17/08/2023	48.81	23.60	ND*	ND*	ND*	ND*	0.69	ND*	29.53	15.31	26.46	15.22
41	21/08/2023	59.59	33.51	ND*	ND*	ND*	ND*	0.13	ND*	12.56	9.44	18.28	13.29
42	24/08/2023	54.68	24.33	ND*	ND*	ND*	ND*	0.37	ND*	15.17	17.28	30.40	10.36
43	28/08/2023	50.31	32.49	ND*	ND*	ND*	ND*	0.41	ND*	27.31	14.16	21.70	16.65
44	31/08/2023	57.55	29.43	ND*	ND*	ND*	ND*	0.34	ND*	21.65	16.45	23.43	11.38
45	04/09/2023	65.62	25.33	ND*	ND*	ND*	ND*	0.80	ND*	27.82	14.52	27.53	26.47
46	07/09/2023	59.16	28.69	ND*	ND*	ND*	ND*	0.94	ND*	17.52	15.38	22.78	17.82
47	11/09/2023	62.34	37.75	ND*	ND*	ND*	ND*	0.60	ND*	13.72	12.35	20.25	15.68
48	14/09/2023	73.61	44.71	ND*	ND*	ND*	ND*	0.50	ND*	19.31	6.50	23.23	18.32
49	18/09/2023	56.16	32.15	ND*	ND*	ND*	ND*	0.21	ND*	31.47	16.21	32.38	21.57
50	21/09/2023	75.67	42.35	ND*	ND*	ND*	ND*	0.31	ND*	20.24	18.43	29.87	23.91
51	25/09/2023	66.78	39.44	ND*	ND*	ND*	ND*	0.25	ND*	26.15	11.67	21.73	19.66
52	28/09/2023	60.39	29.22	ND*	ND*	ND*	ND*	0.39	ND*	14.88	9.50	14.22	22.25

**Observation** Above given Results are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-Idt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

ND\*: Not Detected - Lead as Pb ( $\mu\text{g}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Carbon Monoxide as CO ( $\text{mg}/\text{m}^3$ ): 0.01

ND\*: Not Detected - Benzene as  $\text{C}_6\text{H}_6$  ( $\mu\text{g}/\text{m}^3$ ): 2

ND\*: Not Detected - Benzo (a) Pyrene (BaP) - Particulate Phase only ( $\text{ng}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Arsenic as As ( $\text{ng}/\text{m}^3$ ): 2

ND\*: Not Detected - Nickel as Ni ( $\text{ng}/\text{m}^3$ ): 5

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

● GPCB approved schedule II auditor

● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: [www.polluconlab.com](http://www.polluconlab.com), E. mail: [pollucon@gmail.com](mailto:pollucon@gmail.com), [info@polluconlab.com](mailto:info@polluconlab.com)





**TABLE-1.5: AIR QUALITY MONITORING RESULTS AT HAZIRA VILLAGE**

SR. NO	DATE OF SAMPLING	LOCATION-5: HAZIRA VILLAGE (N 21° 05.44' E 72° 38.44')											
		PM <sub>10</sub>	PM <sub>2.5</sub>	Pb	BaP	As	Ni	CO	C <sub>6</sub> H <sub>6</sub>	NH <sub>3</sub>	SO <sub>2</sub>	NO <sub>x</sub>	O <sub>3</sub>
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
1	03/04/2023	73.57	42.56	0.62	ND*	2.25	10.41	0.78	ND*	14.84	18.97	36.31	23.48
2	06/04/2023	67.25	35.62	ND*	ND*	ND*	ND*	0.82	ND*	32.48	15.57	29.94	20.35
3	10/04/2023	78.63	40.32	0.65	ND*	2.46	10.29	0.74	ND*	28.68	9.57	33.29	18.58
4	13/04/2023	58.47	27.68	ND*	ND*	ND*	ND*	0.63	ND*	24.18	21.57	27.37	21.59
5	17/04/2023	83.48	43.45	0.56	ND*	2.52	10.17	0.46	ND*	31.51	24.53	35.25	29.45
6	20/04/2023	69.36	31.53	ND*	ND*	ND*	ND*	0.87	ND*	29.34	20.20	32.52	16.77
7	24/04/2023	72.68	38.14	0.69	ND*	2.12	10.45	0.36	ND*	21.74	14.64	30.78	27.43
8	27/04/2023	62.12	30.25	ND*	ND*	ND*	ND*	0.76	ND*	13.42	16.72	18.66	24.67
9	01/05/2023	71.86	37.68	0.65	ND*	2.36	10.17	0.66	ND*	18.24	19.31	22.23	19.13
10	04/05/2023	58.13	29.23	ND*	ND*	ND*	ND*	0.55	ND*	23.99	11.67	28.98	24.44
11	08/05/2023	73.51	41.29	ND*	ND*	ND*	ND*	0.29	ND*	33.53	23.48	32.87	28.22
12	11/05/2023	55.61	28.23	ND*	ND*	ND*	ND*	0.47	ND*	25.52	17.33	30.24	23.47
13	15/05/2023	74.53	40.28	0.52	ND*	2.06	10.53	0.69	ND*	19.27	22.64	37.57	25.75
14	18/05/2023	70.26	36.55	ND*	ND*	ND*	ND*	0.37	ND*	36.76	14.82	24.54	27.78
15	22/05/2023	76.61	44.24	0.59	ND*	2.16	10.23	0.50	ND*	31.02	24.35	21.40	21.63
16	25/05/2023	82.47	47.31	ND*	ND*	ND*	ND*	0.89	ND*	34.23	12.68	39.41	13.65
17	29/05/2023	66.23	33.84	ND*	ND*	ND*	ND*	0.60	ND*	24.73	20.40	27.45	16.52
18	01/06/2023	75.69	33.42	ND*	ND*	ND*	ND*	0.50	ND*	25.69	16.29	24.64	25.32
19	05/06/2023	94.33	54.37	0.68	ND*	2.42	10.14	0.39	ND*	22.34	23.69	41.63	21.17
20	08/06/2023	81.26	46.46	ND*	ND*	ND*	ND*	0.58	ND*	31.35	20.42	38.62	24.88
21	12/06/2023	85.65	39.00	0.64	ND*	2.12	10.58	0.26	ND*	36.18	11.75	34.21	27.67
22	15/06/2023	72.15	41.34	ND*	ND*	ND*	ND*	0.33	ND*	20.32	13.59	27.83	30.32
23	19/06/2023	80.86	47.12	ND*	ND*	ND*	ND*	0.61	ND*	30.21	17.72	33.41	20.83
24	22/06/2023	86.32	51.32	0.72	ND*	2.32	10.73	0.73	ND*	27.46	21.22	35.51	16.61
25	26/06/2023	79.63	42.51	ND*	ND*	ND*	ND*	0.42	ND*	12.57	19.29	37.56	22.87
26	29/06/2023	71.34	34.61	ND*	ND*	ND*	ND*	0.74	ND*	37.83	14.83	25.12	26.24
27	03/07/2023	65.62	30.23	ND*	ND*	ND*	ND*	0.41	ND*	29.47	15.62	20.43	27.74
28	06/07/2023	68.12	35.47	ND*	ND*	ND*	ND*	0.24	ND*	33.62	21.22	36.23	23.15



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





29	10/07/2023	72.62	38.60	ND*	ND*	ND*	ND*	0.62	ND*	14.64	14.72	26.58	17.67
30	13/07/2023	80.28	44.21	0.65	ND*	2.21	10.10	0.86	ND*	34.88	20.24	33.29	14.27
31	17/07/2023	67.57	27.34	ND*	ND*	ND*	ND*	0.73	ND*	26.21	23.40	38.25	26.43
32	20/07/2023	50.75	25.59	ND*	ND*	ND*	ND*	0.94	ND*	31.49	19.47	29.43	24.27
33	24/07/2023	64.53	34.68	ND*	ND*	ND*	ND*	0.61	ND*	23.34	13.48	32.50	18.80
34	27/07/2023	60.52	31.34	ND*	ND*	ND*	ND*	0.30	ND*	25.58	18.31	35.65	25.33
35	31/07/2023	77.54	43.59	0.51	ND*	2.42	10.51	0.42	ND*	32.56	16.34	30.39	20.60
36	03/08/2023	68.97	41.47	0.56	ND*	2.12	10.22	0.64	ND*	21.77	20.53	32.66	18.74
37	07/08/2023	63.59	28.21	ND*	ND*	ND*	ND*	0.54	ND*	32.45	15.55	26.35	22.32
38	10/08/2023	73.77	39.49	ND*	ND*	ND*	10.51	0.45	ND*	37.81	24.36	30.44	16.40
39	14/08/2023	78.65	45.27	0.76	ND*	2.18	10.46	0.44	ND*	30.56	18.98	37.65	24.48
40	17/08/2023	66.33	38.94	ND*	ND*	ND*	ND*	0.56	ND*	33.47	21.32	29.32	27.52
41	21/08/2023	71.16	43.45	0.56	ND*	2.06	10.34	0.73	ND*	23.47	14.31	25.35	21.57
42	24/08/2023	67.31	33.46	ND*	ND*	ND*	ND*	0.38	ND*	20.25	22.35	21.29	19.66
43	28/08/2023	58.23	27.22	ND*	ND*	ND*	ND*	0.62	ND*	40.36	12.41	28.82	26.33
44	31/08/2023	70.24	42.68	ND*	ND*	ND*	ND*	0.23	ND*	14.25	19.39	20.54	23.49
45	04/09/2023	77.32	40.38	ND*	ND*	ND*	ND*	0.56	ND*	34.26	24.51	31.07	21.23
46	07/09/2023	62.69	31.57	ND*	ND*	ND*	ND*	0.46	ND*	23.37	19.63	33.29	24.55
47	11/09/2023	58.73	34.87	ND*	ND*	ND*	ND*	0.15	ND*	35.35	17.34	28.41	13.67
48	14/09/2023	79.34	42.25	ND*	ND*	ND*	ND*	0.53	ND*	28.42	21.34	35.65	26.19
49	18/09/2023	64.25	29.66	0.63	ND*	2.34	10.40	0.63	ND*	37.36	18.35	27.67	23.62
50	21/09/2023	70.27	37.91	ND*	ND*	ND*	ND*	0.38	ND*	32.24	11.51	34.51	20.66
51	25/09/2023	76.86	45.17	0.58	ND*	2.18	10.22	0.82	ND*	18.18	23.48	18.32	22.57
52	28/09/2023	63.97	33.90	ND*	ND*	ND*	ND*	0.18	ND*	27.56	20.40	29.54	19.83

**Observation** Above given Results are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-Idt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

ND\*: Not Detected - Lead as Pb ( $\mu\text{g}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Carbon Monoxide as CO ( $\text{mg}/\text{m}^3$ ): 0.01

ND\*: Not Detected - Benzene as  $\text{C}_6\text{H}_6$  ( $\mu\text{g}/\text{m}^3$ ): 2

ND\*: Not Detected - Benzo (a) Pyrene (BaP) - Particulate Phase only ( $\text{ng}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Arsenic as As ( $\text{ng}/\text{m}^3$ ): 2

ND\*: Not Detected - Nickel as Ni ( $\text{ng}/\text{m}^3$ ): 5

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

● GPCB approved schedule II auditor

● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: [www.polluconlab.com](http://www.polluconlab.com), E. mail: [pollucon@gmail.com](mailto:pollucon@gmail.com), [info@polluconlab.com](mailto:info@polluconlab.com)



**TABLE-1.6: AIR QUALITY MONITORING RESULTS AT SUVALI VILLAGE**

SR. NO	DATE OF SAMPLING	LOCATION-6: SUVALI VILLAGE (N 21° 08.55' E 72° 38.24')											
		PM <sub>10</sub>	PM <sub>2.5</sub>	Pb	BaP	As	Ni	CO	C <sub>6</sub> H <sub>6</sub>	NH <sub>3</sub>	SO <sub>2</sub>	NO <sub>x</sub>	O <sub>3</sub>
		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
1	03/04/2023	40.37	21.13	ND*	ND*	ND*	ND*	0.19	ND*	13.83	14.28	22.39	21.65
2	06/04/2023	45.98	26.94	ND*	ND*	ND*	ND*	0.34	ND*	18.49	9.50	25.64	16.52
3	10/04/2023	58.34	28.62	ND*	ND*	ND*	ND*	0.11	ND*	24.33	13.49	20.26	18.95
4	13/04/2023	51.63	30.36	ND*	ND*	ND*	ND*	0.41	ND*	29.44	7.54	16.53	15.67
5	17/04/2023	65.21	36.89	ND*	ND*	ND*	ND*	0.13	ND*	12.69	17.60	23.43	21.00
6	20/04/2023	47.72	34.27	ND*	ND*	ND*	ND*	0.32	ND*	21.41	12.61	26.24	12.42
7	24/04/2023	53.23	31.16	ND*	ND*	ND*	ND*	0.29	ND*	14.54	15.62	21.59	25.82
8	27/04/2023	46.44	24.51	ND*	ND*	ND*	ND*	0.14	ND*	10.26	10.25	18.64	14.13
9	01/05/2023	60.26	31.30	ND*	ND*	ND*	ND*	0.44	ND*	15.68	10.27	25.64	13.55
10	04/05/2023	49.68	22.47	ND*	ND*	ND*	ND*	0.17	ND*	17.68	13.58	17.55	21.78
11	08/05/2023	44.69	27.26	ND*	ND*	ND*	ND*	0.23	ND*	23.48	16.23	21.58	14.53
12	11/05/2023	50.27	25.26	ND*	ND*	ND*	ND*	0.31	ND*	13.87	9.26	26.28	20.65
13	15/05/2023	43.27	21.28	ND*	ND*	ND*	ND*	0.42	ND*	25.35	12.66	22.26	17.64
14	18/05/2023	51.23	23.91	ND*	ND*	ND*	ND*	0.14	ND*	19.39	7.62	16.26	11.29
15	22/05/2023	61.26	35.86	ND*	ND*	ND*	ND*	0.46	ND*	21.49	19.21	28.64	19.50
16	25/05/2023	54.36	32.50	ND*	ND*	ND*	ND*	0.53	ND*	14.23	8.25	14.59	10.80
17	29/05/2023	48.62	29.44	ND*	ND*	ND*	ND*	0.21	ND*	12.96	6.36	24.27	18.66
18	01/06/2023	52.47	28.74	ND*	ND*	ND*	ND*	0.23	ND*	21.11	11.31	21.20	11.44
19	05/06/2023	62.85	35.09	ND*	ND*	ND*	ND*	0.25	ND*	15.33	8.10	26.16	13.23
20	08/06/2023	42.31	19.23	ND*	ND*	ND*	ND*	0.47	ND*	17.69	12.67	14.22	10.35
21	12/06/2023	58.32	26.84	ND*	ND*	ND*	ND*	0.21	ND*	20.27	15.44	18.57	14.27
22	15/06/2023	69.82	22.41	ND*	ND*	ND*	ND*	0.56	ND*	28.61	10.22	24.95	18.23
23	19/06/2023	53.49	33.46	ND*	ND*	ND*	ND*	0.45	ND*	11.29	6.77	20.71	16.57
24	22/06/2023	60.15	24.44	ND*	ND*	ND*	ND*	0.15	ND*	18.27	9.48	17.78	12.57
25	26/06/2023	68.07	27.65	ND*	ND*	ND*	ND*	0.34	ND*	24.51	13.46	19.52	17.26
26	29/06/2023	43.42	20.40	ND*	ND*	ND*	ND*	0.30	ND*	14.22	7.21	16.27	20.15
27	03/07/2023	56.28	27.53	ND*	ND*	ND*	ND*	0.31	ND*	19.02	12.68	19.62	21.24
28	06/07/2023	61.86	25.42	ND*	ND*	ND*	ND*	0.34	ND*	24.84	9.66	21.58	16.18

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





29	10/07/2023	51.24	31.67	ND*	ND*	ND*	ND*	0.56	ND*	16.55	7.69	23.43	12.25
30	13/07/2023	68.39	33.62	ND*	ND*	ND*	ND*	0.18	ND*	22.75	10.24	17.57	22.44
31	17/07/2023	55.74	24.93	ND*	ND*	ND*	ND*	0.39	ND*	26.59	16.78	29.56	11.54
32	20/07/2023	41.35	14.53	ND*	ND*	ND*	ND*	0.32	ND*	18.14	13.51	24.29	20.47
33	24/07/2023	46.83	19.46	ND*	ND*	ND*	ND*	0.25	ND*	11.11	15.82	18.29	13.37
34	27/07/2023	40.34	15.25	ND*	ND*	ND*	ND*	0.22	ND*	13.44	6.62	15.63	15.27
35	31/07/2023	57.76	26.52	ND*	ND*	ND*	ND*	0.44	ND*	29.72	14.20	20.21	17.25
36	03/08/2023	58.33	34.13	ND*	ND*	ND*	ND*	0.16	ND*	15.68	13.43	25.20	10.19
37	07/08/2023	50.66	21.83	ND*	ND*	ND*	ND*	0.11	ND*	11.27	16.38	29.28	18.34
38	10/08/2023	56.28	26.36	ND*	ND*	ND*	ND*	0.21	ND*	14.58	9.55	20.56	13.51
39	14/08/2023	69.26	36.93	ND*	ND*	ND*	ND*	0.49	ND*	17.57	6.53	35.41	17.62
40	17/08/2023	53.42	31.66	ND*	ND*	ND*	ND*	0.15	ND*	23.43	12.40	15.64	20.25
41	21/08/2023	57.96	28.18	ND*	ND*	ND*	ND*	0.25	ND*	13.65	7.38	21.27	11.79
42	24/08/2023	49.68	17.12	ND*	ND*	ND*	ND*	0.36	ND*	16.08	14.32	19.76	14.32
43	28/08/2023	55.93	24.52	ND*	ND*	ND*	ND*	0.46	ND*	22.71	8.55	26.93	21.33
44	31/08/2023	51.49	22.38	ND*	ND*	ND*	ND*	0.22	ND*	28.06	11.62	18.23	19.44
45	04/09/2023	62.84	29.47	ND*	ND*	ND*	ND*	0.44	ND*	16.77	15.45	24.34	13.40
46	07/09/2023	42.55	20.32	ND*	ND*	ND*	ND*	0.42	ND*	19.63	17.73	27.69	22.37
47	11/09/2023	65.25	32.99	ND*	ND*	ND*	ND*	0.19	ND*	10.28	14.27	19.44	25.18
48	14/09/2023	48.75	18.49	ND*	ND*	ND*	ND*	0.32	ND*	13.51	16.56	25.61	21.66
49	18/09/2023	60.76	35.64	ND*	ND*	ND*	ND*	0.24	ND*	11.54	8.45	18.65	17.58
50	21/09/2023	46.35	30.68	ND*	ND*	ND*	ND*	0.13	ND*	23.68	6.88	14.63	14.40
51	25/09/2023	52.53	25.58	ND*	ND*	ND*	ND*	0.58	ND*	15.87	13.47	20.24	16.36
52	28/09/2023	43.59	22.36	ND*	ND*	ND*	ND*	0.36	ND*	25.35	7.50	23.55	12.31

**Observation** Above given Results are within the norms Specified Limit as per CPCB Notification NoB-29016/20/90/PCI-Idt: 18/11/2009 National Ambient Air Quality Standards, New Delhi, for 24 hourly or 8 hourly or 1 hourly monitored values

ND\*: Not Detected - Lead as Pb ( $\mu\text{g}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Carbon Monoxide as CO ( $\text{mg}/\text{m}^3$ ): 0.01

ND\*: Not Detected - Benzene as  $\text{C}_6\text{H}_6$  ( $\mu\text{g}/\text{m}^3$ ): 2

ND\*: Not Detected - Benzo (a) Pyrene (BaP) - Particulate Phase only ( $\text{ng}/\text{m}^3$ ): 0.5

ND\*: Not Detected - Arsenic as As ( $\text{ng}/\text{m}^3$ ): 2

ND\*: Not Detected - Nickel as Ni ( $\text{ng}/\text{m}^3$ ): 5

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986

● GPCB approved schedule II auditor

● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





#### 4B. WATER QUALITY MONITORING (APRIL - 2023 TO SEPTEMBER – 2023)

**TABLE-1.7A: WATER BORE WELL QUALITY RESULTS**

SR. NO.	TEST PARAMETERS	UNIT	GROUND WATER BORE WELL					
			Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
1	Colour	Hazen	3	4	3	4	5	3
2	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	0.18	0.23	0.31	0.25	0.33	0.27
5	pH Value	--	7.72	7.46	7.59	7.73	7.95	7.75
6	Total Hardness as CaCO <sub>3</sub>	mg/L	504	472	498	468	512	528
7	Iron as Fe	mg/L	Not Detected	Not Detected	0.071	0.096	0.084	0.120
8	Chloride as Cl	mg/L	165	149	126	118	193	184
9	Residual Free Chlorine	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
10	Fluoride as F	mg/L	0.36	0.32	0.28	0.32	0.30	0.25
11	Total Dissolved Solids	mg/L	1236	1156	1037	1023	1166	1264
12	Calcium as Ca	mg/L	114	112	131	124	128	146
13	Magnesium as Mg	mg/L	52.56	46.08	40.56	37.44	46.08	38.64
14	Copper as Cu	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
15	Manganese as Mn	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
16	Sulphate as SO <sub>4</sub>	mg/L	57.30	42.98	59.37	63.64	68.10	71.32
17	Nitrate Nitrogen as NO <sub>3</sub>	mg/L	4.98	5.04	4.69	5.12	4.90	3.48
18	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
19	Mercury as Hg	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
20	Cadmium as Cd	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
21	Selenium as Se	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
22	Arsenic as As	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
23	Cyanide as CN	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
24	Lead as Pb	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
25	Zinc as Zn	mg/L	0.27	0.19	0.30	Not Detected	0.12	0.18
26	Anionic Detergents as MBAS	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
27	Chromium as Cr <sup>+6</sup>	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
28	Mineral Oil	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
29	Alkalinity	mg/L	276	249	230	246	236	260
30	Aluminum as Al	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
31	Boron as B	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
<b>32</b>	<b>Pesticides</b>							
32.1	Alachor	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.2	Atrazine	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





SR. NO.	TEST PARAMETERS	UNIT	GROUND WATER BORE WELL					
			Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
32.3	Aldrin/Dieldrine	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.4	Alpha HCH	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.5	Beta HCH	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.6	Butachlor	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.7	Chlorpyrifos	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.8	Delta HCH	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.9	2,4-Dichlorophenoxy acetic acid	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.10	DDT (o,p,p,p-Isomers of DDT, DDE & DDD	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.11	Endosulfan (alpha, beta, and sulphate)	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.12	Ethion	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.13	Gamma – HCH (Lindane)	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.14	Isoproturon	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.15	Malathion	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.16	Methyl Parathion	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.17	Monocrotophos	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.18	Phorate	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
33	Coliform	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent
34	E-Coli	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Ground Water.

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: [www.polluconlab.com](http://www.polluconlab.com), E. mail: [pollucon@gmail.com](mailto:pollucon@gmail.com), [info@polluconlab.com](mailto:info@polluconlab.com)



**TABLE-1.7B: WATER OPEN WELL QUALITY RESULTS**

SR. NO.	TEST PARAMETERS	UNIT	GROUND WATER OPEN WELL					
			Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
1	Colour	Hazen	3	2	3	4	3	4
2	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity	NTU	0.18	0.21	0.16	0.21	0.30	0.26
5	pH Value	--	7.64	7.43	7.29	7.51	7.81	7.59
6	Total Hardness as CaCO <sub>3</sub>	mg/L	410	382	356	340	396	428
7	Iron as Fe	mg/L	0.086	0.071	0.094	0.087	0.094	0.084
8	Chloride as Cl	mg/L	131	119	123	107	150	139
9	Residual Free Chlorine	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
10	Fluoride as F	mg/L	0.46	0.39	0.27	0.31	0.46	0.36
11	Total Dissolved Solids	mg/L	1132	1045	992	978	1062	1173
12	Calcium as Ca	mg/L	78	68.8	71.6	86.4	92	98.8
13	Magnesium as Mg	mg/L	51.60	50.40	42.48	29.76	39.84	43.44
14	Copper as Cu	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
15	Manganese as Mn	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
16	Sulphate as SO <sub>4</sub>	mg/L	53.69	42.68	38.52	51.36	63.20	57.62
17	Nitrate Nitrogen as NO <sub>3</sub>	mg/L	4.73	3.51	3.12	2.68	2.94	3.18
18	Phenolic compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
19	Mercury as Hg	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
20	Cadmium as Cd	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
21	Selenium as Se	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
22	Arsenic as As	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
23	Cyanide as CN	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
24	Lead as Pb	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
25	Zinc as Zn	mg/L	0.23	0.20	0.31	0.27	0.21	0.29
26	Anionic Detergents as MBAS	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
27	Chromium as Cr <sup>+6</sup>	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
28	Mineral Oil	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
29	Alkalinity	mg/L	305	316	297	291	210	256
30	Aluminum as Al	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
31	Boron as B	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32								
32.1	Alachor	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.2	Atrazine	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.3	Aldrin/Dieldrine	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.4	Alpha HCH	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected

**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
Navjivan Circle,Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





SR. NO.	TEST PARAMETERS	UNIT	GROUND WATER OPEN WELL					
			Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
32.5	Beta HCH	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.6	Butachlor	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.7	Chlorpyrifos	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.8	Delta HCH	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.9	2,4-Dichlorophenoxy acetic acid	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.10	DDT (o,p,p,p-Isomers of DDT, DDE & DDD)	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.11	Endosulfan (alpha, beta, and sulphate)	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.12	Ethion	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.13	Gamma – HCH (Lindane)	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.14	Isoproturon	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.15	Malathion	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.16	Methyl Parathion	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.17	Monocrotophos	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
32.18	Phorate	µg/l	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
33	Coliform	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent
34	E-Coli	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Ground Water.

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: [www.polluconlab.com](http://www.polluconlab.com), E. mail: [pollucon@gmail.com](mailto:pollucon@gmail.com), [info@polluconlab.com](mailto:info@polluconlab.com)



**4C. WATER QUALITY MONITORING (APRIL - 2023 TO SEPTEMBER - 2023)****TABLE-1.8: WATER (POND) QUALITY RESULTS**

SR · N O.	PARAMETERS	UNIT	AT MORA VILLAGE (SURFACE WATER – POND)					
			Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
1	Odour	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
2	Colour	Haze n	4	3	2	3	5	3
3	Taste	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	pH Value	--	8.15	7.86	7.51	7.68	8.01	7.94
5	Turbidity	NTU	0.23	0.17	0.21	0.17	0.25	0.18
6	Total Dissolved Solids	mg/L	659	569	674	579	601	564
7	Total Hardness as CaCO <sub>3</sub>	mg/L	237	218	241	236	249	230
8	Chloride as Cl	mg/L	72.00	63.98	75.97	81.97	99.90	83.97
9	Fluoride as F	mg/L	0.43	0.35	0.49	0.43	0.53	0.39
10	Iron as Fe	mg/L	Not Detected	Not Detected	0.065	0.073	0.094	0.081
11	Coliform	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent
12	E-Coli	/100 ml	Absent	Absent	Absent	Absent	Absent	Absent

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Surface Water.

**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**4D. R QUALITY MONITORING (APRIL - 2023 TO SEPTEMBER - 2023)**

**TABLE-1.9: SEA WATER QUALITY ANALYSIS RESULTS OF CB2 SOUTH END TOWARDS LANDSIDE FROM THE SEA BASIN**

S R. N O.	TEST PARAMETERS	UN IT	CB2 SOUTH END TOWARDS LANDSIDE FROM SEA BASIN (N 21° 5'1.92", E 72°37'56.58")											
			20/04/23		25/05/23		22/06/23		24/07/23		17/08/23		18/09/23	
			Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom
1	pH	--	8.31	8.25	8.25	8.17	8.37	8.31	8.25	8.12	8.19	8.03	8.23	8.19
2	Temperature	°C	30.2	30.1	31.4	31.2	31.6	31.4	31.9	31.6	30.6	30.5	30.7	30.6
3	Total Suspended Solids	mg/L	186	175	153	139	193	175	213	195	234	228	256	239
4	BOD (3 Days @ 27 °C)	mg/L	5.32	4.76	5.68	5.20	4.30	3.92	3.60	3.20	3.10	2.84	4.00	3.62
5	Dissolved Oxygen	mg/L	5.90	5.75	5.80	5.70	5.90	5.75	5.85	5.70	5.95	5.90	6.00	5.80
6	Salinity	ppt	33.90	33.84	34.26	34.75	33.29	33.56	33.68	33.96	32.56	32.78	33.92	34.46
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
8	Nitrate as NO <sub>3</sub>	µm ol/L	5.91	5.73	4.96	4.75	5.89	5.70	5.18	4.83	3.93	3.48	5.84	5.70
9	Nitrite as NO <sub>2</sub>	µm ol/L	0.67	0.54	0.52	0.41	0.73	0.65	0.56	0.42	0.37	0.29	0.43	0.36
10	Ammonical Nitrogen as NH <sub>3</sub>	µm ol/L	2.85	2.79	3.17	2.96	2.96	2.80	3.78	3.25	3.68	3.32	4.02	3.35
11	Phosphates as PO <sub>4</sub>	µm ol/L	2.91	2.83	2.86	2.43	2.81	2.75	3.12	2.98	2.81	2.76	2.96	2.83
12	Total Nitrogen	µm ol/L	10.12	9.32	8.92	8.39	9.73	9.32	9.84	8.72	8.12	7.58	10.39	9.64
13	Petroleum Hydrocarbon	µg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
14	Total Dissolved Solids	mg/L	35178	35018	35870	35914	34572	34803	34872	35146	33834	34128	35098	35692
15	COD	mg/L	18.20	16.00	24.00	19.00	18.20	16.34	15.74	13.40	12.96	11.30	16.38	14.62
A	<b>Phytoplankton</b>													
16.1	Chlorophyll	mg/m <sup>3</sup>	2.85	2.67	2.91	2.72	2.80	2.56	2.53	2.32	2.43	2.21	2.75	2.48
16.2	Phaeophytin	mg/m <sup>3</sup>	0.54	1.03	0.79	0.68	0.45	0.39	0.72	0.44	0.34	0.36	0.13	0.90
16.3	Cell Count	No x 10 <sup>3</sup> /L	358	342	382	371	429	413	396	382	371	358	402	396
16.4	Name of Group Number and name of group species of each group	--	Navicula sp. Pediastrum sp. Ulothrix sp. Synedra sp. Thallasiosira sp.	Nitzschia sp. Closterium sp. Pleurosigma sp. Rhizosolenia sp. Guinardia sp.	Pediastrum sp. Ulothrix sp. Synedra sp. Thallasiosira sp. Closterium sp. Pleurosigma sp.	Navicula sp. Nitzschia sp. Guinardia sp. Rhizosolenia sp. Synedra sp.	Pediastrum sp. Ulothrix sp. Thallasiosira sp. Coscinodiscus sp.	Rhizosolenia sp. Navicula sp. Cymbella sp. Fragillaria sp. Synedra sp. Biddulphia sp.	Nitzschia sp. Leptocylin drus Ulothrix sp. Melosira sp. Thallasiosira sp.	Synedra sp. Navicula sp. Pleurosigma sp. Biddulphia sp.	Coscinodiscus sp. Biddulphia sp. Cyclotella sp. Thallasiosira sp. Gyrodinium sp.	Synedra sp. Nitzschia sp. Fragillaria sp. Skeletonema sp. Ulothrix sp.	Melosira sp. Closterium sp. Oscillatoria sp. Pediastrum sp. Nitzschia sp.	Pleurosigma sp. Navicula sp. Thallasiosira sp. Fragillaria sp. Cymbella sp.

Continue...

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





SR · NO ·	TEST PARAMETERS	UNIT	CB2 SOUTH END TOWARDS LANDSIDE FROM SEA BASIN (N 21° 5'1.92", E 72°37'56.58")											
			20/04/23		25/05/23		22/06/23		24/07/23		17/08/23		18/09/23	
			Surfa ce	Botto m	Surfac e	Botto m	Surfa ce	Botto m	Surfac e	Botto m	Surfa ce	Botto m	Surfac e	Botto m
B	Zooplanktons													
17.1	Abundance (Population)	Nox10 <sup>3</sup> /100 m <sup>3</sup>	31		35		26		36		28		37	
17.2	Name of Group Number and name of group species of each group	--	Copepods Polychaetes Foraminiferans Gastropods		Polychaetes Gastropods Bivalves Amphipods		Bivalves Polychaetes Amphipods Gastropods		Bivalves Polychaetes Ostracods Gastropods		Polychaetes Gastropods Ostracods Mysids		Polychaetes Gastropods Mysids Copepods Amphipods	
17.3	Total Biomass	ml/100 m <sup>3</sup>	2.90		3.45		2.50		3.55		2.70		3.40	
C	Microbiological Parameters													
18.1	Total Bacterial Count	CFU/ml	2350		2580		2180		2260		2620		2040	
18.2	Total Coliform	/ml	Present		Present		Present		Present		Present		Present	
18.3	E.coli	/ml	Absent		Absent		Absent		Absent		Absent		Absent	
18.4	Enterococcus species	/ml	Present		Present		Present		Present		Present		Present	
18.5	Salmonella species	/ml	Absent		Absent		Absent		Absent		Absent		Absent	
18.6	Shigella species	/ml	Absent		Absent		Absent		Absent		Absent		Absent	
18.7	Vibrio species	/ml	Absent		Absent		Absent		Absent		Absent		Absent	

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Sea Water.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.10: SEA WATER QUALITY ANALYSIS RESULTS OF MP1 WEST END TOWARDS CHANNEL FROM THE SEA BASIN**

S R · N O ·	TEST PARAMETER S	UNI T	MP1 WEST END TOWARDS CHANNEL FROM SEA BASIN (N 21° 5'9.78", E 72°37'24.48")											
			20/04/23		25/05/23		22/06/23		24/07/23		17/08/23		18/09/23	
			Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom
1	pH	--	8.37	8.30	8.27	8.24	8.36	8.31	8.29	8.24	8.23	8.16	8.29	8.25
2	Temperature	°C	30.3	30.1	31.5	31.3	31.7	31.6	31.8	31.6	30.7	30.6	30.8	30.6
3	Total Suspended Solids	mg/L	194	179	189	165	193	178	235	220	248	231	275	259
4	BOD (3 Days @ 27 °C)	mg/L	5.30	4.50	5.70	5.20	4.68	4.30	3.90	3.74	3.56	3.12	4.26	3.64
5	Dissolved Oxygen	mg/L	5.90	5.80	5.95	5.85	5.90	5.70	5.95	5.80	6.00	5.95	5.90	5.80
6	Salinity	ppt	33.84	33.62	34.18	34.56	33.58	33.92	33.76	34.18	32.46	32.64	33.70	34.28
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
8	Nitrate as NO <sub>3</sub>	μmol /L	5.84	5.61	4.87	4.73	6.18	5.84	4.91	4.79	3.76	3.62	5.74	5.68
9	Nitrite as NO <sub>2</sub>	μmol /L	0.81	0.73	0.74	0.63	0.82	0.71	0.68	0.52	0.53	0.50	0.39	0.32
10	Ammonical Nitrogen as NH <sub>3</sub>	μmol /L	2.75	2.59	2.94	2.80	2.79	2.63	3.32	3.14	3.48	3.29	3.85	3.70
11	Phosphates as PO <sub>4</sub>	μmol /L	2.26	2.06	2.39	2.27	2.68	2.51	2.97	2.85	2.75	2.61	2.83	2.68
12	Total Nitrogen	μmol /L	9.87	9.35	8.68	8.29	9.92	9.35	8.98	8.69	7.98	7.52	10.38	10.24
13	Petroleum Hydrocarbon	μg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
14	Total Dissolved Solids	mg/L	35120	34896	35374	35682	34792	35178	34962	35346	33742	33964	34892	35628
15	COD	mg/L	20.90	18.40	23.00	19.00	18.60	16.32	14.96	15.20	12.06	11.80	15.94	13.62
A	<b>Phytoplankton</b>													
16.1	Chlorophyll	mg/m <sup>3</sup>	3.04	2.58	2.96	2.85	2.69	2.40	2.94	2.67	2.32	2.25	2.62	2.50
16.2	Phaeophytin	mg/m <sup>3</sup>	0.36	0.42	0.44	0.15	0.26	0.44	0.18	0.28	0.59	1.44	1.03	0.74
16.3	Cell Count	No x 10 <sup>3</sup> /L	396	358	405	380	396	380	420	416	384	368	421	408
16.4	Name of Group Number and name of group species of each group	--	Melosira sp. Leptocyli ndrus Scenedes mus sp. Gyrosigm a sp. Ulothrix sp.	Navicula sp. Nitzschia sp. Rhizosole nia sp. Melosira sp. Fragillari a sp.	Melosira sp. Leptocyli ndrus Scenedes mus sp. Gyro sigma sp. Cyclotell a sp.	Navicula sp. Nitzschia sp. Rhizosole nia sp. Ulothrix sp. Closteriu m sp. Synedra sp.	Melosira sp. Leptocyli ndrus Scenedes mus sp. Skeleto nema sp. Cymbella sp. Rhizosole nia sp.	Navicula sp. Synedra sp. Ulothrix sp. Thallasio nema sp. Gyrosigm a sp. Nitzschia sp.	Melosira sp. Coscinodi scus sp. Ulothrix sp. Leptocyli ndrus Thallasio nema sp.	Synedra sp. Ulothrix sp. Gyro sigma sp. Cymbella sp. Fragillari a sp.	Melosira sp. Melosira sp. Melosira sp. Synedra sp. Leptocyli ndrus	Fragillari a sp. Thallasio nema sp. Pleurosig ma sp. Nitzschia sp.	Scenedes mus sp. Ankistrod esmus sp. Gyro sigma sp. Melosira sp. Leptocyli ndrus	Navicula sp. Cymbella sp. Thallasio sira sp. Ulothrix sp.

Continue...

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle,Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**POLLUCON** LABORATORIES PVT. LTD.

SR · NO ·	TEST PARAMETERS	UNIT	MP1 WEST END TOWARDS CHANNEL FROM SEA BASIN (N 21° 5'9.78",E 72°37'24.48")												
			20/04/23		25/05/23		22/06/23		24/07/23		17/08/23		18/09/23		
			Surfa ce	Botto m	Surfac e	Botto m	Surfa ce	Botto m	Surfac e	Botto m	Surfa ce	Botto m	Surfac e	Botto m	
B	Zooplanktons														
17.1	Abundance (Population)	Nox10 <sup>3</sup> /100 m <sup>3</sup>	34		30		29		33		26		35		
17.2	Name of Group Number and name of group species of each group	--	Polychaetes Gastropods Decapods		Polychaetes Gastropods Mysids Bivalves		Polychaetes Decapods Bivalves Mysids		Polychaetes Ostracods Mysids		Polychaetes Mysids Amphipods Copepods		Polychaetes Amphipods Copepods Decapods		
17.3	Total Biomass	ml/100 m <sup>3</sup>	2.90		2.70		2.80		2.90		2.50		3.25		
C	Microbiological Parameters														
18.1	Total Bacterial Count	CFU/ml	2460		2290		2340		2570		2410		2720		
18.2	Total Coliform	/ml	Present		Present		Present		Present		Present		Present		
18.3	E.coli	/ml	Absent		Absent		Absent		Absent		Absent		Absent		
18.4	Enterococcus species	/ml	Present		Present		Present		Present		Present		Present		
18.5	Salmonella species	/ml	Absent		Absent		Absent		Absent		Absent		Absent		
18.6	Shigella species	/ml	Absent		Absent		Absent		Absent		Absent		Absent		
18.7	Vibrio species	/ml	Absent		Absent		Absent		Absent		Absent		Absent		

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Sea Water.

**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
Navjivan Circle,Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.11: SEA WATER QUALITY ANALYSIS RESULTS OF CB1 END TOWARDS CHANNEL FROM THE SEA BASIN**

S R. N O.	TEST PARAMETER S	UNI T	CB1 END TOWARDS CHANNEL FROM SEA BASIN (N 21° 5'14.67" , E 72°37'40.14")											
			20/04/23		25/05/23		22/06/23		24/07/23		17/08/23		18/09/23	
			Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom	Surface	Bottom
1	pH	--	8.12	8.05	8.25	8.21	8.34	8.27	8.24	8.20	8.16	8.13	8.24	8.21
2	Temperature	°C	30.4	30.2	30.9	30.7	31.4	31.1	31.8	31.5	30.5	30.3	30.8	30.5
3	Total Suspended Solids	mg/L	193	184	208	191	187	162	234	219	258	241	281	276
4	BOD (3 Days @ 27 °C)	mg/L	5.30	4.90	4.90	4.30	3.90	3.50	3.20	3.00	3.56	3.28	4.26	3.32
5	Dissolved Oxygen	mg/L	5.95	5.80	5.90	5.75	5.85	8.70	5.90	5.80	6.05	5.95	6.00	5.90
6	Salinity	ppt	33.69	33.92	34.31	34.62	33.62	33.98	33.94	34.38	32.56	32.92	33.48	33.98
7	Oil & Grease	mg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
8	Nitrate as NO <sub>3</sub>	μmol /L	5.89	5.70	6.02	5.84	6.75	5.62	5.10	4.90	3.75	3.56	4.97	4.78
9	Nitrite as NO <sub>2</sub>	μmol /L	0.57	0.49	0.61	0.52	0.83	0.71	0.67	0.52	0.52	0.46	0.46	0.39
10	Ammonical Nitrogen as NH <sub>3</sub>	μmol /L	2.69	2.53	3.02	2.68	2.94	2.87	3.51	3.40	3.61	3.54	4.13	3.87
11	Phosphates as PO <sub>4</sub>	μmol /L	2.47	2.39	2.19	2.04	3.06	2.94	3.29	3.15	2.53	2.40	2.67	2.54
12	Total Nitrogen	μmol /L	9.43	8.96	9.84	9.26	12.75	10.13	9.36	8.90	7.94	7.68	9.82	9.13
13	Petroleum Hydrocarbon	μg/L	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
14	Total Dissolved Solids	mg/L	34880	35118	34928	35219	34872	35175	35140	35612	33412	33764	34708	3516 8
15	COD	mg/L	21.40	17.96	18.00	15.00	17.20	13.90	12.96	10.80	11.82	10.70	15.94	15.26
A	<b>Phytoplankton</b>													
16 .1	Chlorophyll	mg/ m <sup>3</sup>	2.75	2.40	2.88	2.45	2.67	2.32	2.56	2.50	2.40	2.28	2.69	2.42
16 .2	Phaeophytin	mg/ m <sup>3</sup>	0.28	0.62	0.72	0.95	0.17	1.08	0.48	0.26	0.60	0.21	0.13	0.82
16 .3	Cell Count	No x 1 0 <sup>3</sup> /L	362	355	399	385	412	396	423	406	392	380	415	398
16 .4	Name of Group Number and name of species of each group	--	Leptocyli ndrus Rhizosole nia sp. Coscinod iscus sp. Skeleton ema sp. Nitzschia sp.	Fragillari a sp. Synedra sp. Gyrosigm a sp. Melosira sp. Ulothrix sp.	Leptocyli ndrus Rhizosole nia sp. Coscinodi scus sp. Navicula sp. Cymbella sp.	Synedra sp. Fragillari a sp. Melosira sp. Nitzschia sp. Spirogyr a sp.	Thallasio nema sp. Leptocyli ndrus Rhizosole nia sp. Cyclotell a sp. Coscinodi scus sp.	Nitzschia sp. Navicula sp. Melosira sp. Pleurosig ma sp. Synedra sp.	Thallasio sira sp. Leptocyli ndrus Coscinodi scus sp. Fragillari a sp. Cymbella sp.	Fragillari a sp. Navicula sp. Synedra sp. Rhizosole nia sp. Biddulphi a sp. Nitzschia sp.	Nitzschia sp. Skeleton ema sp. Thallasio nema sp. Cymbella sp.	Synedra sp. Fragillari a sp. Thallasio nema sp. Rhizosole nia sp.	Thallasio sira sp. Cymbella sp. Leptocyli ndrus Fragillari a sp.	Navicula sp. Synedra sp. Rhizosol enia sp. Nitzschia sp. Pleurosig ma sp. Ulothrix sp.

Continue...

Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
Navjivan Circle,Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





SR · NO ·	TEST PARAMETERS	UNIT	CB1 END TOWARDS CHANNEL FROM SEA BASIN (N 21° 5'14.67" , E 72°37'40.14")												
			20/04/23		25/05/23		22/06/23		24/07/23		17/08/23		18/09/23		
			Surfac e	Botto m	Surfac e	Botto m	Surfac e	Botto m	Surfac e	Botto m	Surfac e	Botto m	Surfac e	Botto m	
B	Zooplanktons														
17.1	Abundance (Population)	Nox10 <sup>3</sup> /100 m <sup>3</sup>	32		22		35		30		32		35		
17.2	Name of Group Number and name of group species of each group	--	Gastropods Polychaetes Bivalves Decapods		Gastropods Polychaetes Bivalves		Gastropods Polychaetes Bivalves Branchyurans		Polychaetes Mysids Bivalves Branchyurans		Bivalves Polychaetes Gastropods		Polychaetes Gastropods Copepods Amphipods		
17.3	Total Biomass	ml/100 m <sup>3</sup>	3.05		1.90		3.20		2.80		3.00		3.40		
C	Microbiological Parameters														
18.1	Total Bacterial Count	CFU/ml	2480		2130		2350		2040		2190		2270		
18.2	Total Coliform	/ml	Present		Present		Present		Present		Present		Present		
18.3	E.coli	/ml	Absent		Absent		Absent		Absent		Absent		Absent		
18.4	Enterococcus species	/ml	Present		Present		Present		Present		Present		Present		
18.5	Salmonella species	/ml	Absent		Absent		Absent		Absent		Absent		Absent		
18.6	Shigella species	/ml	Absent		Absent		Absent		Absent		Absent		Absent		
18.7	Vibrio species	/ml	Absent		Absent		Absent		Absent		Absent		Absent		

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Sea Water.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





#### 4F. NOISE LEVEL MONITORING (APRIL - 2023 TO SEPTEMBER - 2023)

**TABLE-1.13: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE DAY TIME IN Leq. dB(A) AT NEAR PORT GATE NO.: 2**

SAMPLING LOCATION	1 - NEAR PORT GATE NO.: 2					
LONGITUDE LATITUDE	N 21° 05.426'E 72°37.739'					
DATE OF MONITORING	03/04/23	01/05/23	01/06/23	03/07/23	03/08/23	04/09/23
06:00-07:00	73.7	73.4	69.7	67.2	67.5	68.1
07:00-08:00	68.0	58.2	62.9	61.3	62.9	63.5
08:00-09:00	71.1	71.5	72.5	73.8	72.2	72.9
09:00-10:00	64.4	69.6	67.1	66.5	65.8	65.0
10:00-11:00	63.5	55.4	60.7	58.3	59.0	57.8
11:00-12:00	64.8	56.0	54.8	56.9	55.2	56.1
12:00-13:00	59.8	61.6	55.9	53.4	51.4	52.9
13:00-14:00	64.2	59.8	58.0	58.7	59.2	58.5
14:00-15:00	68.4	64.0	65.4	64.9	62.6	62.7
15:00-16:00	62.4	64.9	67.3	68.8	67.8	69.4
16:00-17:00	62.8	62.1	63.5	64.8	65.9	64.0
17:00-18:00	60.4	53.7	56.4	55.7	57.4	59.5
18:00-19:00	71.2	65.1	64.3	63.1	61.3	62.4
19:00-20:00	68.2	52.9	54.9	55.6	53.9	56.0
20:00-21:00	66.0	61.8	64.4	66.6	64.1	64.2
21:00-22:00	69.4	71.1	68.2	66.0	63.8	61.5
*dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.						
Day Time shall mean from 6:00 am to 10:00 pm						

**TABLE-1.14: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE NIGHT TIME IN Leq. dB(A) AT NEAR PORT GATE NO.: 2**

SAMPLING LOCATION	1 - NEAR PORT GATE NO.: 2					
LONGITUDE LATITUDE	N 21° 05.426'E 72°37.739'					
DATE OF MONITORING	03/04/23 & 04/04/23	01/05/23 & 02/05/23	01/06/23 & 02/06/23	03/07/23 & 04/07/23	03/08/23 & 04/08/23	04/09/23 & 05/09/23
22:00-23:00	56.5	50.6	53.5	56.0	57.9	59.5
23:00-00:00	56.6	54.1	55.1	54.1	55.1	54.6
00:00-01:00	57.8	50.7	49.6	51.5	51.5	51.6
01:00-02:00	52.1	58.4	57.9	59.7	61.3	61.5
02:00-03:00	59.9	49.7	52.3	52.6	51.1	51.2
03:00-04:00	56.1	59.4	56.9	54.6	52.1	52.4
04:00-05:00	58.6	49.3	48.3	49.6	50.2	51.7
05:00-06:00	55.6	54.7	54.1	51.6	50.0	50.9
*dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.						
Night Time shall mean from 10:00 pm to 06:00 am.						

**Observation** Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.15: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE DAY TIME IN Leq. dB(A) AT HSE BUILDING TERRACE**

SAMPLING LOCATION	2 - HSE BUILDING TERRACE					
LONGITUDE LATITUDE	N 21° 05.043' E 72° 38.491'					
DATE OF MONITORING	10/04/23	08/05/23	08/06/23	10/07/23	10/08/23	11/09/23
06:00-07:00	64.6	65.2	64.1	65.5	64.4	64.0
07:00-08:00	71.0	62.1	68.2	67.2	68.7	69.4
08:00-09:00	63.2	60.6	62.2	62.0	61.1	59.9
09:00-10:00	67.7	56.2	54.4	53.2	51.9	52.9
10:00-11:00	63.0	64.4	67.3	69.1	71.5	72.3
11:00-12:00	60.1	73.7	71.4	70.1	67.6	69.8
12:00-13:00	71.7	49.6	51.8	50.5	49.3	49.2
13:00-14:00	65.7	62.9	62.5	62.4	61.6	62.1
14:00-15:00	63.1	57.0	54.0	51.9	53.7	55.0
15:00-16:00	66.3	64.8	64.7	62.3	62.7	63.5
16:00-17:00	70.1	62.0	63.3	61.0	62.1	60.8
17:00-18:00	63.7	70.2	71.6	72.8	70.4	70.4
18:00-19:00	63.9	58.9	56.6	55.8	57.1	56.8
19:00-20:00	61.0	53.8	57.8	60.3	59.3	59.6
20:00-21:00	65.9	58.4	62.7	60.5	59.9	59.3
21:00-22:00	57.2	57.9	59.6	59.3	61.4	59.2
#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.						
Day Time shall mean from 6:00 am to 10:00 pm						

**TABLE-1.16: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE NIGHT TIME IN Leq. dB(A) AT HSE BUILDING TERRACE**

SAMPLING LOCATION	2 - HSE BUILDING TERRACE					
LONGITUDE LATITUDE	N 21° 05.043' E 72° 38.491'					
DATE OF MONITORING	10/04/23 & 11/04/23	08/05/23 & 06/05/23	08/06/23 & 09/06/23	10/07/23 & 11/07/23	10/08/23 & 11/08/23	11/09/23 & 12/09/23
22:00-23:00	52.0	58.4	61.1	59.7	57.3	57.2
23:00-00:00	57.7	52.4	51.3	49.3	49.5	48.7
00:00-01:00	51.1	50.3	51.5	52.8	54.3	55.9
01:00-02:00	49.3	46.9	47.5	45.0	46.2	48.6
02:00-03:00	55.9	58.2	60.6	60.3	59.6	57.4
03:00-04:00	53.1	61.9	59.0	59.1	59.0	59.8
04:00-05:00	59.8	51.8	54.8	56.3	56.6	54.7
05:00-06:00	56.1	48.3	50.2	51.2	51.0	49.9
#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.						
Night Time shall mean from 10:00 pm to 06:00 am.						

**Observation** Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com



**TABLE-1.17: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE DAY TIME IN Leq. dB(A) AT CENTRAL WATER PUMP HOUSE**

SAMPLING LOCATION	3 - CENTRAL WATER PUMP HOUSE					
LONGITUDE LATITUDE	N 21° 04.697' E 72° 38.420'					
DATE OF MONITORING	13/04/23	11/05/23	12/06/23	13/07/23	14/08/23	14/09/23
06:00-07:00	66.0	66.7	66.7	66.2	66.8	67.3
07:00-08:00	63.8	56.6	56.6	55.2	54.5	56.4
08:00-09:00	64.6	64.1	67.4	68.7	66.8	67.4
09:00-10:00	68.7	59.5	63.3	65.2	63.6	61.7
10:00-11:00	54.5	60.5	58.3	57.8	56.5	57.3
11:00-12:00	69.4	69.2	66.9	65.4	63.2	63.7
12:00-13:00	64.3	68.0	65.6	66.4	67.4	65.4
13:00-14:00	65.1	69.9	68.7	69.5	68.1	70.6
14:00-15:00	55.2	56.9	61.5	61.4	60.5	62.5
15:00-16:00	72.3	72.8	69.3	67.8	66.2	68.3
16:00-17:00	64.0	57.5	60.9	59.8	58.5	59.2
17:00-18:00	64.2	72.0	69.7	70.9	70.1	67.9
18:00-19:00	69.3	68.5	64.4	64.0	64.2	66.0
19:00-20:00	58.3	64.0	61.0	59.9	60.7	60.9
20:00-21:00	53.2	65.2	61.8	63.5	64.2	62.3
21:00-22:00	66.1	53.9	57.1	58.7	60.5	58.7
#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.						
Day Time shall mean from 6:00 am to 10:00 pm.						

**TABLE-1.18: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE NIGHT TIME IN Leq. dB(A) AT CENTRAL WATER PUMP HOUSE**

SAMPLING LOCATION	3 - CENTRAL WATER PUMP HOUSE					
LONGITUDE LATITUDE	N 21° 04.697' E 72° 38.420'					
DATE OF MONITORING	13/04/23 & 14/04/23	11/05/23 & 12/05/23	12/06/23 & 13/06/23	13/07/23 & 14/07/23	14/08/23 & 15/08/23	14/09/23 & 15/09/23
22:00-23:00	55.4	56.7	57.1	54.8	53.9	55.4
23:00-00:00	50.9	54.7	57.5	56.4	57.6	58.8
00:00-01:00	56.6	55.3	57.3	56.2	55.2	54.5
01:00-02:00	51.7	66.2	63.5	65.0	65.2	67.7
02:00-03:00	59.5	57.8	60.0	62.2	62.4	62.4
03:00-04:00	52.9	55.8	59.7	61.0	58.7	58.9
04:00-05:00	60.7	64.1	66.9	66.2	65.3	66.8
05:00-06:00	54.7	55.4	55.5	56.5	54.1	54.0
#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.						
Night Time shall mean from 10:00 pm to 06:00 am.						

**Observation** Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.19: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE DAY TIME IN Leq. dB(A) AT CONTAINER TERMINAL**

SAMPLING LOCATION	4 - CONTAINER TERMINAL					
LONGITUDE LATITUDE	N 21° 05.187' E 72° 37.774'					
DATE OF MONITORING	06/04/23	04/05/23	05/06/23	06/07/23	07/08/23	07/09/23
06:00-07:00	64.0	63.3	60.7	60.2	58.2	57.6
07:00-08:00	63.5	72.9	73.2	71.8	73.2	71.6
08:00-09:00	56.3	63.7	62.8	60.9	62.4	60.2
09:00-10:00	58.3	54.2	57.5	59.6	61.7	63.7
10:00-11:00	69.0	61.7	62.6	64.9	63.6	61.8
11:00-12:00	62.8	58.7	60.4	61.2	62.0	62.0
12:00-13:00	67.9	54.6	56.3	57.1	57.2	58.7
13:00-14:00	71.7	55.9	57.1	58.8	63.3	64.3
14:00-15:00	68.0	62.1	64.1	63.1	61.2	63.2
15:00-16:00	59.9	51.4	55.5	56.6	54.5	56.1
16:00-17:00	63.0	65.2	64.4	64.0	64.4	66.9
17:00-18:00	65.8	69.6	68.9	70.7	68.7	68.6
18:00-19:00	72.9	66.0	65.6	63.9	64.7	64.8
19:00-20:00	56.2	65.3	70.8	70.1	67.6	67.3
20:00-21:00	61.2	58.4	57.3	55.1	57.4	57.4
21:00-22:00	64.8	62.3	65.0	65.3	65.7	66.8

#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.  
Day Time shall mean from 6:00 am to 10:00 pm.

**TABLE-1.20: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE NIGHT TIME IN Leq. dB(A) AT CONTAINER TERMINAL**

SAMPLING LOCATION	4 - CONTAINER TERMINAL					
LONGITUDE LATITUDE	N 21° 05.187' E 72° 37.774'					
DATE OF MONITORING	06/04/23 & 07/04/23	04/05/23 & 05/05/23	05/06/23 & 06/06/23	06/07/23 & 07/07/23	07/08/23 & 08/08/23	07/09/23 & 08/09/23
22:00-23:00	62.6	55.7	51.5	49.2	50.8	48.6
23:00-00:00	53.9	59.3	56.5	55.4	56.7	54.8
00:00-01:00	55.1	45.6	45.9	46.3	48.7	49.7
01:00-02:00	61.4	54.6	57.9	58.5	59.4	61.9
02:00-03:00	53.8	48.8	47.4	45.8	46.1	47.8
03:00-04:00	57.2	51.1	52.7	54.6	56.5	58.7
04:00-05:00	56.6	49.9	53.3	50.8	50.4	50.9
05:00-06:00	60.0	57.3	56.9	58.2	56.4	58.2

#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.  
Night Time shall mean from 10:00 pm to 06:00 am.

**Observation** Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com



**TABLE-1.21: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE DAY TIME IN Leq. dB(A) AT HAZIRA VILLAGE**

SAMPLING LOCATION	5 - HAZIRA VILLAGE					
LONGITUDE LATITUDE	N 21° 05.44' E 72° 38.44'					
DATE OF MONITORING	17/04/23	15/05/23	15/06/23	17/07/23	17/08/23	18/09/23
06:00-07:00	67.3	69.7	70.1	70.6	68.8	68.9
07:00-08:00	56.9	65.0	66.6	65.4	63.1	61.5
08:00-09:00	66.8	65.5	62.4	62.3	64.8	67.3
09:00-10:00	56.6	59.9	58.9	60.0	61.4	63.2
10:00-11:00	62.1	55.2	52.5	53.5	54.3	52.0
11:00-12:00	69.1	64.5	64.7	64.5	65.8	67.8
12:00-13:00	65.1	68.7	70.4	70.1	70.5	69.9
13:00-14:00	53.3	53.2	56.1	56.2	58.6	58.1
14:00-15:00	66.3	63.5	65.3	66.9	68.2	69.2
15:00-16:00	72.8	67.2	62.2	64.2	66.5	67.0
16:00-17:00	60.7	62.2	63.7	65.5	65.4	63.9
17:00-18:00	54.1	66.6	70.3	68.8	71.0	70.6
18:00-19:00	62.4	60.9	63.6	62.9	61.5	63.6
19:00-20:00	69.2	67.8	67.9	67.9	66.8	66.7
20:00-21:00	57.5	67.6	69.8	68.3	70.8	68.3
21:00-22:00	58.6	64.6	60.4	61.0	61.2	59.5

#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.  
Day Time shall mean from 6:00 am to 10:00 pm.

**TABLE-1.22: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE NIGHT TIME IN Leq. dB(A) AT HAZIRA VILLAGE**

SAMPLING LOCATION	5 - HAZIRA VILLAGE					
LONGITUDE LATITUDE	N 21° 05.44' E 72° 38.44'					
DATE OF MONITORING	17/04/23 & 18/04/23	15/05/23 & 16/05/23	15/06/23 & 16/06/23	17/07/23 & 18/07/23	17/08/23 & 18/08/23	18/09/23 & 19/09/23
22:00-23:00	56.7	52.9	55.1	57.1	57.2	55.1
23:00-00:00	56.2	50.8	52.1	50.8	53.1	55.5
00:00-01:00	61.9	59.6	57.9	55.7	54.6	55.9
01:00-02:00	54.2	61.5	58.9	57.6	59.8	61.4
02:00-03:00	57.7	51.5	49.7	49.9	50.0	51.8
03:00-04:00	52.3	64.7	66.5	68.1	66.7	68.7
04:00-05:00	55.3	48.5	48.6	47.2	45.3	45.2
05:00-06:00	54.4	63.0	58.0	58.2	58.2	57.3

#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.  
Night Time shall mean from 10:00 pm to 06:00 am.

**Observation** Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.

**Note:** The Noise Level of Hazira Village is compare with the Industrial area Norms as Hazira Village is Surround By Numbers of industries.



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.23: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE DAY TIME IN Leq. dB(A) AT SUVALI VILLAGE**

SAMPLING LOCATION	6 - SUVALI VILLAGE					
LONGITUDE LATITUDE	N 21° 08.55' E 72° 38.24'					
DATE OF MONITORING	20/04/23	18/05/23	19/06/2023	20/07/23	21/08/23	21/09/23
06:00-07:00	59.3	52.4	51.8	53.2	55.5	55.4
07:00-08:00	65.1	53.3	50.2	51.7	51.2	51.5
08:00-09:00	64.5	54.1	55.8	56.2	55.9	55.1
09:00-10:00	52.8	56.7	59.0	60.5	58.9	59.4
10:00-11:00	60.6	44.0	44.2	43.2	43.0	42.7
11:00-12:00	55.0	56.0	54.1	51.9	51.5	52.8
12:00-13:00	63.3	50.9	54.3	53.7	52.4	50.6
13:00-14:00	56.0	56.6	50.6	49.6	51.8	53.5
14:00-15:00	62.2	64.8	63.2	62.1	61.1	61.4
15:00-16:00	59.2	51.0	52.6	52.9	53.9	54.4
16:00-17:00	61.9	47.5	46.7	45.8	43.9	45.5
17:00-18:00	57.1	48.8	48.9	50.5	52.8	53.4
18:00-19:00	63.0	42.8	45.2	45.0	45.6	44.8
19:00-20:00	58.4	50.6	50.8	50.0	50.9	49.3
20:00-21:00	62.9	45.2	49.2	48.9	49.1	47.9
21:00-22:00	59.9	54.3	53.5	54.4	52.2	52.3

#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.  
Day Time shall mean from 6:00 am to 10:00 pm.

**TABLE-1.24: AMBIENT NOISE LEVEL MONITORING RESULTS DURING THE NIGHT TIME IN Leq. dB(A) AT SUVALI VILLAGE**

SAMPLING LOCATION	6 - SUVALI VILLAGE					
LONGITUDE LATITUDE	N 21° 08.55' E 72° 38.24'					
DATE OF MONITORING	20/04/23 & 21/04/23	18/05/23 & 19/05/23	19/06/23 & 20/06/23	20/07/23 & 21/07/23	21/08/23 & 22/08/23	21/09/23 & 22/09/23
22:00-23:00	49.8	47.3	50.2	49.8	48.0	47.3
23:00-00:00	46.6	48.5	44.9	42.5	41.0	39.1
00:00-01:00	52.2	50.8	47.8	45.6	46.4	45.5
01:00-02:00	53.3	46.7	44.8	45.9	47.0	45.0
02:00-03:00	50.6	52.6	53.4	54.8	56.3	57.6
03:00-04:00	50.4	44.0	42.6	43.8	46.2	44.3
04:00-05:00	47.9	53.8	51.8	53.5	54.2	53.7
05:00-06:00	45.5	46.5	49.8	47.9	46.5	46.2

#dB(A) Leq. Denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.  
Night Time shall mean from 10:00 pm to 06:00 am.

**Observation** Above given Results are within the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000.



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com



**4G. DG SETS STACK EMISSION AND NOISE LEVEL MONITORING (APRIL - 2023 TO SEPTEMBER - 2023)**

**TABLE-1.25A: DG SETS STACK EMISSION MONITORING RESULTS**

SR. NO.	PARAMETERS	UNIT	DG SET TOYO DENKI - 1		DG SET TOYO DENKI - 2	
			25/05/23	21/08/23	25/05/23	21/08/23
1	Particulate Matter	mg/Nm <sup>3</sup>	26.38	28.84	25.81	23.67
2	Sulphur Dioxide	ppm	6.17	7.41	7.63	6.82
3	Oxide of Nitrogen	ppm	33.23	34.57	35.63	32.45
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	31.49	20.04	26.32	29.87
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected

**TABLE-1.25B: DG SETS STACK EMISSION MONITORING RESULTS**

SR. NO.	PARAMETERS	UNIT	DG SET TOYO DENKI - 3		SS - 1 LT DG - 320 KVA	
			25/05/23	21/08/23	26/05/23	21/08/23
1	Particulate Matter	mg/Nm <sup>3</sup>	28.51	25.54	35.67	35.78
2	Sulphur Dioxide	ppm	8.5	7.99	7.21	7.67
3	Oxide of Nitrogen	ppm	38.67	36.31	34.26	34.38
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	29.45	24.43	16.26	14.89
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected

**TABLE-1.25C: DG SETS STACK EMISSION MONITORING RESULTS**

SR. NO.	PARAMETERS	UNIT	SS3 - DG - 200 KVA		LT PHASE - 1 (625 KVA)	
			26/05/23	22/08/23	26/05/23	22/08/23
1	Particulate Matter	mg/Nm <sup>3</sup>	25.61	25.65	34.22	34.37
2	Sulphur Dioxide	ppm	7.21	7.04	4.64	4.68
3	Oxide of Nitrogen	ppm	35.66	35.8	34.27	34.39
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	12.83	17.18	20.16	21.76
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected



Authorized Signatory

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.25D: DG SETS STACK EMISSION MONITORING RESULTS**

SR. NO.	PARAMETERS	UNIT	LT PHASE - 2 (750 KVA)		ER - 1 (100 KVA)	
			26/05/23	22/08/23	26/05/23	22/08/23
1	Particulate Matter	mg/Nm <sup>3</sup>	37.69	37.77	30.23	30.33
2	Sulphur Dioxide	ppm	6.08	6.35	6.43	6.64
3	Oxide of Nitrogen	ppm	37.53	37.61	30.25	30.38
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	21.6	21.6	18.9	16.38
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected

**TABLE-1.25E: DG SETS STACK EMISSION MONITORING RESULTS**

SR. NO.	PARAMETERS	UNIT	NDG BUILDING (380 KVA)		CUSTOM BUILDING (320 KVA)	
			26/05/23	22/08/23	26/05/23	22/08/23
1	Particulate Matter	mg/Nm <sup>3</sup>	33.45	33.48	32.42	32.47
2	Sulphur Dioxide	ppm	5.37	4.97	6.3	6.2
3	Oxide of Nitrogen	ppm	31.49	31.66	33.52	33.6
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	17.87	18.32	14.43	17.18
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com



**TABLE-1.26: DG SETS NOISE LEVEL MONITORING RESULTS**

SR. NO.	DG SET AVERAGE NOISE LEVEL IN LEQ. DB(A)		
	SAMPLING LOCATION	AT 1 M DISTANCE FROM THE ENCLOSURE	
	Sampling Date	25 & 26/05/23	21 & 22/08/23
1.	DG SET TOYO DENKI - 1	70.5	72.3
2.	DG SET TOYO DENKI - 2	67.3	68.1
3.	DG SET TOYO DENKI -3	65.2	70.2
4.	SS-1 LT DG -320 KVA	72.6	67.1
5.	SS3 -DG -200 KVA	66.3	62.9
6.	LT PHASE -1 (625 KVA)	70.1	58.2
7.	LT PHASE -2 (750 KVA)	65.9	66.7
8.	ER-1 (100 KVA)	69.7	62.1
9.	NDG BUILDING (380 KVA)	61.3	59.3
10.	CUSTOM BUILDING (320 KVA)	71.4	66.0


**Authorized Signatory**

● FSSAI Approved Lab   ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986   ● GPCB approved schedule II auditor   ● ISO 14001 : 2004   ● OHSAS 18001 : 2007   ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
 Navjivan Circle,Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





#### 4H. SEA SEDIMENT QUALITY MONITORING (APRIL - 2023 TO SEPTEMBER - 2023)

**TABLE-1.27: SEA SEDIMENT QUALITY RESULTS OF CB2 SOUTH END TOWARDS LANDSIDE**

SR · NO ·	PARAMETERS	UNIT	CB2 SOUTH END TOWARDS LANDSIDE FROM SEA BASIN (N 21° 5'1.92", E 72°37'56.58")					
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
1	Organic Matter	%	0.30	0.47	0.53	0.43	0.51	0.46
2	Phosphorus as P	µg/g	814	753	802	713	806	739
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
5	<b>Heavy Metals</b>							
5.1	Aluminum as Al	%	5.26	5.02	5.13	4.76	5.29	4.86
5.2	Total Chromium as Cr <sup>+3</sup>	µg/g	97.58	109	98.24	105	118	127
5.3	Manganese as Mn	µg/g	662	713	756	801	703	782
5.4	Iron as Fe	%	4.82	5.12	4.97	5.24	5.08	4.96
5.5	Nickel as Ni	µg/g	50.24	56.29	60.71	53.79	49.17	57.89
5.6	Copper as Cu	µg/g	56.93	61.37	81.33	62.31	53.28	61.75
5.7	Zinc as Zn	µg/g	112	93.46	107	95.84	89.84	98.24
5.8	Lead as Pb	µg/g	1.63	1.27	Not Detected	2.13	1.59	1.75
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
6	<b>Benthic Organisms</b>							
6.1	Macrobenthos (No and name of groups present, No and name of species of each group present)	--	Branchyurans Polychaetes Gastropods	Polychaetes Gastropods Crustaceans Decapods	Branchyurans Polychaetes Gastropods Decapods	Branchyurans Polychaetes Gastropods	Polychaetes Gastropods Bivalves	Polychaetes Gastropods Branchyurans
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Nematodes Foraminiferans	Nematodes	--	Foraminiferans	Nematodes	Foraminiferans
6.3	Population	No./m <sup>2</sup>	529	441	529	676	440	559

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Sea Sediment.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.28: SEA SEDIMENT QUALITY RESULTS OF MP1 WEST END TOWARDS CHANNEL OF SEA BASIN**

Sr. No.	PARAMETERS	UNIT	MP1 WEST END TOWARDS CHANNEL OF SEA BASIN (N 21° 5'9.78", E 72°37'24.48")					
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
1	Organic Matter	%	0.28	0.38	0.5	0.48	0.53	0.49
2	Phosphorus as P	µg/g	839	704	745	803	738	805
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
5	<b>Heavy Metals</b>							
5.1	Aluminum as Al	%	5.26	5.12	5.06	4.82	5.12	4.98
5.2	Total Chromium as Cr <sup>+3</sup>	µg/g	99.17	103	95.12	103	97.28	107
5.3	Manganese as Mn	µg/g	802	756	724	769	704	756
5.4	Iron as Fe	%	4.98	5.04	4.9	5.02	4.83	5.12
5.5	Nickel as Ni	µg/g	54.28	61.57	56.29	69.75	51.72	63.75
5.6	Copper as Cu	µg/g	63.17	52.31	65.13	43.61	36.54	47.12
5.7	Zinc as Zn	µg/g	96.32	92.56	112	90.73	82.35	91.58
5.8	Lead as Pb	µg/g	1.47	1.32	Not Detected	2.04	1.29	1.73
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
6	<b>Benthic Organisms</b>							
6.1	Macrobenthos (No and name of groups present, No and name of species of each group present)	--	Gastropods Polychaetes Amphipods	Brachyuran s Gastropods Polychaetes	Brachyuran s Gastropods Polychaetes	Branchyura ns Gastropods Bivalves	Gastropods Bivalves Polychaetes	Gastropods Bivalves Polychaetes
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Nematodes	Foraminifer ans	--	--	Foraminifer ans	Foraminifer ans
6.3	Population	No./m <sup>2</sup>	614	556	588	735	499	585

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Sea Sediment.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**TABLE-1.29: SEA SEDIMENT QUALITY RESULTS OF CB1 END TOWARDS CHANNEL**

SR NO.	PARAMETERS	UNIT	CB1 WEST END TOWARDS CHANNEL OF SEA BASIN (N 21° 5'14.67" , E 72°37'40.14")					
			20/04/23	25/05/23	22/06/23	24/07/23	17/08/23	18/09/23
1	Organic Matter	%	0.29	0.37	0.42	0.32	0.50	0.47
2	Phosphorus as P	µg/g	813	708	805	765	713	769
3	Texture	--	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt	Sandy Silt
4	Petroleum Hydrocarbon	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
5	<b>Heavy Metals</b>							
5.1	Aluminum as Al	%	4.96	5.29	5.13	4.93	5.19	5.03
5.2	Total Chromium as Cr <sup>+3</sup>	µg/g	103	91.37	112	99.54	113	97.14
5.3	Manganese as Mn	µg/g	768	684	738	792	756	728
5.4	Iron as Fe	%	4.76	5.02	4.92	5.19	4.93	5.12
5.5	Nickel as Ni	µg/g	61.23	56.7	63.85	55.68	47.51	61.37
5.6	Copper as Cu	µg/g	53.17	68.9	51.23	46.17	54.32	43.93
5.7	Zinc as Zn	µg/g	93.56	175	92.38	106	93.17	116
5.8	Lead as Pb	µg/g	1.32	1.75	Not Detected	2.37	1.49	1.92
5.9	Mercury as Hg	µg/g	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
6	<b>Benthic Organisms</b>							
6.1	Macrobenthos (No and name of groups present, No and name of species of each group present)	--	Polychaetes Bivalves Amphipods Branchyurans	Polychaetes Bivalves Brachyurans	Polychaetes Bivalves Amphipods Gastropods	Polychaetes Bivalves Gastropods	Polychaetes Bivalves Amphipods	Branchyurans Gastropods Polychaetes
6.2	MeioBenthos (No and name of groups present, No and name of species of each group present)	--	Nematodes	Nematodes	Foraminiferans	Foraminiferans Nematodes	Foraminiferans	Foraminiferans
6.3	Population	No./m <sup>2</sup>	437	496	559	618	528	496

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Sea Sediment.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com





**4I. SOIL QUALITY MONITROING (APRIL - 2023 TO SEPTEMBER - 2023)**

**TABLE-1.30A: SOIL QUALITY RESULTS OF NEAR PORT GATE NO. 2**

SR. NO.	PARAMETERS	UNIT	NEAR PORT GATE NO. 2	
			23/06/23	18/09/23
1	Type	--	Sandy Loam	Sandy Loam
<b>Grain Size Analysis</b>				
2	Gravel	%	1.8	2.8
3	Coarse Sand	%	7.2	6.2
4	Medium Sand	%	25	23
5	Fine Sand	%	44	41
6	Total Sand	%	78	73
7	Silt + Clay	%	22	30
8	pH (1:5)	--	8.9	8.82
9	Electricity Conductivity	µmho/cm	1944	1998
10	Alkali matter	mg/kg	580	624
11	Cation Exchange Capacity	meq/100 gm	13.02	12.64
12	Sodium Absorption Ratio	--	11.4	10.11
13	Organic Matter	mg/kg	0.68	0.61
14	Available Nitrogen	meq/100 gm	0.77	0.54
15	Available Potassium	mg/kg	6.84	7.52
16	Available Phosphorus	mg/kg	0.96	0.78
17	Available Sodium	mg/kg	10.68	11.2
18	Permeability	cm/sec	$1.08 \times 10^{-7}$	$1.2 \times 10^{-7}$

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Soil Quality.



**Authorized Signatory**

● FSSAI Approved Lab ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 ● GPCB approved schedule II auditor ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com



**TABLE-1.30B: SOIL QUALITY RESULTS OF NEAR LT CANTEEN PARKING**

SR. NO.	PARAMETERS	UNIT	NEAR LT CANTEEN PARKING	
1	Type	--	Sandy Loam	Sandy Loam
<b>Grain Size Analysis</b>				
2	Gravel	%	1.4	1.1
3	Coarse Sand	%	8.4	7.9
4	Medium Sand	%	23	25
5	Fine Sand	%	39	42
6	Total Sand	%	75	76
7	Silt + Clay	%	25	24
8	pH (1:5)	--	8.68	8.65
9	Electricity Conductivity	µmho/cm	1876	1854
10	Alkali matter	mg/kg	536	568
11	Cation Exchange Capacity	meq/100 gm	12.58	13.47
12	Sodium Absorption Ratio	--	9.82	10.54
13	Organic Matter	mg/kg	0.44	0.48
14	Available Nitrogen	meq/100 gm	0.63	0.67
15	Available Potassium	mg/kg	8.01	7.39
16	Available Phosphorus	mg/kg	0.85	0.73
17	Available Sodium	mg/kg	11.36	9.84
18	Permeability	cm/sec	$1.58 \times 10^{-7}$	$1.40 \times 10^{-7}$

**Observation** From the above results it is concluded that there is No Significant Changes in the Quality of Soil Quality.


**Authorized Signatory**

● FSSAI Approved Lab   ● Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986   ● GPCB approved schedule II auditor   ● ISO 14001 : 2004   ● OHSAS 18001 : 2007   ● ISO 9001 : 2008

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart,  
 Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com

**ANNEXURE-5**

**Copy of ISO Certificates**



## CERTIFICATE OF APPROVAL

Issued by Indian Register Quality Systems  
(A Division of IRCLASS Systems and Solutions Private Limited)

This is to certify that the Environmental Management Systems of

**Organisation:** Adani Hazira Port Limited

**Address:** P.O. Hazira, Tal: Choryashi,  
Dist. Surat - 394 270

has been assessed and found conforming to the following requirement

**Standard:** ISO 14001:2015

**Scope:** Providing Port Facilities for Handling and  
Storage of Bulk, Liquid and Containerized  
Cargo

**Certificate No.:** IRQS/220301168

**Initial Certification Date:** 28/10/2013

**Current Date of Granting:** 26/10/2022

**Expiry Date:** 25/10/2025



**Shashi Nath Mishra**  
Head IRQS

This approval is subject to continued satisfactory maintenance of the Environmental Management Systems of the organization to the above standard which will be monitored by IRQS. The use of the Accreditation Mark indicates accreditation with respect to activities covered by the certificate with accreditation no. C071. Condition Overleaf

COA/IRQS/RvA/EMS/Rev 00

Head Office: 52A, Adi Shankaracharya Marg, Opp. Powai Lake, Powai, Mumbai - 400 072, India.

**ANNEXURE-6**

**Photographs of Air Pollution Control Measures and Green Belt Area**





Closed Conveyor



Wind Shield



Mist Canyon for Dust Suppression



Dust Suppression System Installed in Conveyor System



**Coal Chute point having water Sprinkling System**



**Water Sprinklers installed for Dust Suppression**







Road Sweeping Machines



Dry Bulk Cargo Covered with Tarpaulin to avoid dust generation



Coal Transporting Trucks Covered with Tarpaulin to avoid dust generation

Recent Photographs of Green Belt Area







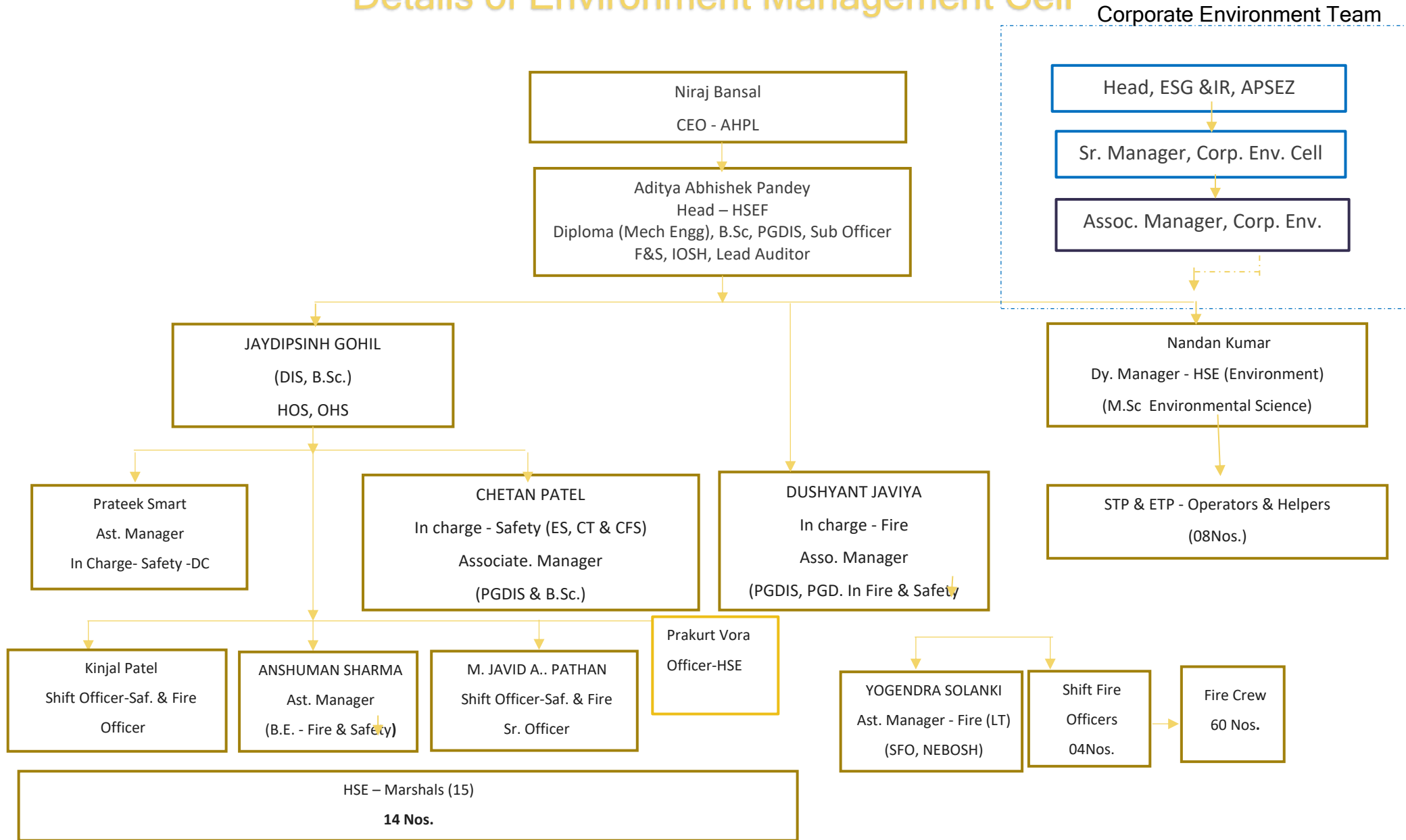




**ANNEXURE-7**

**DETAILS OF ENVIRONMENTAL MANAGEMENT CELL**

# Details of Environment Management Cell





## Annexure 8

### Environmental Budget and Expenditure of Compliance Period

Sr No	Activities	Budget for FY 2023-24	Expenditure
		(FY24 till Sep'23)	
		(In Lacs INR )	(In Lacs INR )
1	Legal and Statutory Charges	10	0.091
2	Environmental Monitoring Services	19.91	7.9
3	Hazardous Waste Management	33.48	2.5
4	Horticulture Development –Greenery and Plantation	149	78.01
5	Manpower Sewage Treatment Plant and Effluent Treatment Plant	26.62	9.64
6	Disposal of Bio medical Waste	1.8	0.87
7	Water Sprinkling for dust suppression	250	94.43
8	Miscellaneous Environmental Initiatives and Salary of Environmental Professionals	20	9.75
9	Installation of CAAQMS	78	71.25
10	Upgradation of Sewage Treatment Plant	140	128
11	IMS including ISO 14001:2015 (EMS) audit, certification, and internal audit training	4	0
	Total	732.81	402.441

#### Expenditure of last three Years

Year	Budget	Expenditure (In Lacs INR)
2020-21	479.63	418.11
2021-22	571.80	443.70
2022-23	550.04	471.69

**Annexure 9**

**Form V Environment Statement FY 2022-23**





**Ports and  
Logistics**

**AHPL/GPCB/2023-24/04**

**Date: 28.06.2023**

**GPCB ID: 35352**

To

The Member Secretary,  
Gujarat Pollution Control Board,  
Paryavaran Bhavan, Sector-10A,  
Gandhinagar-382 010 (Gujarat)

Dear Sir,

**Ref.:** I. Consolidated consent and authorization (CC&A) vide consent order no. AWH-118804, 18.05.2022 valid up to 12.07.2027

**Sub.:** Environmental Statement in **Form-V** for the financial year 2022-23 of **M/s. Adani Hazira Port Ltd.**

Sir,

With reference to above subject matter, please find enclosed herewith **Environmental Statement - Form-V** prescribed under *Rule, 14 of the Environment (Protection) Rules, 1986* of **M/s. Adani Hazira Port Ltd.**, At & PO: Hazira, Taluka: Choryasi, District: Surat (Gujarat) for the financial year 2022-23.

This is for your kind reference and record please.

Thanking You,

For **Adani Hazira Port Ltd.**

**(Niraj Bansal)**

**CEO-AHPL**

**Encl.:** - Environmental Statement in Form-V for the Financial Year: 2022-23

**Cc to:** - The Regional Officer, Gujarat Pollution Control Board, Plot No:11-12/2,3. GIDC-Pandesara Surat-394221. Telephone: (0261) 2442696, 2411192. Fax: (0261) 2429733. Email: ro-gpcb-sura@gujarat.gov.in

Adani Hazira Port Ltd  
At & PO Hazira  
Choryashi  
Surat 394 270  
Gujarat, India  
CIN: U45209GJ2009PTC058789

Tel +91 261 220 7780  
Fax +91 261 220 7777  
info@adani.com  
www.adaniports.com





**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

**FORM - V**

(See Rule 14)

**Environmental Statement for the Financial Year ending 31<sup>st</sup> March, 2023**

**PART – A**

(i)	Name and address of the Owner/ Occupier of the Industry Operation or Process	:	<b>Niraj Bansal,</b> <b>Chief Executive Officer,</b> M/s. Adani Hazira Port Ltd., At & Post: Hazira, Taluka: Choryasi, District: Surat (Gujarat)
(ii)	Industry Category Primary (STC Code) Secondary (STC Code)	:	<b>Red - Large</b> Not Applicable Not Applicable
(iii)	Production Capacity	:	57.7 MMTPA (Total Cargo Handling Capacity)
(iv)	Year of Establishment	:	2010
(v)	Date of Last Environment Statement Submitted	:	30 <sup>th</sup> June 2022

**PART - B**

**Water and Raw Material Consumption**

**(i) Water Consumption:**

<b>Water Consumption Cu. Mtr./Day</b>	
Process	Approx. 1859.51 m <sup>3</sup> /day in Firefighting, Dust Suppression, Sprinkling Washing Activities, and horticulture etc.
Cooling	
Domestic	Approx. 166.53 m <sup>3</sup> /day in Domestic Purpose

<b>Name of Products</b>	<b>Process Water Consumption Per Unit Of Product Output</b>	
	<b>During the Previous Financial Year</b>	<b>During the Current Financial Year</b>
Handling and Storage of General Dry Cargo, Liquid Cargo and Containers*	Total Water Consumption during the FY: 2021-22 is 615045.19 m <sup>3</sup> in the Dust Suppression, Fire Fighting, Cooling, LT - Washing Activities, Horticulture and Domestic purpose etc.  The Water consumption per unit of cargo handling is 0. 0.0247 m <sup>3</sup> /MT.	Total Water Consumption during the FY: 2022-23 is 739506.78 m <sup>3</sup> in the Dust Suppression, Fire Fighting, Cooling, LT - Washing Activities, Horticulture and Domestic purpose etc.  The Water consumption per unit of cargo handling is 0. 0.0292 m <sup>3</sup> /MT.

**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

- \* The Unit does not carry out any manufacturing process. The water consumed was mainly in Firefighting, Dust Suppression, Water Sprinkling, Washing Activities and Horticulture & Domestic Purpose etc.

**(ii) Raw Material Consumption:**

Name of Raw Material	Name of Products	Consumption of Raw Material per Unit of output	
		During the previous Financial Year	During the current Financial Year
Not Applicable	Not Applicable	Not Applicable	Not Applicable

- \* Unit does not carry out any manufacturing process.

**PART - C**

**Pollutants discharged to Environment/Unit of Output**  
**(Parameters as specified in consent issued)**

Pollutants	Quantity of pollutants discharged (Mass/day)	Concentrations of pollutants in discharges (Mass/Volume)	Percentage of variation from prescribed standards with reasons
(a) Water	Nil*		
(b) Air	<ul style="list-style-type: none"> <li>• DG sets are provided as standby power source and used during power failure.</li> <li>• The height of DG stacks as per CPCB/GPCB standards. All the monitored parameters are found within prescribed limits.</li> </ul>		
Particulate Matter (mg/Nm <sup>3</sup> )	DG set emission report is enclosed as <b>Annexure-1.</b>		Nil
Sulphur Dioxide (ppm)			Nil
Nitrogen Oxide (ppm)			Nil

- \* The Unit does not carry out any manufacturing process, as it is a service industry i.e. Port engaged in Handling and Storage of General Dry Cargo, Liquid Cargo and Containers. The source of effluent/ wastewater generation is washing activities of liquid tanks, pipelines and floor washing during any spillage and/or leakage of liquid cargo and other domestic activities. During the Financial Year: 2022-23. There is no discharge of treated effluent / water discharged to the environment. All the treated Effluents and Sewage are utilized in horticulture purpose.

There was approx. 83.26 KL/Day Sewage Generation. The sewage was treated in the Sewage Treatment Plants (STP's) and treated water confirming to prescribe standards was reused in gardening and plantation activities. There was approx. 87.30 KL/Day of Effluents generation, and all



**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

of the generated effluents were treated in Effluents Treatment Plant and utilized in Horticulture Purpose.

**PART - D**

**Hazardous Wastes**

**(as specified under Hazardous waste (Management and Handling) Rules, 2016**

Hazardous Wastes	Total Quantity (Kg.)	
	During the Previous Financial Year	During the Current Financial Year
a) From Process	Quantity of Hazardous Waste generated is given below: Cat.-3.2: 87730 Kg. of cargo residue containing chemicals. Cat.-3.3: 1090 Kg. of Used Oil Filters. Cat 3.4: 4200 Kg of Bilge water Containing oils Cat-33.11: 2960 Kg of contaminated empty barrel Cat 33.2: 5850 Kg of oily Cotton rags Cat.-5.1: 19440 Kg. of Used/Spent Oil. Cat.-5.2: 18830 Kg. of Oil Contaminated Foam Pigs. Cat 35.1: 2400 Kg of gas cleaning residues CMS.	Quantity of Hazardous Waste generated is given below: Cat.-3.2: 134640 Kg. of cargo residue containing chemicals. Cat.-3.3: 375 Kg. of Used Oil Filters. Cat-33.11: 12750 Kg of contaminated empty barrel Cat 33.2: 4000 Kg of oily Cotton rags Cat.-5.1: 162370 Kg. of Used/Spent Oil. Cat.-5.2: 112760 Kg. of Oil Contaminated Foam Pigs.
b) From Pollution Control facilities	Nil	Nil

**PART - E**

**Solid Waste**

Solid Waste	Total Quantity (MT/Annum)	
	During the Previous Financial Year	During the Current Financial Year
(a) From Process (Ash)		
(b) From Pollution Control		

**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

facilities		
(C-1) Quantity recycled or reutilized within the unit	5.772 MT (Kitchen & Food Waste was Converted in to Manure through Organic Waste Converter)	5.560 MT (Kitchen & Food Waste was Converted in to Manure through Organic Waste Converter)
(C-2) Sold		
(C-3) Disposed	Approx. 222.14 MT (Garbage Wastes) processed through Solid Waste Management Facility of Surat Municipal Corporation	Approx. 211.680 MT (Garbage Wastes) disposed off through waste management agencies.

**Note:** Scrap is collected in designated scrap yard at Central Store and sold to scrap vendor.

**PART - F**

**Please specify the characterization (in terms of Composition and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes:**

- Total quantity hazardous waste disposed off during the financial year 2022-23 is approx. 426.895 MT. Out of which 150.97 MT of Incinerable hazardous waste was disposed off through GPCB authorized CHWIF M/s Saurashtra Enviro Projects Pvt Ltd Kutch. Approx. 103.67 MT of co processable hazardous waste are sent to GPCB registered Preprocessing facility M/s Eco Waste Management, Himmat Nagar.
- Approx. 162.37 MT Used/Spent Oil/Bilge Water were generated (including opening were sold out to GPCB registered recycler/refiners. The Waste Oils were stored in barrels in hazardous waste storage shed.
- Approx. 12.75 MT - Empty Paint Drums/Tins were sold out to GPCB registered recycler at M/s Jawrawala Petroleum Ahmedabad.
- Oily Cotton rags were generated from various maintenance and operational activities, which were kept in covered hazardous waste storage area. 4.0 MT of oily cotton rags Wastes were disposed off through GPCB authorized CHWIF Saurashtra Enviro Projects Pvt Ltd Kutch and Eco Waste Management Preprocessing facility. 112.76 MT of Oil contaminated Foam pigs was disposed off through GPCB authorized CHWIF Saurashtra Enviro Projects Pvt Ltd Kutch and Eco Waste Management Preprocessing facility at Himmatnagar.
- Used Oil filters of 0.375 MT was disposed off through GPCB authorized CHWIF Saurashtra Enviro Projects Pvt Ltd Kutch
- Cargo residue containing chemicals of 134.64 MT was disposed off through GPCB authorized CHWIF Saurashtra Enviro Projects Pvt Ltd Kutch



**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

**PART - G**

**Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production: -**

- Unit has installed **Sewage Treatment Plants of 75 KLD capacity and Effluent Treatment Plant (ETP) of 90 KLD Capacity** for treatment of the Sewage water and Effluent being generated at site. The treated water is being reused within port premises.
- Unit has installed **Organic Waste Converter (OWC)** to convert the organic wastes into organic manure i.e.: Kitchen/Food Waste and Horticultural Waste being generated at site. The manure is being reused within port premises.
- M/s. AHPL has developed mangrove afforestation on an area 200 hectares i.e.: 20 hectares near Village: Kantiyajal, Sea coast area and 180 hectares near Village: Nada-Devla, District: Bharuch (Gujarat).
- M/s. AHPL has developed a Bio-Shield Pilot Project on an area of 18 hectares at near Village: Tankari Bandar, Taluka: Jambusar, District: Bharuch (Gujarat).
- The Unit has been used recycled water i.e. treated sewage of KRIBHCO for industrial used which caters more than 80% of total water consumption.
- The Unit has installed Photo voltaic Solar Panel of 3.5 MW and reduced its grid Power consumption and 2 MW of Wind mills at Rojmal near Rajkot for renewal energy generation.
- During the financial year: 2022-23, the total cost incurred on environmental protection measures is enclosed as **Annexure-2**.

**PART - H**

**Additional measures /investment/ proposal for environmental protection including abatement of pollution, prevention of pollution.**

- Unit is carrying out regular environmental monitoring within the Port and surrounding area through reputed MoEF&CC and NABL accredited laboratory. All the environmental parameters are found well within specified limits and the details of monitored data is regularly submitting to GPCB, CPCB, MoEF&CC and other concerned authorities.

**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

- Unit has installed STP's and ETP for the treatment of the domestic waste water and effluent being generated at site and the treated water is being used for horticulture (plantation & gardening) purpose. Unit has also provided dump pond and conveyance channel for collection of runoff generated from Coal Yard.
- Unit has provided sprinklers at coal yard & conveyer system and carrying out regular water spreading to control the dust exposure. Wind breaking shield is provided around the periphery of Coal Yard.
- Unit has a dedicated horticulture department & developing green belt within port premises.
- Unit uses mist canon to suppress the fugitive coal dust at coal yard.
- Unit has deployed four road sweeping machines to control the fugitive dust emissions.
- Unit has installed wind break shield around coal yard and Rock Phosphate Yard to suppress dust emission.
- Unit has laid 1.7 km of closed conveyor system having dust suppression system for handling of coal from Jetty to coal yard.
- Unit has laid approx. 17 km of underground of pipeline for receiving treated wastewater from KRIBHCO and all the industrial requirement of water is being fulfilled through the recycled water.
- Unit has developed greenbelt area of 78.49 hectare till March, 2023.

**PART - I**

**Any other particulars for improving the quality of environment:**

- Trainings on Environment Management and Waste Management were organized for employees, associates and contractual workers.
- Environmental awareness programs have been conducted during the year for employees, contractual employees, school children and local community of nearby villages.
- Integrated housekeeping management is undertaken on top priority to maintain neat and clean working environment in the port premises.
- World Environment Day and other important environment related days are being celebrated to raise awareness among employees, associates and contractor's workmen, The participants of the programs organized on these days were motivated by providing prizes and certificates.
- The Port has initiated "Single Use Plastic Free Port" initiative and Confederation of Indian Industry has been engaged for certifying the protocol and implementation of the same.



**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

- The Port has an ISO 14001:2015 certified system for Environment Management System, ISO 19001:2015 certified system for Quality Management System, ISO 45001: 2018 certified system for Occupational Health and Safety Management System and ISO 50001: 2018 certified system for Energy Management System.
- 200 ha of Mangrove plantation and 18 ha of Bio shield development carried out in Tankari Village of Jambusar taluka, district- Bharuch, Gujarat and these are being maintained and monitored through one NGO and SHG.

Date: 28.06.2023

  
(Authorized Signatory)

Name: Niraj Bansal  
Designation: Chief Executive Officer (CEO)  
Address: At & Post: Hazira, Taluka: Choryashi,  
District: Surat (Gujarat)

**Environment Statement In (Form-V) For The FY: 2022-23 of  
M/s. Adani Hazira Port Ltd.**

**ANNEXURE-1**

**DG SETS STACK EMISSION AND NOISE LEVEL MONITORING: -**

**Note:** DG sets are provided as standby power source and used during power failure.



**POLLUCON LABORATORIES PVT. LTD.**

**4G. DG SETS STACK EMISSION AND NOISE LEVEL MONITORING: -**

**Table-1.25: DG Sets Stack Monitoring Results for the period: October - 2022 to March - 2022**

**Table-1.25 (a): DG Sets Stack Monitoring Results:**


Sr. No.	Parameters	Unit	DG SET TOYO DENKI -1		DG SET TOYO DENKI -2	
			28/11/2022	20/02/2023	28/11/2022	20/02/2023
1	Particulate Matter	mg/Nm <sup>3</sup>	24.53	28.61	28.67	24.3
2	Sulphur Dioxide	ppm	4.51	7.8	6.49	8.37
3	Oxide of Nitrogen	ppm	34.23	38.56	36.19	33.67
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	23.39	28.05	22.9	25.39
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected

**Table-1.25 (b): DG Sets Stack Monitoring Results:**

Sr. No.	Parameters	Unit	DG SET TOYO DENKI -3		SS-1 LT DG -320 KVA	
			28/11/2022	28/11/2022	28/11/2022	20/02/2023
1	Particulate Matter	mg/Nm <sup>3</sup>	30.62	27.52	27.52	24.3
2	Sulphur Dioxide	ppm	7.55	7.41	7.41	8.37
3	Oxide of Nitrogen	ppm	38.67	38.3	38.3	33.67
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	25.77	11.68	11.68	25.39
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected

**Table-1.25 (c): DG Sets Stack Monitoring Results:**

Sr. No.	Parameters	Unit	SS3 -DG -200 KVA		LT Phase -1 (625 KVA)	
			28/11/2022	21/02/2023	29/11/2022	21/02/2023
1	Particulate Matter	mg/Nm <sup>3</sup>	26.81	23.55	38.41	36.23
2	Sulphur Dioxide	ppm	8.21	6.32	6.47	5.16
3	Oxide of Nitrogen	ppm	30.47	32.61	34.28	36.28
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	10.99	11.68	18.9	21.07
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected

  
**Authorized Signatory**

● ISO 9001:2015 Approved Lab ● Recognized by MoEF, New Delhi Under Sec. 12 of Environmental Protection Act-1986 ● GPCB approved ● ISO 14001:2004 ● OHSAS 18001:2007 ● ISO 45001:2018

**"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Did Shantinagar Silk Mill Lane, Near Gayatri Farsan Mart,  
Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.**

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com



**Environment Statement In (Form-V) For The FY: 2022-23 of  
M/s. Adani Hazira Port Ltd.**



**POLLUCON LABORATORIES PVT. LTD.**

**Table-1.25 (d): DG Sets Stack Monitoring Results:**

Sr. No.	Parameters	Unit	LT Phase -2 (750 KVA)		ER-1 (100 KVA)	
			29/11/2022	21/02/2023	29/11/2022	21/02/2023
1	Particulate Matter	mg/Nm <sup>3</sup>	32.56	39.59	26.52	28.54
2	Sulphur Dioxide	ppm	7.68	8.16	5.02	6.56
3	Oxide of Nitrogen	ppm	35.46	38.71	31.55	29.59
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	21.19	18.9	16.26	17.41
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected

**Table-1.25 (e): DG Sets Stack Monitoring Results:**

Sr. No.	Parameters	Unit	MDG Building (380 KVA)		Custom Building (320 KVA)	
			29/11/2022	21/02/2023	29/11/2022	20/02/2023
1	Particulate Matter	mg/Nm <sup>3</sup>	36.24	31.55	32.48	35.43
2	Sulphur Dioxide	ppm	5.08	4.91	6.49	7.31
3	Oxide of Nitrogen	ppm	35.33	33.44	34.5	30.5
4	Carbon Monoxide (CO)	mg/m <sup>3</sup>	15.35	16.61	14.43	15.57
5	Non Methyl Hydro Carbon (NMHC)	mg/m <sup>3</sup>	Not Detected	Not Detected	Not Detected	Not Detected



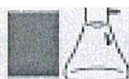
**Authorized Signatory**

● PSMA Approved Lab ● Recognized by MoEF, New Delhi Under Sec. 12 of Environmental Protection Act-1986 ● GPCB approved ● ISO 14001 : 2004 ● OHSAS 18001 : 2007 ● ISO 9001 : 2008  
● Schedule II auditor

"Pollucon House", Plot No.5/6, Opp.Balaji Industrial Society, Old Shantinath Silk Mill Lane, Near Gayatri Farsan Mart,  
Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

Phone : 0261-2635750, 0261-2635751, 0261-2635775, 0798605174, WEB: www.polluconlab.com, E-mail: pollucon@gmail.com, info@polluconlab.com

**Environment Statement In (Form-V) For The FY: 2022-23 of  
M/s. Adani Hazira Port Ltd.**



**POLLUCON** LABORATORIES PVT. LTD.

Table-1.26: DG Sets Noise Level Monitoring Results for the period: October - 2022 to March - 2022

Sr. No.	DG Set Average Noise Level In Leq. dB(A)		
	Sampling Location	At 1 M Distance From The Enclosure	
	Sampling Date	28 & 29/11/2022	20 & 21/02/2023
1.	DG SET TOYO DENKI - 1	71.6	70.2
2.	DG SET TOYO DENKI - 2	69.5	65.8
3.	DG SET TOYO DENKI -3	62.1	69.0
4.	SS-1 LT DG -320 KVA	70.3	65.7
5.	SS3 -DG -200 KVA	64.2	60.1
6.	LT PHASE -1 (625 KVA)	68.1	55.2
7.	LT PHASE -2 (750 KVA)	63.9	63.9
8.	ER-1 (100 KVA)	67.7	64.2
9.	NDG BUILDING (380 KVA)	59.5	56.1
10.	CUSTOM BUILDING (320 KVA)	72.9	64.9

Authorized Signatory

SSAI Approved Lab • Recognised by MoEF, New Delhi Under Sec. 12 of Environmental (Protection) Act-1986 • GPCB approved schedule II auditor • ISO 14001 : 2004 • OHSAS 18001 : 2007 • ISO 9001 : 2008

"Pollucon House", Plot No.516, Opp.Bata Industrial Society, Old Shantinath Silk Mill Lane, Near Gaytri Farsan Mart, Navjivan Circle, Udhana Magdalla Road, Surat-395007, Gujarat, India.

ne : 0261-2635750, 0261-2635751, 0261-2635775, 07016605174, WEB: www.polluconlab.com, E. mail: pollucon@gmail.com, info@polluconlab.com



**Environment Statement In (Form-V) For The FY: 2022-23 of**  
**M/s. Adani Hazira Port Ltd.**

**ANNEXURE - II**

**Environment Budget & Expenditure of FY 2022-23**

Sr No	Activities	Budget for FY 2022-23	Expenditure (FY23)
		(In Lacs INR )	(In Lacs INR )
1	Environmental Study/Audit/Survey/Consultancy Services	32	19.28
2	Legal and Statutory Charges/Newspaper advertisement	10	9.45
3	Environmental Monitoring Services	21.04	16.56
4	Hazardous Waste Management	33.2	18.30
5	Horticulture Development – Greenery and Plantation	169	167
6	Manpower Sewage Treatment Plant and Effluent Treatment Plant	10	9.80
7	Disposal of Bio medical Waste	1.8	1.8
8	Water Sprinkling for dust suppression	250	210
9	Miscellaneous Environmental Initiatives and Salary of Environmental Professionals	20	18
10	ISO 14001:2015 (EMS) audit, certification, and internal audit training	3	1.5
<b>Total</b>		<b>550.04</b>	<b>471.69</b>

**Expenditure of last three Years**

Year	Budget	Expenditure (In Lacs INR)
2019-20	363.80	326.76
2020-21	479.63	418.11
2021-22	571.80	443.70

