Your (Half Yearly Compliance Report) has been Submitted with following details	
Proposal No	IA/GJ/IND2/292720/2022
Compliance ID	127619778
Compliance Number(For Tracking)	EC/M/COMPLIANCE/127619778/2025
Reporting Year	2025
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	22-05-2025
RO/SRO Name	Shrawan Kumar Verma
RO/SRO Email	kr099.ifs@nic.in
State	GUJARAT
RO/SRO Office Address	Integrated Regional Offices, Gandhi Nagar
Note:- SMS and E-Mail has been sent to Shrawan Kumar Verma, GUJARAT with Notification to Project Proponent.	

adani

Ref: MPL/ENV/MoEF&CC/2025 -May/08 **Date: 22nd May, 2025**

To,
Shri Subrat Mohapatra, IFS (I/C)
Deputy Director General of Forests (C)
Ministry of Environment, Forest and Climate Change,
Integrated Regional Office, Gandhinagar,
"Karmayogi Bhawan", Block-3, F-2 Wing, 5th Floor, Near CH-3 Circle,
Sector-10A, Gandhinagar – 382010
E-mail : iro.gandhingr-mefcc@gov.in

Subject: Six monthly compliance report (October, 2024 to March, 2025) of Environment Clearance (EC) for the project activities "VCM-2002 KTPA, PVC-2000 KTPA, Ethylene Glycol- 400 KTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat" by M/s Mundra Petrochem Limited.

Reference : 1). EC Identification No. - EC22A020GJ133762, File No. IA-J-11011/149/2021-IA II(I) dated 31/08/2022.
2). F.No.J-11011/149/2021 – IA – II(I) Dated 27/12/2022.
3). Compliance ID: 111868755, Compliance No.: EC/M/COMPLIANCE/111868755/2024 Submission Date: 20/11/2024 for the reporting period Apr – Sept-2024.

Respected Sir,

With reference to above subject, MoEF&CC vide above refer letter dated 31/08/2022 has granted environment clearance for the project activities "VCM-2002 KTPA, PVC-2000 KTPA, Ethylene Glycol- 400 KTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Adani Enterprises Limited". Followed by MoEF&CC vide above refer letter dated 27/12/2022 has transferred the Environment Clearance on the name of M/s Mundra Petrochem Limited from M/s Adani Enterprises Limited.

The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. We are hereby submitting a soft copy of the six-monthly EC compliance report for the period October 2024 to March 2025.

We hope you will find the above in order.

Thanking you,
Yours faithfully,

Mundra Petrochem Limited

Vinay Kumar Singh
CSO & BU Environment Head

Copy to : 1. Reginal Directorates, CPCB, Vadodara : arvindjha.cpcb@gov.in
2. Member Secretory, GPCB : ms-gpcb@gujarat.gov.in
3. Regional Office, GPCB (Kutch East): ro-gpcb-kute@gujarat.gov.in

Mundra Petrochem Limited
"Adani Corporate House",
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MUNDRA PETROCHEM LIMITED

Six Monthly EC Compliance Report

October, 2024 – March, 2025

ENVIRONMENTAL CLEARANCE

FOR

The project activities "VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA at Mundra, Kutch Gujarat

EC IDENTIFICATION NO. EC22A020GJ133762 DATED 31/08/2022

Mundra Petrochem Limited
Adani Corporate House, Shantigram, Near Vaishnodevi Circle, S G Highway, Ahmedabad-382421, Gujarat

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Mundra Petrochem Limited

Introduction:

Mundra Petrochem Limited, wholly owned stepdown subsidiary of Adani Enterprises Limited (AEL) intends to setup a PVC Project at Mundra, Kachchh, Gujarat. The overall PVC Production capacity of the proposed project is 2000 KTPA (Kilo Tons Per Annum). PVC grades such as Suspension PVC (Resin), Chlorinated PVC (C-PVC), Mass PVC (bulk) and Emulsion PVC (paste) would be produced at the proposed PVC Project.

For the implementation of this project, various units are proposed to be established, including a Semi-Coke Plant, Calcium Carbide Plant, Acetylene Plant, Caustic Soda (Chlor-Alkali process) Plant, VCM Plant, PVC Plant, Ethylene Glycol Plant, and Clinker & Cement Plant.

PVC produced from the facility will serve the domestic market, thereby reducing reliance on imports. The products and by-products from the plant will be marketed domestically or internationally based on prevailing market conditions.

Ministry of Environment Forest and Climate Change has granted Environment Clearance for proposed project "Poly-Vinyl Chloride (PVC) comprising of IND-I projects i.e. Semi Coke– 2030 KTPA, Cement–6 MTPA; Clinker–4 MTPA, IND-II projects i.e. VCM– 2002 KTPA, PVC– 2000 KTPA, Ethylene Glycol–400 KTPA and IND-III projects i.e. Acetylene–860 KTPA & Caustic Soda–1310 KTPA) and Calcium Carbide–2900 KTPA (Not Specified in EIA Notification)) in land notified as Industrial area of APSEZ, Ta-Mundra, Dist-Kachchh, Gujarat." vide –

Industry – I activity: EC identification no. EC22A009GJ154137 and file no. IA-J-11011/423/2021-IA-II(IND-I) dated 26/09/2022.

Industry – II activity: EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022.

Industry – III activity: EC Identification No. - EC22A013GJ127411, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022.

As part of the company's long-term business strategy, the proposed project activities have been transferred from M/s Adani Enterprises Limited (AEL) to M/s Mundra Petrochem Limited (MPL). MPL, a wholly owned subsidiary of AEL, was incorporated under the provisions of the Company Act, 2013 to undertake various business activities related to Semi-Coke, Calcium Carbide, Cement & Clinker, VCM, PVC, Ethylene Glycol, Chlor-alkali, acetylene plants, and associated products in a phased manner. Further above granted Environment Clearances have been transferred in the name of M/s Mundra Petrochem Limited (MPL) by Ministry of Environment Forest and Climate Change (MOEFCC) vide their letter no.

1. **Industry – I activity: - File no. IA-J-11011/423/2021-IA-II(IND-I) Dated 23/12/2022.**
2. **Industry – II activity: - File no. J-11011/149/2021-IA-II(I) Dated 27/12/2022.**
3. **Industry – III activity: - File no. IA-J-11011/149/2021-IA-II(I) Dated 28/11/2022.**

Further, the Consent to Establish (CTE) is granted by the Gujarat Pollution Control Board (GPCB) vide order CTE-59301 dated 13/12/2022 and same was transferred in the name of Mundra Petrochem Limited on dated 12/04/2023.

The PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. The latest progress status of site construction activities is attached as **Enclosure – A**.

Point wise Compliance of Environmental Clearance for Industrial activity-II- Proposed VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA vide EC Identification No: EC22A020GJ133762 File No: IA-J-11011/149/2021-IA-II(I) Date: 31/08/2022 & subsequent EC Transfer vide File no. J-11011/149/2021-IA-II(I) Dated 27/12/2022.

S. No	Conditions	Status
A	**Specific Condition**	
(i)	The project proponent shall abide by all orders and judicial pronouncements made from time to time in the case related to public hearing and land which is pending with Gujarat High court	Agreed with requirements.
(ii)	3D studies of risk assessment shall be carried out for all hazardous chemicals and submitted to MoEF&CC within three (03) months. Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. Currently, HAZOP review for the process plants is conducted for all units within the PVC complex to identify potential hazards and operability problems. The review assesses associated risks and safeguards, along with risk reduction measures using guide words in a structured approach. Furthermore, a Quantitative Risk Assessment and 3D (Three-dimensional) Risk Assessment study for hazardous bulk chemicals has been carried out by a third-party reputed safety consultant. This assessment considers critical scenarios for hazardous chemicals using advanced risk assessment techniques and tools to evaluate the risk and associated mitigation measures. The final report is awaited and same shall be submitted to MoEF&CC. Recommendations for mitigation measures as per various risk assessment studies are being considered in project design, engineering & construction for site implementation.
(iii)	PP shall conduct monitoring of site-specific meteorological data & air quality modelling for winter season after commissioning of	Noted and shall be complied with the requirements.

S. No	Conditions	Status
	plant and submit the report to the Regional Office of MoEF&CC.	Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. Site specific meteorological data & air quality modelling for winter season will be conducted after commissioning of plant and same will be submitted to regional office of MoEF&CC.
(iv)	SO_2 emission standard from coal fired steam boilers within the projects is proposed to be within 100 mg/Nm3 that shall be achieved by installing suitable APCD such as Flue Gas Desulphurization for reduction of SOx emissions. The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November 2012 as amended time to time shall be followed.	Noted and shall be complied with the requirements. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. However, suitable APCD will be installed to control the SOx emission level within the stipulated norms.
(v)	Incinerator of VCM Plant shall be constructed as per regulatory requirements under The Environment (Protection) Rules, 1986 for incinerator facility. VCM monitoring in ambient air shall be conducted online at 4-5 locations within plant and at AAQM monitoring locations within the study area also. Dioxins and furan emissions shall be controlled by providing proper control systems including chillers, carbon and lime dosing and running the process as per the CPCB guidelines. Monthly VOC monitoring shall be done at vulnerable points.	Noted and shall be complied with the requirements. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. However, necessary arrangements will be made according to stipulated norms to construct the VCM incinerator and control dioxins and furan emissions. The engineering design of the VCM incinerator will comply with the applicable rules as amended in the Environment (Protection) Rules, 2010 (G.S.R.608 (E), dated 21st July 2010). Furthermore, during operations, monitoring of relevant VOCs and VCM will be conducted on a monthly basis as required.
(vi)	Properly designed and appropriate air pollution control equipment shall be attached to flue gas stacks of PVC plant, VCM plant and Ethylene Glycol Unit and flare stacks as mentioned in the environment management plan. Emission control measures shall be taken to ensure air emission standards and norms as	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site.

S. No	Conditions	Status
	prescribed by CPCB and SPCB are strictly followed.	Necessary APC equipment will be attached to flue gas stacks of PVC plant, VCM plant and Ethylene Glycol Unit and flare stacks as mentioned in the environment management plan for ensuring the emission level well within the stipulated norms by CPCB and SPCB.
(vii)	The company/PP shall ensure that there will be no impact on mangroves plantation present in study area due to the construction and operation phase of the project activities.	Noted and being complied with. Remark: Presently, the PVC project is under detailed engineering & procurement stage including simultaneous construction activities are in progress at site. The highest priority is being given to the conservation and protection of the nearby mangrove forest. Additionally, this same level of priority will be upheld during the operational phase.
(viii)	Conservation plan as submitted and approved by Chief Wildlife Warden, Gandhinagar vide letter no. WLP/32/C/297-298/2022-2023 dated 18/06/2022 shall be followed and budget earmarked shall be invested within the given time frame.	Noted and being complied with the requirements. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. Further, activities for the wildlife conservation plan have been completed. The review and maintenance of the plan are being conducted in consultation with the Forest Department, Kachchh, Bhuj. Details of activities performed according to the approved site-specific wildlife conservation/management plan are attached as **Annexure – I**. A copy of the report is being furnished to the Regional Office of the MoEF&CC along with the six-monthly compliance report.
(ix)	10% of total power requirement with respect to PVC, VCM, & Ethylene glycol process in overall PVC project will be met by purchasing renewable energy through DISCOM from suitable renewable energy generator or alternate sources.	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. However, the necessary arrangements shall be made by

S. No	Conditions	Status
		procuring renewable energy from a DISCOM through an appropriate renewable energy generator or alternative sources to meet the stipulated requirements.
(x)	There will be no groundwater extraction for this project. The total water requirement for PVC, VCM, Ethylene Glycol process will be 29,040 m3/day and for other common utilities will be 65,948 m3/day and will be met from APSEZL Seawater Desalination plant. Necessary permission in this regard shall be obtained from the concerned regulatory authority. The project proponent will treat and reuse the treated water within the factory and no waste or treated water shall be discharged outside the premises. Also, company shall explore possibility of optimizing and reducing the water consumption during detailed engineering and operational stage to reduce the OPEX for De-saline water.	Noted and shall be complied with the requirements. Remark: Water requirements for the construction activities is being met through DESAL plant. Further, this project is based on "Zero Liquid (Effluent) Discharge" concept. So, there will be no untreated water discharge outside the premises. Further, possibilities are being explored for optimizing and reducing the water consumption in detailed engineering based on technical feasibilities. Also, water conservation initiatives will further be explored during operational stage to reduce the OPEX for De-saline water.
(xi)	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MOEF&CC. Outcome from the report to be implemented for conservation scheme. Performance assessment of pollution control systems/ devices shall be done annually.	Noted and shall be complied with. Remark: Comprehensive water audit will be conducted on an annual basis during the plant operation phase and the report for the same will be furnished to Regional Office, MoEF&CC. Further, outcomes of the water audit will be implemented for conservation scheme and performance assessment of pollution control systems/ devices will also be done annually during operation phase.
(xii)	Industrial waste water shall be treated in ETP followed by RO and MEE. Treated water shall be reused back as cooling tower make up water and boiler feed water. Domestic sewage shall be treated in STP, and treated water shall be reused in gardening. No any untreated water shall be disposed of outside the plant area to avoid impact on surface water quality and Zero effluent Discharge concept shall be followed. Online flow meters shall be installed at inlet and outlet of the ETPs. Use of PPE's shall be mandatory while handling the chemicals in ETP to avoid spillage	Noted and shall be complied with. Remark: This project is based on "Zero Liquid (Effluent) Discharge" Concept and there will be no untreated water discharge outside the plant premises. Further, adequate capacity of wastewater treatment system will be installed to achieve the Zero Liquid (Effluent) Discharge". Treated water will be reused for cooling tower make up water and/or for other suitable activities inside the plant premises. Moreover, required online flow meters will be installed to measure the

S. No	Conditions	Status
		ETPs flow and adequate measures will be ensured while handling the chemicals in ETP to avoid spillage. In addition to this, STP has been set up for necessary treatment of domestic wastewater during construction activities. Environment Monitoring Report is enclosed as **Annexure - II**.
(xiii)	Company shall provide extended aeration system in the ETP scheme for removal of total Ammonical nitrogen. The existing ammonia tower in ETP scheme shall be used only for removal of free ammonia from incoming effluent.	Noted and shall be complied with. Remark: ETP shall be designed considering the nature of effluent and all requisite arrangement will be provided in the ETP to control the Ammonical Nitrogen as well as free Ammonia in the effluent (if any).
(xiv)	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond. Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. However, a separate storm water drainage system will be provided to prevent the mixing of wastewater with storm water. Guard ponds will be adequately provided to manage the initial storm runoff during rain. Additionally, oil catchers and oil traps will be installed at all feasible locations within the rain and storm water drainage system inside the factory premises.
(xv)	For safety and control of risk of any leakage from Anhydrous HCl pipeline, the pipeline shall be built using a seamless pipe with no flanges in between. Periodic Leak check with ammonia torch shall be carried out to detect the leak point along the pipeline. Toxic Leak detectors shall be installed and regularly tested at appropriate detection levels as per industry norms. Regular pipeline thickness measurements and maintenance shall be ensured. Continuous monitoring of pressure of HCl pipeline with high priority alarms, Pressure drop detection shall be monitored for promptly addressing of any leak. SCADA system shall be installed for the pipelines and interlocking shall be	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. All mandatory sensors and leak detectors will be installed according to established safety standards to mitigate the risk of leakages from the anhydrous HCl pipeline. Additionally, continuous monitoring of the HCl pipeline's pressure with high-priority alarms and pressure drop detection will be implemented to promptly address any

S. No	Conditions	Status
	done. Chlorine storage tank shall be provided with safety measures such as level indicators with alarm, chlorine gas detector, chlorine sensors and emergency blower suction hoods with storage tank, rupture disc and remotely operated auto valves.	leaks. A SCADA system will be installed for the pipelines, with appropriate interlocking mechanisms. Furthermore, the chlorine storage tank will be equipped with comprehensive safety measures, including level indicators with alarms, chlorine gas detectors, chlorine sensors, emergency blower suction hoods, rupture discs, and remotely operated automatic valves.
(xvi)	The total ash generated from the coal fired boilers shall be utilized in proposed inhouse cement manufacturing unit.	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site.
(xvii)	Public Hearing issues raised by the local people shall be addressed as per the budget and timeline submitted.	Noted and being complied with the requirements. Remarks – The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. An action plan proposed to address the issues raised during the public hearing and the socio-economic concerns in the study area. MPL has already initiated CER activities in all villages surrounding the project area. The total CER expenditure incurred in various community welfare and eco-development activities during the reporting period is INR 470.85 lakhs, with cumulative CER expenditure up to the end of the reporting period being approximately INR 1301 lakhs. The details of CER activities with expenditures are summarized in CER report enclosed as **Annexure – III.**
(xviii)	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed

S. No	Conditions	Status
	recommendations made in the EIA/EMP in respect of environmental management and risk mitigation measures relating to the project shall be implemented.	engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. By incorporating environmental protection measures and safeguards in accordance with applicable regulatory requirements and best available technologies involves several actions, such as water sprinkling on roads to control dust, setting speed limits to prevent airborne fugitive dust, and transporting materials in bulkers or covered with tarpaulin sheets. Report with Photographs of the same is enclosed as **Annexure – IV.**
(xix)	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. Safe storage practices will be implemented for hazardous chemicals. Additionally, in the interest of risk management, flame arresters will be installed in the tank farm, and solvent transfer will be conducted using appropriate equipment and pumps.
(xx)	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.	Noted and shall be complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. Disposal of hazardous waste /organic residue and spent carbon etc. will be done through co-processing in cement industries after obtaining necessary authorization. Further, evaporation salt will be disposed off to the TSDF during operation phase.
(xxi)	The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio – remediated. The sludge shall be stored	Noted and shall be complied with.

S. No	Conditions	Status
	in HDPE lined pit with proper leachate collection system	Remark: Adequate arrangements shall be provided for collection, oil recovery and storage of oily sludge.
(xxii)	The company shall undertake waste minimization measures as below: (a) Metering and control of quantities of active ingredients to minimize waste. (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapor recovery system. (f) Use of high-pressure hoses for equipment cleaning etc. to reduce wastewater generation.	Noted and shall be complied with the requirements. Remarks- Best available practices including suggested measures will be adopted for waste minimization.
(xxiii)	The green belt of 5-10 m width shall be developed in at least 33% of the total project area of Pocket 1, mainly along the plant periphery, in downward wind direction, and along roadsides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department. Total 33% of the greenbelt shall be design so that thickness of the greenbelt is increased on downwind side of the project in comparison to other sides. Additionally, 20-meter wide shall be developed in the plant side adjacent to the Mangrove Forest.	Noted and shall be complied with the requirements. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. A greenbelt of adequate width will be established in phases, primarily along the plant perimeter, in the direction of prevailing winds, and alongside roads. The selection of plant species will be carried out in consultation with the State Forest Department. It is planned that 33% of the area will be developed and maintained as a greenbelt. Tree plantation activities in nearby community villages, including roadside plantations, are being carried out in consultation with the local forest department. A copy of the implementation report is enclosed as **Annexure – V** with photographs of the plantation activity.

S. No	Conditions	Status
(xxiv)	As per the Ministry's OM dated 30.09.2020 superseding the OM dated 01.05.2018 regarding the Corporate Environmental Responsibility, and as per the action plan proposed by the project proponent to address the socio-economic and environmental issues in the study area, the project proponent, as committed, shall provide education funds in technical training centers/ support in nearby village's schools, support in health care facilities, drinking water supply and funds for miscellaneous activities like solar street lights, battery, solar panel etc., in the nearby villages. The action plan shall to be completed within time as proposed.	Noted and being complied with the requirements. Remarks – The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. The action plan to address issues raised during the public hearing and socio-economic issues in the study area is being implemented as the project progresses at the site. MPL has already initiated CER activities in all villages surrounding the project area. The total CER expenditure incurred for various community welfare and eco-development activities during the reporting period is INR 470.85 Lakhs, while the cumulative CER expenditure until the end of the reporting period is approximately INR 1301 Lakhs The details of CER activities with expenditures are summarized in CER report enclosed as **Annexure – III**.
(xxv)	The project proponent shall ensure 70% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development center/provide skill development training to village people	Noted and being complied with the requirements. Remark: Priority will be given to local people on skill basis as per the applicable law for employment. Skill development activities have already been started to impart necessary training to village people as part of Corporate Environmental Responsibility.
(xxvi)	A separate Environmental Management Cell (having qualified person with Environmental Science / Environmental Engineering / specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization / Managing Director / CEO as per company hierarchy	The proposed PVC project is currently in the final design, detailed engineering, and procurement stages. Simultaneously, construction activities are ongoing at the site A separate Environmental Management Cell, staffed with qualified individuals specializing in Environmental Science and Engineering, has been established. The head of the EMC reports directly to the

S. No	Conditions	Status
		CEO according to the company's hierarchy. Furthermore, full-fledged environment management cell cum laboratory will also be developed at site for day-to-day environment management including carrying out the environmental monitoring activities as per the operational phase environment management plan.
(xxvii)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	Noted and shall be complied with the requirements. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. Adequate Firefighting system / arrangement for protection of possible fire hazards during manufacturing process in material handling will be done as per the norms.
(xxviii)	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent to be utilized for irrigation/gardening, real time monitoring system shall be installed at the ETP outlet	Noted and shall be complied with the requirements. Remark: Continuous online (24x7) monitoring system for stack emissions will be installed for measurement of flue gas discharge and the pollutants concentration as per CPCB Guideline and necessary arrangements will be made for transmission of data to the CPCB / SPCB server during operation phase. Further, as this project is on "Zero Liquide Discharge" Concept, real time monitoring system will be installed at the ETP outlet as per CPCB Guideline.
(xxix)	PP to set up occupational health Centre for surveillance of the worker's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.	Noted and shall be complied with the requirements. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stages. Simultaneously, construction activities are ongoing at the site. Regular health check-up is being done and fitness reports of workers / employees during construction phase are maintained.

S. No	Conditions	Status
		Additionally, upon starting operations, regular occupational health surveillance of workers will be conducted, and records will be kept accordingly. Further, it will be ensured that workmen are equipped with all necessary PPEs for Personal protection during construction as well as operational activities.
(xxx)	PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12th August 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.	Noted and being complied with the requirements. Remarks: Regular awareness programs are being conducted in nearby community areas to promote the ban on single-use plastics along with other important environmental conservation issues. A copy of this information is enclosed as **Annexure - VI**.
B	**General Conditions**	
(i)	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted and agreed with requirements.
(ii)	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	Noted and being complied with the requirements. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site.

S. No	Conditions	Status
		Energy efficiency measures are being integrated into the project design and engineering. High-quality LED lighting equipment will be installed in offices and residential areas for energy conservation and environment betterment.
(iii)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (Day time) and 70 dBA (Nighttime).	Noted and being complied with. Remark: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. Additionally, ambient noise quality monitoring (ANQM) is being conducted at designated locations within the project site and surrounding villages by an independent NABL accredited laboratory. The results of the ANQM adhere to the standards specified under the E(P)A Rules, 1986. The Environment Monitoring report is attached as **Annexure – II**.
(iv)	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Noted and being complied with the requirements. Remark: To enhance the socio-economic conditions of the study area, various eco-developmental measures, including community welfare activities, are being implemented in a phased approach under Corporate Environmental Responsibility (CER) with the involvement of local villages and administration. To understand the current social status and needs of the local community, a "Baseline & Need Assessment Study" was conducted by a third-party professional agency, involving various stakeholders such as local villagers and administration. The recommendations from this study have been incorporated into the CER plan for phased implementation.

S. No	Conditions	Status
		MPL has started CER activities in all villages around the project area. The total CER expenditure for various community welfare and eco-development activities during the reporting period is INR 470.85 Lakhs, with cumulative CER expenditure up to the end of the reporting period approximately INR 1301 Lakhs, in accordance with project progress. The details of CER activities implemented during the reporting period along with expenditures are summarized in CER report enclosed as **Annexure – III**.
(v)	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Noted and shall be complied with the requirements. Adequate funds for EMP / environment management / pollution control measures as part of CAPEX & OPEX have been kept for implementing and complying the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the state Government.
(vi)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad / Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal.	Environmental Clearance letter has been submitted to concerned panchayats (all 15 villages) & The Taluka Development Officer (Rural Local Body), The District Development Officer, District Industries Center, and the local NGO / trust from whom suggestions / representations received during public hearing. Letters no. are as under and reference Ack. copy of submission is enclosed as **Annexure - VII.** 1). AEL/MPL/ENV/EC/2022-September/01 Dated 02/09/2022. 2). AEL/MPL/ENV/EC/2022- September/03 Dated 02/09/2022. 3). AEL/MPL/ENV/EC/2022-September/06/01 to 15 Dated 02/09/2022.
(vii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of	As per MoEF&CC Office Memorandum dated 14th June, 2022, Six monthly compliance report of stipulated environment clearance conditions including results of monitored data being uploaded on PARIVESH Portal & company's

S. No	Conditions	Status
	MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	website i.e https://www.adanienterprises.com.
(viii)	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	The proposed PVC project is currently in the final design, detailed engineering, and procurement stages. Simultaneously, construction activities are ongoing at the site However, Environmental Statement for the year 2024-25 have been Submitted to the Gujarat Pollution Control Board and IRO, Gandhinagar through vide our letter no. MPL/ENV/GPCB – Form – V/ 2025 – May/02 dated 12/05/2025 i.e within stipulated time period and same is also available on Companay's Website i.e https://www.adanienterprises.com. Copy of the submission is enclosed as **Annexure – VIII**.
(ix)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB / Committee and may also be seen at Website of the Ministry and at https://parivesh.nic.in/. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	The advertisement stating "the project has been accorded environmental clearance by MoEF&CC and also displayed on company website" have been published on following news papers on 5th September, 2022. (i.e within 7 days of grant of Environmental Clearance). 1. Kutch Mitra (Gujarati Language) 2. Gujarat Samachar (Gujarati Language) 3. The Times of India (English Language). Copies of the same have already been submitted to concerned authorities through vide our letter no. AEL/MPL/ENV/MoEF&CC/2022 – September/05 dated 06/09/2022. Copy enclosed as **Annexure – IX**."

S. No	Conditions	Status
(x)	The project authorities 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 the project.	Noted and complied. The requisite information are being submitted to authority as part of six monthly EC compliance report. Remarks: The proposed PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. The date of financial closure is 25th April 2024 when MPL signed the financing documents with the lead banks. The commencement of land development including earth work preparation, piling for foundation/construction activities have been initiated after award of consent of establishment (CTE) from the state pollution control board i.e. 13th Dec. 2022 after obtaining necessary environmental clearance from the MoEF&CC. As per schedule, the production/commercial operation of all the proposed units is expected by 1st October 2027.
(xi)	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Agreed with requirement.

Enclosure

Enclosure No.	Name
A	Progress status (Photographs) of site construction activities.

Annexures

Annexure No.	Name
I	Activities as per approved Wild Life Conservation Plan.
II	Environment Monitoring Report
III	CER Activities
IV	Pollution Control Measures as per EMP.
V	Tree Plantation Activities
VI	Awareness Program on "Ban on Single use Plastic"
VII	Letter for submission of EC to Local Authorities/NGOs.
VIII	Copy of submission of Environment Statement – Form – V.
IX	Letter for submission of EC and News Paper to concern authorities.

Enclosure – A

Construction activities for the PVC Project at Vill: Vandh & Tunda, Ta: Mundra Dist: Kutch.

Os&Us Area - PVC Cooling Tower

Os&Us Area - Boiler Package

Os&Us Area - VCM Sphere

PVC Plant - Equipment Erection

Overview of PVC Plant

VCM Gas Holder – Tankage Erection Work – PVC Plant

VCM Plant - Reactor Area

VCM Plant - Modular Assembly Yard

VCM Sphere – RCC Sub Structure Work

VCM Plant - AG Piping Erection

Acetylene Plant - Acetylene Silo

Acetylene Plant - Acetylene Silo

Acetylene Plant - Acetylene Gas Holder

Chlor-Alkali Plant - Primary Brine Tank

Chlor-Alkali Plant - HCL Synthesis Tank

Chlor-Alkali Plant - Chiller Unit

Chlor-Alkali Plant

CaC2 Plant - Semi Coke Dryer

CaC2 Plant - Gas Boosting Station

Calcium Carbide Furnace Workshop

Annexure – I

Activities for Wildlife Conservation Plan

An awareness program on "Wildlife Conservation" was conducted in a nearby village. The program covered the need for wildlife conservation, its definition, importance, and methods. It also highlighted actions taken by Mundra Petrochem Limited in consultation with Adani Foundations for surrounding villages and coastal areas.

Status of Wild Life conservation plan.

Sr. No.	Activity	Villages / Area	Status	Remark
1	Plantation program for coservation of habitat	Nearby Villages	Fulfilled	88536+ trees have been planted at nearby villages.
2	Awareness programme for "Wild life" Conservation – Educational Program.	Tunda (1st Year)	Fulfilled *	Awareness programme have been conducted under Eco Club Programne.
		Vandh (2nd Year)	Fulfilled *	
		Navinal (3rd Year)	Fulfilled*	Awareness programme Have beenconducted under Eco Club Programne.
		Siracha (4th Year)	Fulfilled*	
		Kandagra (5th Year)	Fulfilled*	Awareness programme have been conducted under Eco Club Programne.
3	Artificial Concreate water pond of 1000 lit capacity to provide drinking water facility for wild animals.	2 villages in study area	Fulfilled	2 Nos. "Guzzler" – Drinking water facilities of more than 1000 liters capacity have been provided for wild life animals at the locations recommended by District Forest Department, Gov. of Gujarat.
4	Mangrove Plantation (1000 no. of plant per Ha.)	Near by project area.	Fulfilled	10000 numbers of mangrove plantation have been done in vicinity of plant premises.

* : 70 number of schools from neaby 16 villages and includes mundra and Mandavi towns have been covered under "ECO CLUB" which are formed for generating awareness on environmental best practices, wildlife conservation, Mangrove conservation, sustainability and Earth eco system.

Wildlife awareness programs have been conducted at schools of nearby villages under the Eco Club initiative. 70 schools from surrounding villages, including Mundra and Mandavi town areas, participated in these programs aimed at promoting environmental awareness on topics such as wildlife conservation, alternatives to single-use plastics, and mangrove conservation.

Over 6000 students participated in these programs, gaining an understanding of the importance of their local area and the dependence of life on barren land as well as coastal regions.

Students were also educated about the sanctuary and reserve forest areas located in the district and the measures taken to protect wildlife.

Mangroves are salt-tolerant trees and shrubs that thrive in coastal intertidal zones. These remarkable ecosystems are found in the coastal areas of Mundra and Mandavi talukas near the MPL premises. Mangrove forests are essential not only to the health of coastal environments but also to the communities that rely on them. This report highlights the significance of mangrove conservation.

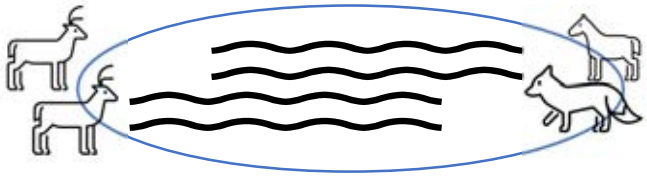
Mangrove plantation in an area of 7+ Ha have been carried out at nearby PVC Project area – Kotadi Creek with planting 72000+ numbers of mangrove species.



The theme – "Mangroves: Vital Guardian of Coastal Ecosystems" highlighted their role in protecting coastlines, supporting fisheries and sustaining local communities. Biodiversity expert from the company, Professors from the collages elaborated the importance of mangroves with how mangroves provide myriad of ecological, economic and social benefits. This awareness session also emphasized on how mangrove serve as critical habitats for a wide array of marine and terrestrial species, including fish, birds and invertebrates. The dense root systems of mangroves stabilize shorelines, preventing erosion and protecting coastal areas from the impacts of storms and rising sea levels.


Awareness sessions were conducted among the employees of MPL about the ecological and global importance of wildlife and biodiversity. Understand the significance and entire phenomenon of Kutch's unique ecosystems.

Furthermore, in accordance with the approved wildlife conservation plan, two "Guzzler" drinking water facilities for wild animals have been constructed in consultation with and under the supervision of the District Forest Department, Kutch, at the Reserve forest area, Navinal Dhuvo, near Bardimata Temple.



2 numbers of Guzzler have been constructed at Reserve forest area, Navinal Dhuvo, Near Baradi Mata Mandir, Navinal

Letter from Forest Department for Completion of "GUZZLER" – Drinking water facilities for animals.

પ્રતિ શ્રી,

મુન્દ્રા પેટ્રોકેમિકલ્સ લિમિટેડ (અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ),

વેસ્ટ પોર્ટ રોડ,
ગામ: વાંઢ / ટૂંડા
તાલુકા: મુન્દ્રા

વિષય: નવીનાળ ઢૂવા ખાતે "ગઝલર્સ" (કુલ સંખ્યા – ૨) - પાણી ના પોઇન્ટ નું નિર્માણ – બાબતે.

સંદર્ભ: પીસીસીએફ, ગુજરાત પત્ર નં. WLP/32/C/297-298/2022-23, તા: ૧૮.૦૬.૨૦૨૨.

પ્રતિ શ્રી,

સાદર ઉપરોક્ત વિષયના સંદર્ભમાં જણાવવાનું કે, ચીફ વાઇલ્ડ લાઇફ વોર્ડન, ગુજરાત દ્વારા મંજૂર કરાયેલ વાઇલ્ડ લાઇફ સંરક્ષણ યોજના ઓ માની એક કામગીરી જેવી કે, નવીનાળ ઢૂવા ખાતે આરક્ષિત જંગલ વિસ્તારમાં આવેલ બરડી માતા ના મંદિર નજીક "ગઝલરર્સ" (કુલ સંખ્યા – ૨) - વન્ય પ્રાણી માટે પાણી ની સુવિધા નું નિર્માણ અમારી જાણ અંદર સફળતાપૂર્વક પૂર્ણ થયું છે જે તે વિસ્તાર માં વસતા વન્ય જીવનના આરામ અને મૂળને પૂર્ણ કરશે.

તમારો આભાર,

રેન્જ ફોરેસ્ટ ઓફિસર
મુંદ્રા નોર્મલ રેન્જ

M/S. MUNDRA PETROCHEMICAL LIMITED (MPL)

Six Monthly Environmental Monitoring Report
Mundra Petrochemicals Limited (MPL) Located at near Village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat

Month: October 2024 to March 2025

Submitted By

UniStar Environment & Research Labs Pvt. Ltd.
White House, Near GIDC Office, Char Rasta, Vapi, Gujarat, India – 396195

M/S. MUNDRA PETROCHEM LIMITED (MPL)

Six Monthly Environment Monitoring Report for Green PVC Project near Village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat

QUALITY CONTROL							
Name of Publication	Six Monthly Environmental Monitoring Report for Green PVC Project near Village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat						
SO No.	Service Order	**Issue No.**	1	**Revision No.**	01	**Released**	March 2025
Prepared & Managed By	MS. Pooja Gandhi		**Approved by**		Mr. Jaivik Tandel		
Released By	Unistar Environment and Research Labs Pvt. Ltd.						

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LIST OF ANNEXURES

ABBREVIATIONS AND ACRONYMS

MPL	:	Mundra Petrochemicals Limited
APL	:	Adani Power Limited.
APSEZL	:	Adani Ports & Special Economic Zone Limited
UERL	:	UniStar Environment and Research Labs Private Limited
CPCB	:	Central Pollution Control Board
EIA	:	Environment Impact Assessment
EMP	:	Environmental Management Plan
ETP	:	Effluent Treatment Plant
KLD	:	Kilo Liter Day
MOEFCC	:	Ministry of Environment, Forest & Climate Change
C_2H_2	:	Acetylene
CaC_2	:	Calcium Carbide
C_2H_3Cl	:	Vinyl chloride
GoI	:	Government of India
GPCB	:	Gujarat Pollution Control Board
PVC	:	Polyvinyl chloride
VCM	:	Vinyl Chloride Monomer

1 EXECUTIVE SUMMARY

1.1 Introduction

1.1.1 About ADANI Group

Adani Group is India's fastest growing corporate catering to a billion aspirations. Adani Group is a diversified organization comprising of 7 publicly traded companies in India. Adani Group has headquartered in Ahmedabad, in the state of Gujarat, India. Over the years, Adani Group has positioned itself to be the market leader in its transport logistics and energy utility portfolio businesses focusing on large scale infrastructure development in India with O & M practices benchmarked to global standards, with key businesses across Resources - mining & trading, Logistics – shipping, rail and airport terminals, Energy – Gas (LNG, City Gas), Thermal power generation, Renewables (Solar & Wind) and transmission energy infrastructure, Agro commodities, Ancillary industries and Real estate etc. Adani Group is the largest private power producer in India.

Adani owes its success and leadership position to its core philosophy of 'Nation Building' driven by ***'Growth with Goodness'*** - a guiding principle for sustainable growth. Adani is committed to improve its ESG footprint by re-aligning its businesses with emphasis on climate protection and increasing community outreach through its CSR programme based on the principles of sustainability, diversity and shared values.

Adani group is now executing green PVC project (Green PVC) at near Village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat

1.1.2 About UniStar Environment and Research Labs Private Limited (UERL)

UniStar Environment and Research Labs Private Limited is a company which provide efficient and economical services in the areas of environmental pollution control/monitoring and chemical analysis & research activities to various industries and institutions. UniStar provides technical consultancy backed by well-established sophisticated analytical laboratories, to comply with Statutory requirements and directives of the Pollution Control Board/ Committees under various Environment Pollution Control Acts. and Rules. We also carry out post Environmental Clearance monitoring and assist our valued customers in preparation of Half-yearly Environmental Clearance Compliance report.

- Ministry of Environment, Forest and Climate Change (MOEFCC), GOI recognized the Laboratory under the Environment Protection Act-1986 which is valid up to – 18/10/2027.
- ISO/IEC 17025 Accredited Laboratory by National Accreditation Board for Testing and Calibration Laboratories (NABL) which is valid up to – 22/09/2026.
- Recognized Environmental Auditor Laboratory by Gujarat Pollution Control Board, Gandhinagar, Gujarat, India which is valid up to 31/12/2025.

  Copy of relevant certificates are attached as Annexure I.

1.2 Brief Description of Project

The proposed Green PVC Project is having various major units such as, Semi-coke Plant, Calcium Carbide Plant, Acetylene Plant, VCM Plant, PVC Plant, Caustic Soda Plant, Ethylene Glycol Plant & Cement Plant. The associated infrastructure facilities such as boiler, final/intermediate product storages etc, utilities, pipelines, ancillary facilities for interconnecting /transferring of materials between pockets, loading/unloading, roads, drainages, pipe racks, trenches, cable trays, non-plant buildings, laboratories, fabrication yards, batching Plant, dispatch section, general stores/ warehouse, fire & safety department, maintenance workshop, occupational health centre etc. will also be established.

2 ENVIRONMENTAL MONITORING

2.1 General Philosophy & Scope of Work

The environmental monitoring encompassed various disciplines and environmental attributes, including air quality, water quality, noise levels, and soil conditions. As per the given scope of work for environmental monitoring by MPL, we have prepared Environmental Monitoring Plan as per below.

Sr. No	Discipline	Location	Parameter	Frequency
1.	Ambient Air Quality Monitoring	Seven Locations	As per NAAQMS, 2009	Monthly
2.	Ambient Noise Monitoring	Seven Locations	Day Time & Nighttime - Noise Levels in Leq dB(A)	Monthly
3.	Treated Sewage water	One Location	pH, Bio-Chemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Total Suspended Solids (TSS), Faecal Coliform (FC) (Most Probable Number per 100 millilitre, MPN/100ml, Nitrogen-Total, Phosphorus-Total	Monthly
4.	Ground water	Eight Location	pH, Temperature, Turbidity, conductivity, Total Dissolved Solids, Bio-Chemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Salinity, Ammonical Nitrogen, Total Alkalinity, Total Hardness, Calcium, Magnesium, Chloride, Sulphate, Nitrate, Fluoride, Phenolic Compound, Sodium, Potassium, Calcium Hardness, Magnesium Hardness, Lead, Iron, Cadmium, Manganese, Copper, Arsenic, Chromium, Mercury, Nickel, Zinc, Total Nitrogen, Cyanide, Total Phosphorous, Sodium Absorption Ratio (SAR)	Pre & Post Monsoon
5.	Surface Water	Four Location	pH, Colour, Conductivity, Total Dissolved Solids, Bio-Chemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Dissolved Oxygen, Total Hardness, Calcium Hardness, Magnesium Hardness, Chloride, Sulphate, Nitrate, Fluoride, Phenolic Compound, Ammonical Nitrogen, Lead, Iron, Cadmium, Manganese, Copper, Arsenic, Chromium, Boron, Mercury, Zinc, Cyanide, Sodium Absorption Ratio (SAR)	Pre & Post Monsoon
6.	Surface Water (Marine)	Three Location	pH, Colour, Odour, turbidity, Total Suspended Solids, Total Dissolved Solids, Bio-Chemical Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Dissolved Oxygen, Oil & Grease, Lead, Iron, Cadmium, Manganese,	Pre & Post Monsoon

2.2 Sampling & Analysis

The selection of methods for sampling, preservation, and analysis holds significant importance in environmental monitoring. To ensure the highest quality in environmental sampling and analysis, the Central Pollution Control Board (CPCB) has established guidelines for these processes. Adhering to these guidelines, specific methods for sampling and analysis of environmental samples have been chosen and implemented. Instrument used in sampling are calibrated from NABL accredited Laboratory. Details are as follows:

Sr. No	Name of Instrument Used	ID No./Sr. No	Make/Model	Calibration Date	Cal. Valid up to
1.	Respirable Dust Sampler PM 10	UERL/AIR/RDS/47/ 1816-DTJ-2013	Envirotech/ APM 460-BL	17/12/2024	16/12/2025
2.	Fine Particulate Sampler PM 2.5	UERL/AIR/FPS/22/ 44-DTC-2012	Envirotech/ APM 550-MINI	17/12/2024	16/12/2025
3.	Respirable Dust Sampler PM 10	UERL/AIR/RDS/34/ 1768-DTB-2013	Envirotech/ APM 460-BL	19/12/2024	18/12/2025
4.	Fine Particulate Sampler PM 2.5	UERL/AIR/FPS/21/ 20-DTC-2012	Envirotech/ APM 550-MINI	20/12/2024	19/12/2025
5.	Respirable Dust Sampler PM 10	UERL/AIR/RDS/027/ 1751-DTA-2013	Envirotech/ APM 460-BL	20/12/2024	19/12/2025
6.	Fine Particulate Sampler PM 2.5	UERL/AIR/FPS/050/ 129-DTL-2012	Envirotech/ APM 550-MINI	20/12/2024	19/12/2025
7.	Sound Level Meter	UERL/AIR/SLM/09A	Envirotech - SLM 100 /24 DTE 2008	16/12/2024	15/12/2025
8.	Sound Level Meter	UERL/AIR/SLM/09B	Envirotech - SLM 100 /310 DTK 2015	16/12/2024	15/12/2025
9.	Sound Level Meter	UERL/AIR/SLM/09C	Extech / SDL 600	16/12/2024	15/12/2025

***Calibration certificates are attached in Annexure II**

2.2.1 Ambient Air Quality Sampling and Analytical Techniques

The techniques used for ambient air quality monitoring and its permissible limit are given in following table.

Sr. No.	Parameter	Technique	Technical protocol	Permissible Limit (As per NAAQS)
1.	Particulate Matter as PM10	Respirable Dust Sampler (Gravimetric method)	IS - 5182, Part - 23	100
2.	Particulate Matter as PM2.5	fine particular Sampler (Gravimetric method)	IS - 5182, Part - 24	60
3.	Sulphur Dioxide as SO2	Modified West and Gaeke	IS - 5182, Part - 2	80
4.	Nitrogen Dioxide as NO2	Jacob &Hochheiser	IS - 5182, Part - 6	80
5.	Carbon Monoxide as CO	Gas Analyser (CO)	IS - 5182, Part - 10	4.0
6.	Ozone as O3	UV Spectrophotometer	IS - 5182, Part - 9	180
7.	Ammonia as NH3	Titrimetric Method	IS - 5182, Part - 25	400
8.	Lead as Pb	AAS Method	IS - 5182, Part - 22	1.0
9.	Nickel as Ni	AAS Method	IS - 5182, Part - 26	20
10.	Arsenic as As	AAS Method	IS - 5182, Part - 22	6.0
11.	Benzene as C6H6	GC Method	IS - 5182, Part - 11	5.0
12.	Benzo (a) Pyrene (BaP)	GC Method	IS - 5182, Part - 12	1.0

2.2.2 Ambient Noise Level Sampling Techniques

The techniques used for ambient air quality monitoring and its permissible limit are given in following table.

Sr. No.	Parameter	Technique	Technical protocol	Permissible Limit (As per CPCB)
1.	Ambient Noise Level Monitoring at Industrial Area	Noise Meter (Leq)	IS : 9989 : 1981	Day Time – 75 dB Night Time – 70 dB
2	Ambient Noise Level Monitoring at Residential Area	Noise Meter (Leq)	IS : 9989 : 1981	Day Time – 55 dB Night Time – 45 dB

2.2.3 Ground Water Sampling & Analysis Techniques

Sr. No.	Parameter	Technical protocol	IS 10500 Standard Limits for drinking water	
			Desirable limit	Per. Limit in the Abs. of Alt. Source
1	pH	IS 3025(Part 11):2022	6.5-8.5	NR
2	Temp	IS 3025(Part 9):1984	NS	NS
3	Turbidity	IS 3025(Part 10):1984	1	5
4	TDS	IS 3025(Part 14):1984	500	2000
5	Electrical Conductivity	IS 3025(Part 16):2024	NS	NS
6	COD	IS 3025(Part 58): 2006	NS	NS
7	BOD	IS 3025(Part 44): 1993	NS	NS
8	Phenol	IS 3025(Part 43): 2020	0.001	0.002
9	Chlorides	IS 3025(Part 32): 1988	250	1000
10	Sulphate	IS 3025(Part 24): 2022	200	400
11	Total Hardness	IS 3025(Part 21): 2009	200	600
12	Ca++ Hardness	APHA 23rd Ed,2017,3500 Ca. B	NS	NS
13	Mg++ Hardness	APHA 23rd Ed,2017,3500 Mg. B	NS	NS
14	Total Alkalinity	IS 3025(Part 23): 1986	200	600
15	Nitrate	APHA 23rd Ed,2017,4500 NO3-B	45	NR
16	Fluoride	IS 3025(Part 60): 2008	1	1.5
17	Sodium	APHA 23rd Ed,2017,3500 Na. B	NS	NS
18	Potassium	APHA 23rd Ed,2017,3500 Mg. B	NS	NS
19	Calcium	APHA 23rd Ed,2017,3500 Ca. B	75	200
20	Magnesium	APHA 23rd Ed,2017,3500 Mg. B	30	100
21	Salinity	APHA 23rd Ed,2017,2520-B, 2-60	NS	NS
22	Total Nitrogen	APHA 23rd Ed,2017,4500 NH3 - B	0.5	NR
23	Total Phosphorous	APHA 23rd Ed,2017,4500-P, D	NS	NS
24	Dissolved Oxygen	APHA 23rd Ed,2017,4500-O, B	NS	NS
25	Ammonical Nitrogen	IS 3025(Part 34) (ISE Method):1988	NS	NS
26	SAR	By Calculation	NS	NS
	Heavy Metals			
27	Arsenic (as As)	APHA 23rd Ed,2017,3114-C	0.01	0.05
28	Cadmium (as Cd)	IS 3025(Part 41): 1992	0.003	NR
29	Chromium (as Cr)	APHA 23rd Ed,2017,3111-B	0.05	NR
30	Copper (as Cu)	APHA 23rd Ed,2017,3111-B	0.05	1.5
31	Cyanide (as CN)	IS 3025(Part 27): 1986	0.05	NR
32	Iron (as Fe)	IS 3025(Part 53): 2003	0.3	NR
33	Lead (as Pb)	IS 3025(Part 47): 1994	0.01	NR
34	Mercury (as Hg)	APHA 23rd Ed,2017,3112-B	0.001	NR

Sr. No.	Parameter	Technical protocol	IS 10500 Standard Limits for drinking water	
			Desirable limit	Per. Limit in the Abs. of Alt. Source
35	Manganese (as Mn)	APHA 23rd Ed,2017,3500 Mn. B	0.1	0.3
36	Nickel (as Ni)	IS 3025(Part 54): 1994	0.02	NR
37	Zinc (as Zn)	IS 3025(Part 49): 1994	5	15
38	Total Coliform	IS 1622:1981	Shall not be detectable	
39	Faecal Coliforms	IS 1622:1981	Shall not be detectable	

2.2.4 Surface Water Sampling & Analysis Techniques

Sr. No.	Parameter	Technical protocol	Classification for Inland Surface Water (CPCB)
			Class E
1	pH	IS 3025(Part 11):2022	6.5 to 8.5
2	Dissolved Oxygen	APHA 23rd Ed,2017,4500-O, B	NA
3	TDS	IS 3025(Part 14):1984	2100
4	Electrical Conductivity	IS 3025(Part 16):2024	2250
5	BOD	IS 3025(Part 44): 1993	NA
6	Colour	IS 3025(Part 4):2021	-
7	Total Hardness	IS 3025(Part 21): 2009	NA
8	Ca++ Hardness	APHA 23rd Ed,2017,3500 Ca. B	NA
9	Mg++ Hardness	APHA 23rd Ed,2017,3500 Mg. B	NA
10	Chlorides	IS 3025(Part 32): 1988	600
11	Sulphate	IS 3025(Part 24): 2022	1000
12	Nitrate	APHA 23rd Ed,2017,4500 NO3-B	NA
13	Fluoride	IS 3025(Part 60): 2008	-
14	Phenol	IS 3025(Part 43): 2020	NA
15	Ammonical Nitrogen	IS 3025(Part 34) (ISE Method):1988	NA
16	SAR	By Calculation	26
17	Copper (as Cu)	APHA 23rd Ed,2017,3111-B	NA
18	Iron (as Fe)	IS 3025(Part 53): 2003	NA
19	Manganese (as Mn)	APHA 23rd Ed,2017,3500 Mn. B	NA
20	Mercury	APHA 23rd Ed,2017,3112-B	NA
21	Cadmium (as Cd)	IS 3025(Part 41): 1992	NA
22	Arsenic (as As)	APHA 23rd Ed,2017,3114-C	NA
23	Cyanide	IS 3025(Part 27): 1986	NA
24	Lead (as Pb)	IS 3025(Part 47): 1994	NA
25	Zinc	IS 3025(Part 49): 1994	NA
26	Chromium (as Cr)	APHA 23rd Ed,2017,3111-B	NA
27	Boron	IS 3025(Part 49): 1994	2
28	Total Coliform	IS 1622:1981	-
29	COD	IS 3025(Part 57): RA 2021	-

2.2.5 Surface Water (Marine) Sampling & Analysis Techniques

Sr. No.	Parameter	Technical protocol	Classification for Coastal marine water (CPCB)
			SW-I
1	pH	IS 3025(Part 11):2022	6.5 to 8.5
2	Dissolved Oxygen	APHA 23rd Ed,2017,4500-O, B	5
3	Colour & Odour	IS 3025(Part 4):2021 & IS 3025(Part 5):1983	No Colour No Odour
4	Floating Matters	-	None
5	Total Suspended Solid	APHA 23rd Ed,2017,2540-D	None from Sewage or Industrial waste Origin
6	Turbidity	IS 3025(Part 10):1984	-
7	BOD	IS 3025(Part 44): 1993	-
8	Oil & Grease	IS 3025(Part 39): 1991	0.1
9	Mercury as Hg	APHA 23rd Ed,2017,3112-B	0.01
10	Lead (as Pb)	IS 3025(Part 47): 1994	0.01
11	Cadmium (as Cd)	IS 3025(Part 41): 1992	0.01
12	Iron (as Fe)	IS 3025(Part 53): 2003	-
13	Manganese (as Mn)	APHA 23rd Ed,2017,3500 Mn. B	-
14	Total Coliform	IS 1622:1981	-
15	Sludge Deposits, Solid refuse floating Solids, Oil Grease and Scum	-	-
16	COD	IS 3025(Part 57): RA 2021	-

2.2.6 Treated Water Sampling & Analysis Techniques

The techniques used for waste water Sampling and analysis its permissible limit is given in following table.

Sr. No.	Parameter	Technical protocol	Permissible Limit (As per MOEFCC notification no. GSR 1265(E) dt. 13 Oct. 2017)
1.	Treated Effluent from STP		
	pH	IS 3025(Part 11):2022	6.5 to 9.0
	BOD	APHA 23rd Ed,2017,5210-B	<30
	COD	IS 3025(Part 58): 2006	-
	TSS	APHA 23rd Ed.,2017, 2540 – D	<50
	Nitrogen Total	APHA 23rd Ed,2017,4500-B, C	--
	Phosphorous Total	APHA 23rd Ed,2017,4500-P, D	--
	Faecal Coliform	IS 1622:1981	<1000

2.3 Location (map showing general location, Monitoring location and project boundary) with coordinates & Monitoring details.

The general location of the project is shown in ***Map 2-1*** shows the study area of 10 Km radius around the project site on Google Earth downloaded image.

The sampling location used for monitoring purpose is taken after due consideration with baseline monitoring location, availability of power & weather condition etc. Also In order to evaluate the quality of sewage water, samples were acquired from the sewage water treatment plant for comprehensive analysis. These analyses encompassed physico-chemical, general-chemical, and microbiological parameters.

Sr. No.	Sampling Type	Sampling Location	Type of Area	Coordinates
1.	Ambient Air & Noise	Project Site (Pocket – 1)	Industrial Area	22.785943° N, 69.566645° E
2.	Ambient Air & Noise	Project Site (Pocket – 2)	Industrial Area	22.78221° N, 69.559541° E
3.	Ambient Air & Noise	Project Site (Pocket – 3)	Industrial Area	22.802171° N, 69.552084° E
4.	Ambient Air & Noise	Near Fabrication & Batching Plant	Industrial Area	22.807563° N, 69.704170° E
5	Ambient Air & Noise	Village - Navinal	Rural Area	22.829246° N, 69.598332° E
6.	Ambient Air & Noise	Village - Zarpara	Rural Area	22.837942° N, 69.646225° E
7.	Ambient Air & Noise	Village - Vandh	Rural Area	22.809106° N, 69.53562° E
8.	Trade Effluent – STP Outlet	Project Site (Pocket – 1)	Industrial Area	22.784881° N, 69.566798°E

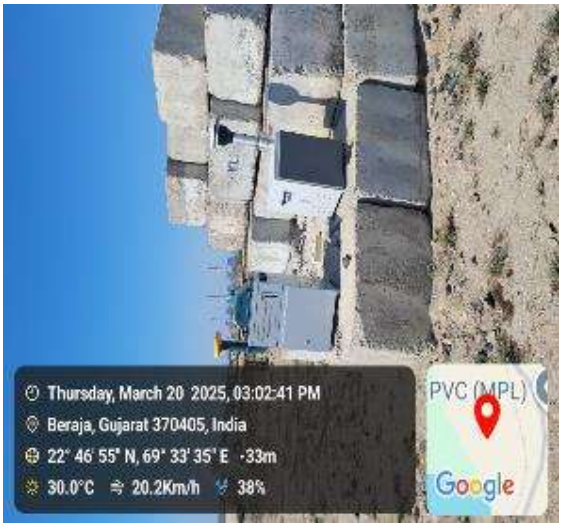
Photograph 2-1: Proposed Project Site (Current Status of Land)

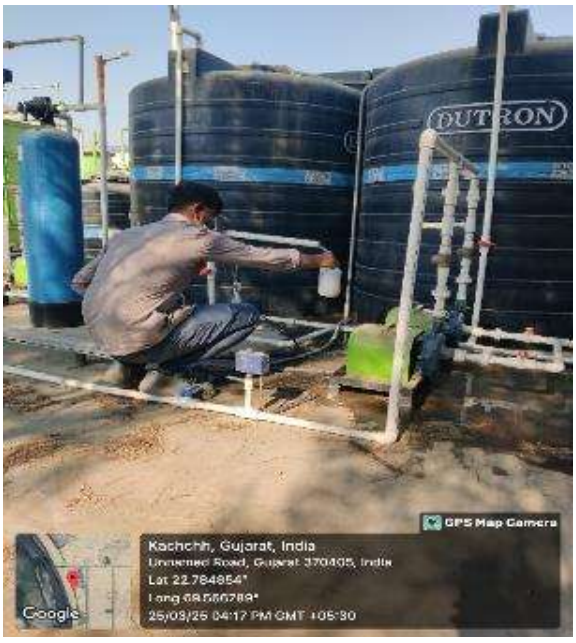
Pocket – 1

Pocket – 2

Pocket 3

Photograph 2-2: Photographs of monitoring

	
Project Site (Pocket – 1)	**Project Site (Pocket – 2)**
	
Project Site (Pocket – 3)	**Near Fabrication & Batching Plant**

	
Village Navinal	**Village Vandh**
	
Village-Zarpara	**Project Site (Pocket – 1)** **STP Sample Collection**

Surface Water - Navinal Village

Surface Water - Zarpara Village

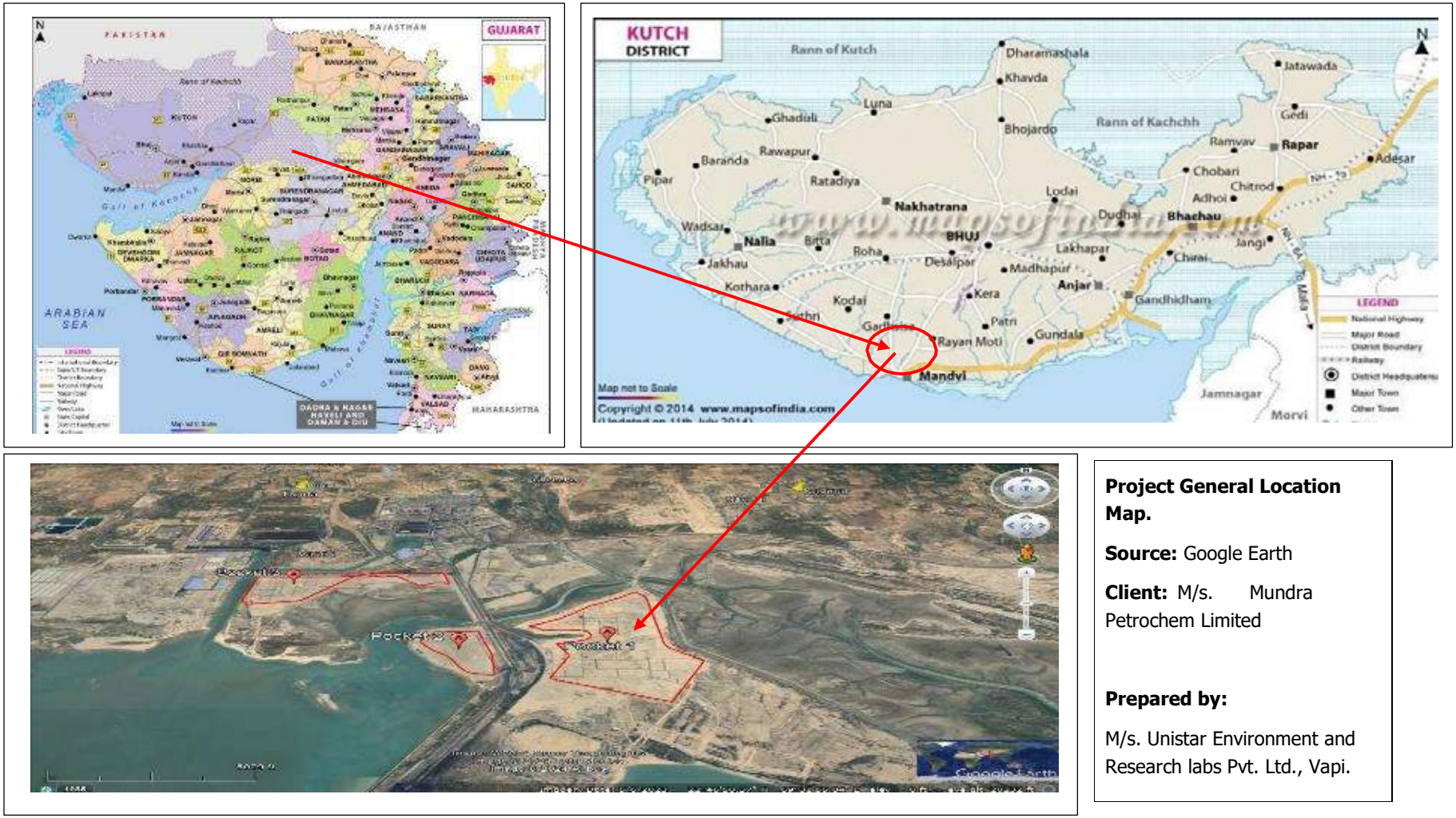
Ground Water- Navinal Village

Marine Water – Kotadi Creek

Project Site (Pocket – 1)

Project Site (Pocket – 3)

Map 2-1: Images Project General Location Map



Project General Location Map.

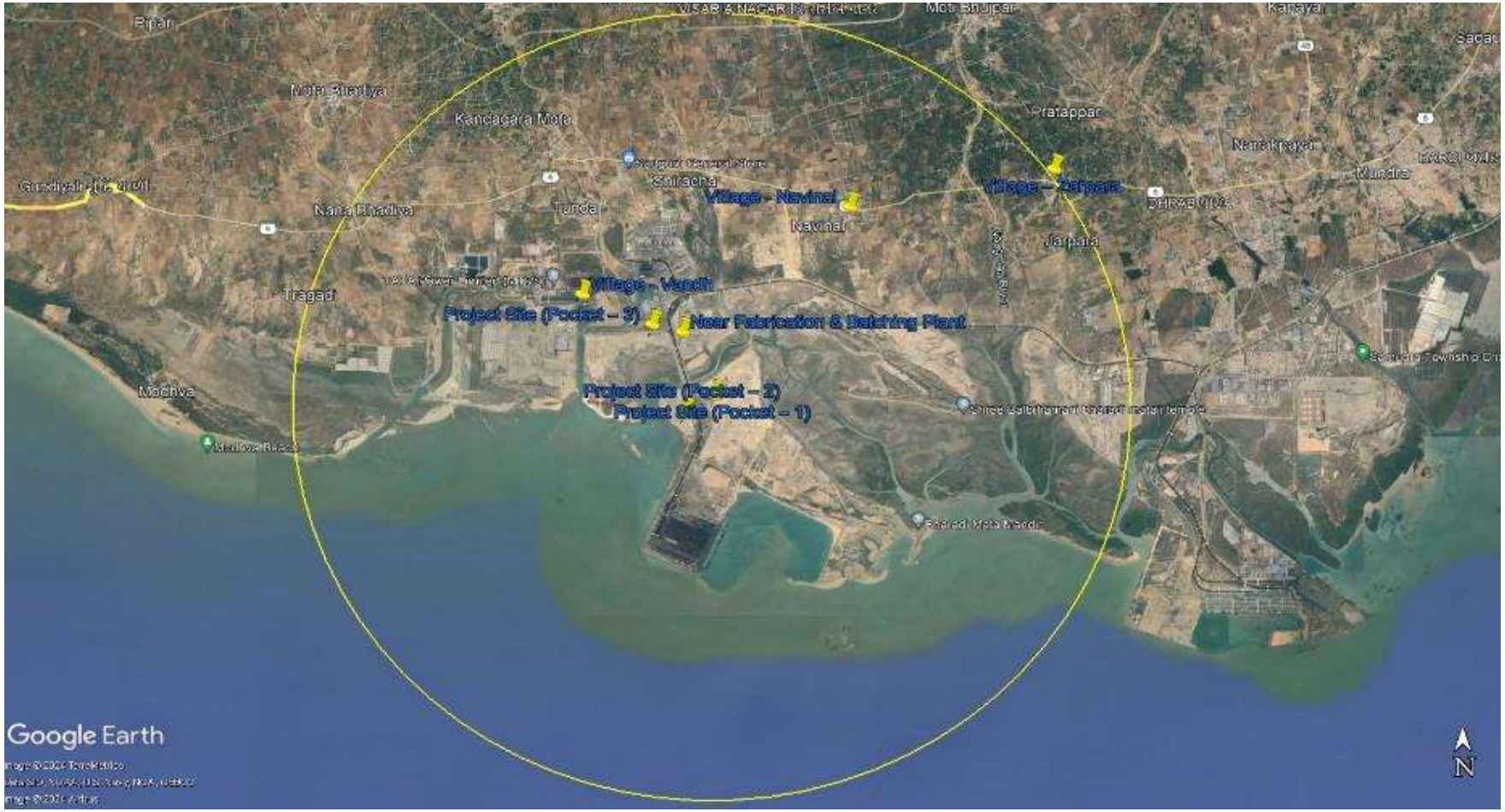
Source: Google Earth

Client: M/s. Mundra Petrochem Limited

Prepared by:

M/s. Unistar Environment and Research labs Pvt. Ltd., Vapi.

Map 2-1: Project site and Study Area of 10 Km radius on Google Earth Downloaded



3 CLIMATIC CONDITON

3.1 Climatic data from secondary sources

For the Green PVC project secondary data for weather conditions in the region is available for the period of October 2024 to March 2025. This table gives useful information about a region's weather condition. Meteorological data was analysed/reviewed for important parameters like Temperature, Humidity, BP, Wind speed, Wind direction, Solar radiation and Rainfall.

Average meteorological condition recorded at metrological station is as given in below table.

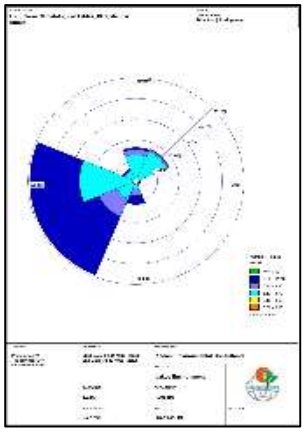
Table 3-1: Average meteorological condition

Weather Monitoring Data							
Month	**Scale**	**Temp. (°C)**	**RH (%)**	**BP (mmHg)**	**Wind Direction**	**Wind speed (Km/ Hr.)**	**Total Rainfall (mm)**
October 2024 to March 2025	Max.	42.4	98.3	764.1	360.0	39.1	7.5
	Min.	9.0	4.0	745.9	0.0	0.0	
	Average/ Total	25.3	53.2	758.2	166.1	5.8	

Total Rainfall for Year 2024 at the end of December 2025 is 1639 MM.

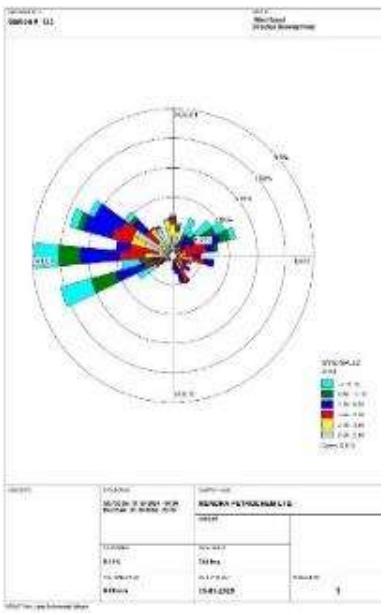
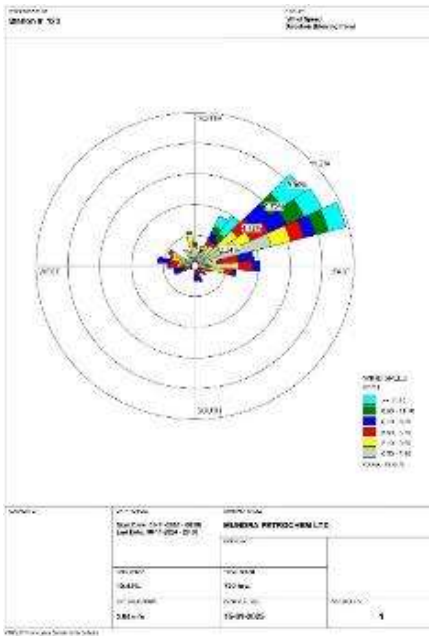
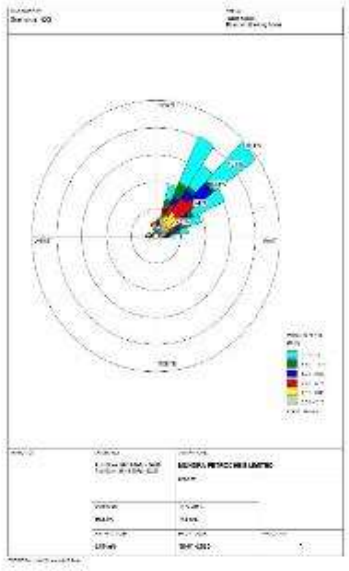
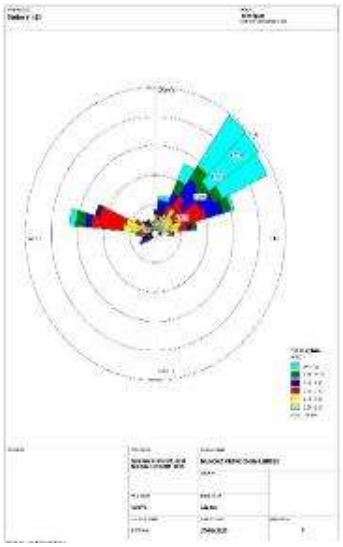
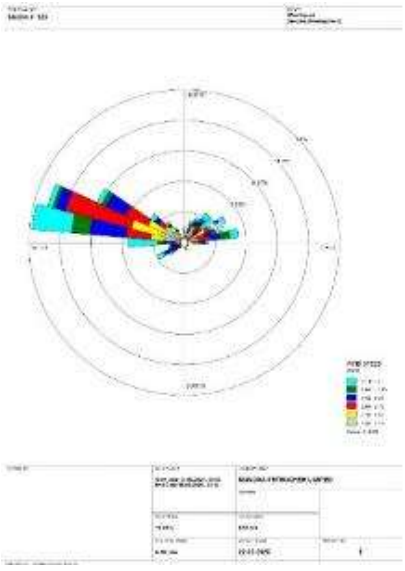
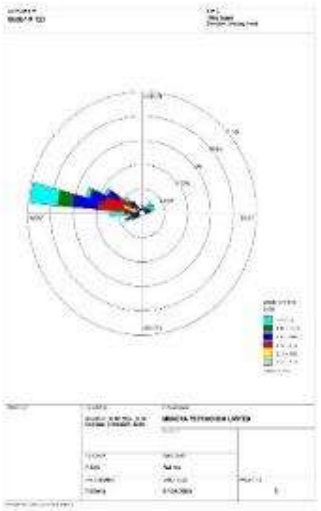
Based on wind patterns data, monthly wind-rose diagrams are presented in below Figure along with historical windrose of area.

Figure 3-1: Season wise wind-rose diagrams.



Annual

Wind Rose 2024 APL Mundra

		
Wind Rose Oct-24	Wind Rose Nov-24	Wind Rose Dec-24
		
Wind Rose Jan-25	Wind Rose Feb-25	Wind Rose March-25

4 ANALYSIS & INTERPRETATION

4.1 Ambient Air

Sr. No.	Month	Parameter with Results											
		PM10	PM2.5	SO2	NO2	CO	O3	NH3	Pb	Ni	As	Benzene	Benzo (a) Pyrene
		µg/m3	µg/m3	µg/m3	µg/m3	mg/m3	µg/m3	µg/m3	µg/m3	ng/m3	ng/m3	µg/m3	ng/m3
		Permissible Limit As per NAAQS – 2009 Notification.											
		100	60	80	80	2	400	100	1	6	20	5	1
Location : Project Site (Near to Pocket -1)													
1	Oct-24	59.9	23.6	17.6	20.9	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
2	Nov-24	65.7	25.1	18.6	21.4	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
3	Dec-24	73.6	30.1	23.4	26.9	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
4	Jan-25	70.2	28.7	21.5	24.3	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
5	Feb-25	72.4	30.9	24.4	27.8	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
6	Mar-25	68.3	26.6	23.4	26.7	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
Report Ref. No. - URA/24/10/A-052 dt. 30/10/2024, URA/24/11/A-056 dt. 30/11/2024, URA/24/12/A-060 dt.04/01/2025 URA/25/01/A-062 dt. 31/01/2025, URA/25/02/A-069 dt. 05/03/2025, URA/25/03/A-059 dt. 27/03/2025													
Location: Project Site (Near to Pocket -2)													
1	Oct-24	57.5	20.9	19.8	22.1	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
2	Nov-24	61.3	23.8	20.5	24.3	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
3	Dec-24	51.5	21.8	26.9	30.8	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
4	Jan-25	55.8	25.4	27.4	31.8	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
5	Feb-25	60.2	29.5	28.7	32.3	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
6	Mar-25	57.4	25.6	26.7	29.9	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
Report Ref. No. - URA/24/10/A-055 dt. 30/10/2024, URA/24/11/A-070 dt. 30/11/2024, URA/24/12/A-066 dt.04/01/2025, URA/25/01/A-064 31/01/2025, URA/25/02/A-070 dt. 05/03/2025, URA/25/03/A-060 dt. 27/03/2025													
Location: Project Site (Near to Pocket -3)													
1	Oct-24	61.3	23.4	19.9	23.4	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
2	Nov-24	65.8	25.5	20.6	24.3	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
3	Dec-24	69.4	28.7	25.6	29.5	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
4	Jan-25	70.2	30.9	23.1	26.7	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
5	Feb-25	73.5	33.1	25.8	28.2	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
6	Mar-25	70.5	30.1	24.6	27.9	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
Report Ref. No. URA/24/10/A-047 dt. 30/10/2024, URA/24/11/A-061 dt. 30/11/2024, URA/24/12/A-065 dt.04/01/2025 URA/25/01/A-067 dt. 31/01/2025, URA/25/02/A-071 dt. 05/03/2025, URA/25/03/A-066 dt. 27/03/2025													

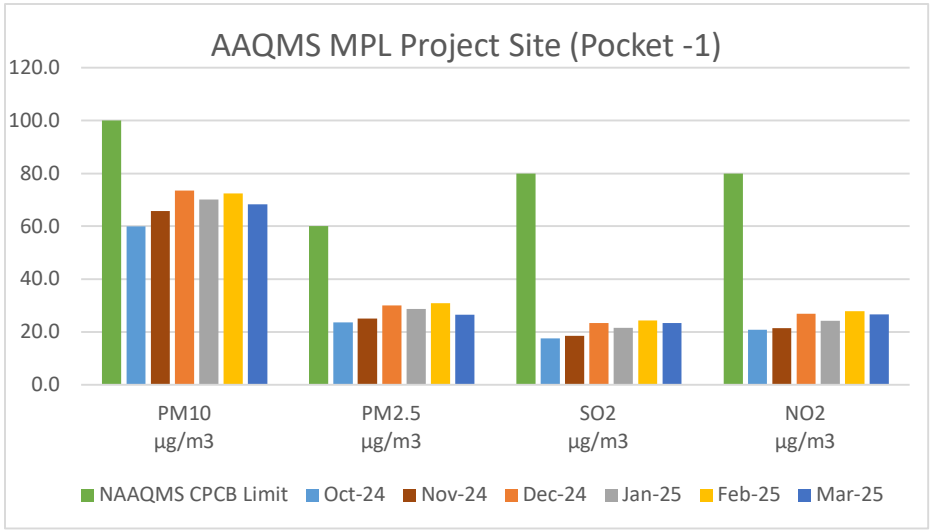
Location: Near Fabrication and Batching Plant													
1	Oct-24	60.8	21.3	18.4	22.5	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
2	Nov-24	62.5	24.4	17.3	20.6	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
3	Dec-24	68.3	27.5	24.3	27.8	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
4	Jan-25	66.6	29.8	20.8	24.6	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
5	Feb-25	68.9	31.2	22.6	25.9	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
6	Mar-25	65.3	29.9	21.1	25.4	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
Report Ref. No.- URA/24/10/A-048 dt. 30/10/2024, URA/24/11/A-057 dt. 30/11/2024, URA/24/12/A-061 dt.04/01/2025 URA/25/01/A-066 dt. 31/01/2025, URA/25/02/A-076 dt. 05/03/2025, URA/25/03/A-061 dt. 27/03/2025													
Location : Village Navinal													
1	Oct-24	45.5	16.5	12.3	15.6	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
2	Nov-24	50.3	19.6	11.5	14.7	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
3	Dec-24	61.7	28.6	16.6	20.9	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
4	Jan-25	63.7	30.1	18.2	21.4	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
5	Feb-25	65.8	32.4	19.4	22.7	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
6	Mar-25	61.2	29.7	17.3	20.8	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
Report Ref. No. - URA/24/10/A-040 dt. 30/10/2024, URA/24/11/A-031 dt. 30/11/2024, URA/24/12/A-059 dt.04/01/2025 URA/25/01/A-041 dt. 31/01/2025, URA/25/02/A-067 dt. 05/03/2025, URA/25/03/A-067 dt. 27/03/2025													
Location : Village Zarpara													
1	Oct-24	42.3	18.5	11.3	14.5	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
2	Nov-24	45.8	17.2	10.4	13.5	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
3	Dec-24	54.5	23.5	17.5	22.4	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
4	Jan-25	57.8	26.3	19.8	23.5	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
5	Feb-25	59.9	28.6	20.3	24.6	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
6	Mar-25	57.6	26.1	19.7	22.5	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
Report Ref. No. - URA/24/10/A-050 dt. 30/10/2024, URA/24/11/A-051 dt. 30/11/2024, URA/24/12/A-064 dt.04/01/2025 URA/25/01/A-042 dt. 31/01/2025, URA/25/02/A-066 dt. 05/03/2025, URA/25/03/A-065 dt. 27/03/2025													
Location : Village Vandh													
1	Oct-24	46.1	17.3	10.9	14.3	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
2	Nov-24	51.2	18.6	9.8	12.8	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
3	Dec-24	66.8	27.8	15.7	21.3	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
4	Jan-25	68.9	30.5	17.6	20.6	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
5	Feb-25	66.2	31.4	18.5	21.4	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1
6	Mar-25	63.4	28.7	20.8	23.4	<0.01	<5.0	<5.0	<0.5	<1.0	<1.0	<1.0	<0.1

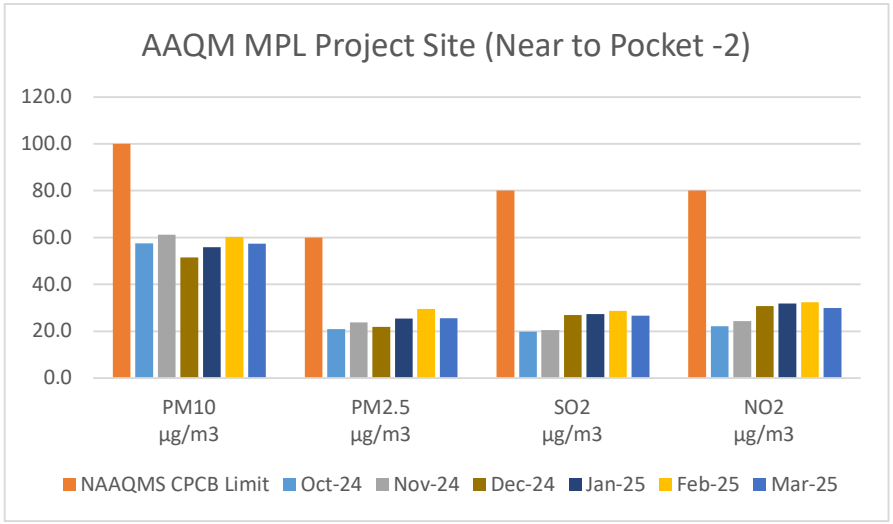
Report Ref. No.- URA/24/10/A-070 dt. 30/10/2024, URA/24/11/A-075 dt. 30/11/2024, URA/24/12/A-035 dt.04/01/2025 URA/25/01/A-040 dt. 31/01/2025, URA/25/02/A-072 dt. 05/03/2025, URA/25/03/A-058 dt. 27/03/2025

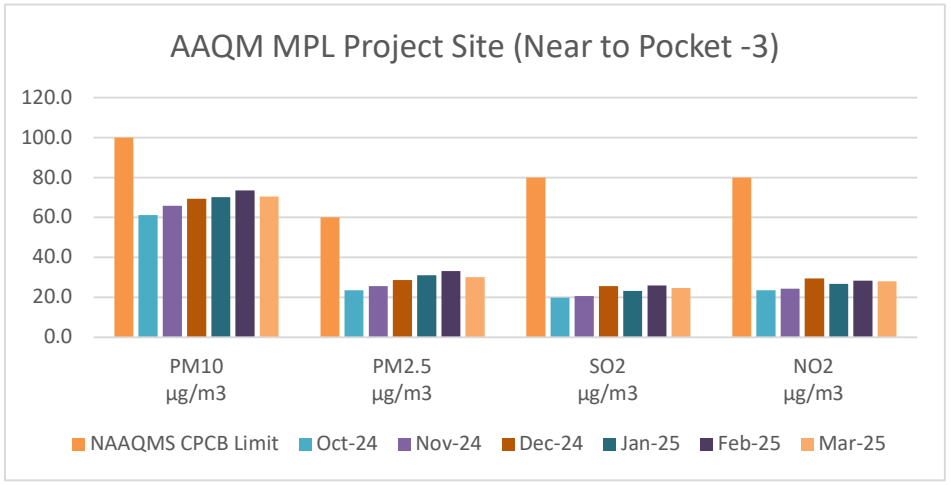
Observations

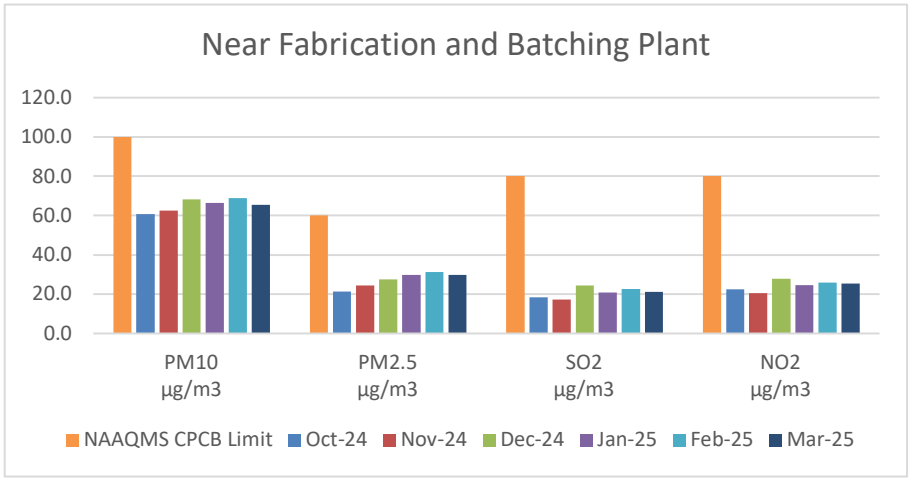
- The concentration of PM10 ranged from 73.6 µg/m3 at the Project Site (Pocket -1) to 42.3 µg/m3 in the Village of Zarpara, with an average concentration of 61.6 µg/m3.
- The concentration of PM2.5 ranged from 33.1 µg/m3 at the Project Site - Pocket 3 to 16.5 µg/m3 in the Village of Navinal, with an average concentration of 26.2 µg/m3.
- The concentration of SO2 ranged from 28.7 µg/m3 at the Project Site - Pocket 2 to 9.8 µg/m3 in the Village of Vandh, with an average concentration of 19.8 µg/m3.
- The concentration of NO2 ranged from 32.3 µg/m3 at the Project Site - Pocket 2 to 12.8 µg/m3 in the Village of Vandh, with an average concentration of 23.3 µg/m3.
- The concentrations of CO were below <0.01 mg/m3, & NH3 were below <5.0 µg/m3, O3 were below <5.0 µg/m3 at all the locations.
- The concentrations of Lead (Pb) were below <0.5 µg/m3, Arsenic (As) were below <1.0 ng/m3 & Nickel (Ni) were all below <1.0 ng/m3 at all the locations.
- The concentrations of Benzene were below <1.0 µg/m3 & BaP were all below <0.1 ng/m3 at all the locations.

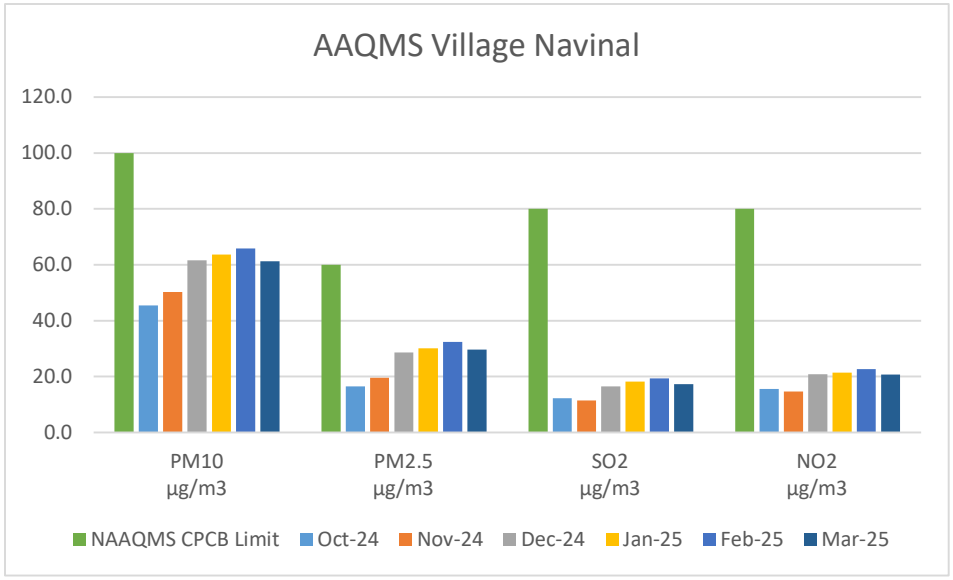
The concentrations of all monitored air quality parameters were found to be within the permissible limits as defined by the National Ambient Air Quality (NAAQ) Standards set by the Ministry of Environment, Forest and Climate Change (MoEF&CC).

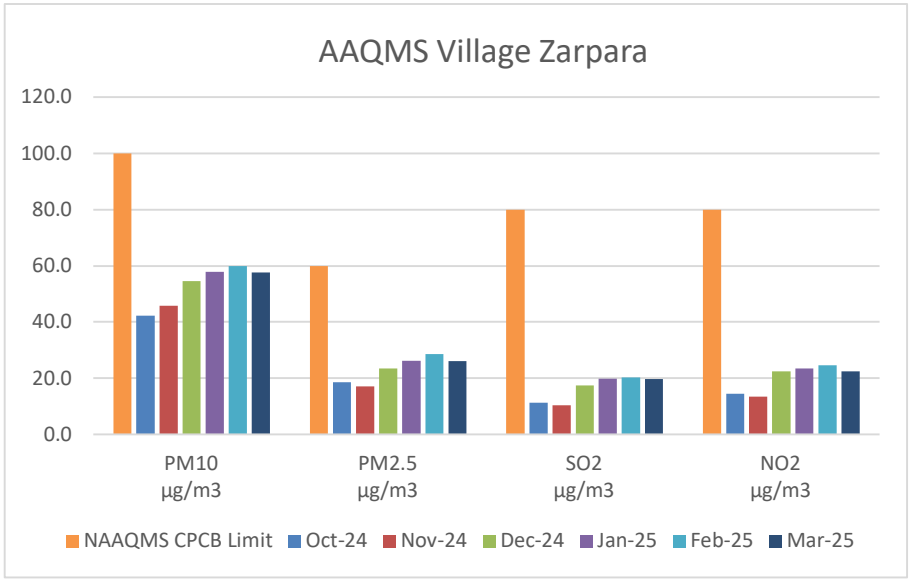

AAQMS MPL Project Site (Pocket -1)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PM10 µg/m3
PM2.5 µg/m3
SO2 µg/m3
NO2 µg/m3
NAAQMS CPCB Limit
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25

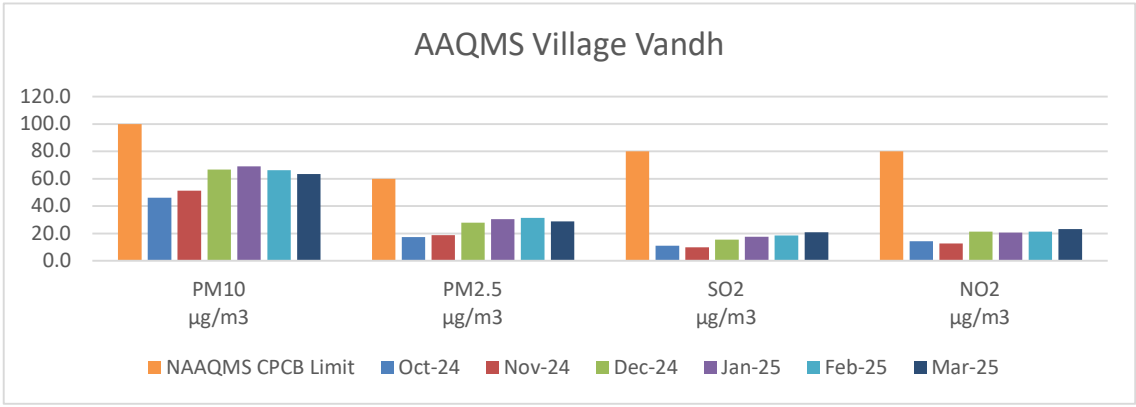

AAQM MPL Project Site (Near to Pocket -2)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PM10 µg/m3
PM2.5 µg/m3
SO2 µg/m3
NO2 µg/m3
NAAQMS CPCB Limit
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25


AAQM MPL Project Site (Near to Pocket -3)
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PM10 µg/m3
PM2.5 µg/m3
SO2 µg/m3
NO2 µg/m3
NAAQMS CPCB Limit
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25


Near Fabrication and Batching Plant
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PM10 µg/m3
PM2.5 µg/m3
SO2 µg/m3
NO2 µg/m3
NAAQMS CPCB Limit
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25


AAQMS Village Navinal
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PM10 µg/m3
PM2.5 µg/m3
SO2 µg/m3
NO2 µg/m3
NAAQMS CPCB Limit
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25


AAQMS Village Zarpara
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PM10 µg/m3
PM2.5 µg/m3
SO2 µg/m3
NO2 µg/m3
NAAQMS CPCB Limit
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25


AAQMS Village Vandh
120.0
100.0
80.0
60.0
40.0
20.0
0.0
PM10 µg/m3
PM2.5 µg/m3
SO2 µg/m3
NO2 µg/m3
NAAQMS CPCB Limit
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25

4.2 Ambient Noise

The ambient noise levels measured and analysed for equivalent noise levels viz. Leq (24hrly), Leq day, Leq night at all the noise monitoring locations.

Ambient Noise Level in Leq														
Sr. No	Location	Day Time Noise Level in Leq							Night Time Noise Level in Leq					
		CPCB Limits	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	CPCB Limits	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
1	PS (Pkt – 1)	75	57.2	55.5	57.4	58.9	59.5	59.4	70	45.9	46.1	47.1	48.6	49.8	48.3
2	PS (Pkt – 2)	75	56.9	56.2	58.9	59.4	60.1	58.2	70	46.0	45.1	46.0	47.6	48.7	47.3
3	PS (Pkt – 3)	75	59.3	57.7	59.1	59.1	60.3	59.6	70	46.2	47.2	47.7	49.4	51.8	49.5
4	Nr. Fab. & Batch. Plant	75	60.4	59.2	59.5	59.7	61.3	59.1	70	47.8	46.9	48.7	51.2	49.8	47.0
5	Vill - Navinal	55	47.3	45.4	45.8	47.4	47.8	45.1	45	39.7	37.3	37.1	40.2	39.7	37.3
6	Vill - Zarpara	55	49	49.1	49.5	52	52	52.7	45	37.6	34.6	36.6	40.8	43.2	41.0
7	Vill - Vandh	55	46	44.7	46.4	48.4	48.4	49.4	45	38.8	35.8	36.8	38.6	40.0	38.7

Report Ref. No.-

URA/24/10/AN-018 dt.30/10/24, URA/24/10/AN-020 dt. 30/10/24, URA/24/10/AN-017 dt. 30/10/24 , URA/24/10/AN-018 dt 30/10/24, URA/24/10/AN-012 dt 30/10/24. URA/24/10/AN-019 dt. 30/10/24 URA/24/10/AN-029 dt. 30/10/24

URA/24/11/AN-020 dt.30/11/24, URA/24/11/AN-022 dt.30/11/24, URA/24/11/AN-021 dt.30/11/24, URA/24/11/AN-018 dt.30/11/24, URA/24/11/AN-007 dt.30/11/24, URA/24/11/AN-018 dt.30/11/24, URA/24/11/AN-036 dt.30/11/24

URA/24/12/AN-037 dt. 04/01/25, URA/24/12/AN-041 dt. 04/01/25, URA/24/12/AN-040 dt. 04/01/25, URA/24/12/AN-038 dt. 04/01/25, URA/24/12/AN-036 dt. 04/01/25, URA/24/12/AN-039 dt. 04/01/25, URA/24/12/AN-020 dt. 04/01/25

URA/25/01/AN-031 dt.31/01/25, URA/25/01/AN-032 dt. 31/01/25, URA/25/01/AN-034 dt. 31/01/25 , URA/25/01/AN-033 dt 31/01/25, URA/25/01/AN-027 dt 31/01/25. URA/25/01/AN-028 dt. 31/01/25, URA/25/01/AN-026 dt. 31/01/25

URA/25/02/AN-038 dt.05/03/25, URA/25/02/AN-039 dt. 05/03/25, URA/25/02/AN-040 dt. 05/03/25, URA/25/02/AN-044 dt 05/03/25, URA/25/02/AN-037 dt 05/03/25. URA/25/02/AN-036 dt. 05/03/25, URA/25/02/AN-041 dt. 05/03/25

URA/25/03/AN-029 dt.27/03/25, URA/25/03/AN-030 dt. 27/03/25, URA/25/03/AN-033 dt. 27/03/25 , URA/25/03/AN-031 dt 27/03/25, URA/25/03/AN-034 dt 27/03/25. URA/25/03/AN-032 dt. 27/03/2025 URA/25/03/AN-028 dt. 27/03/2025

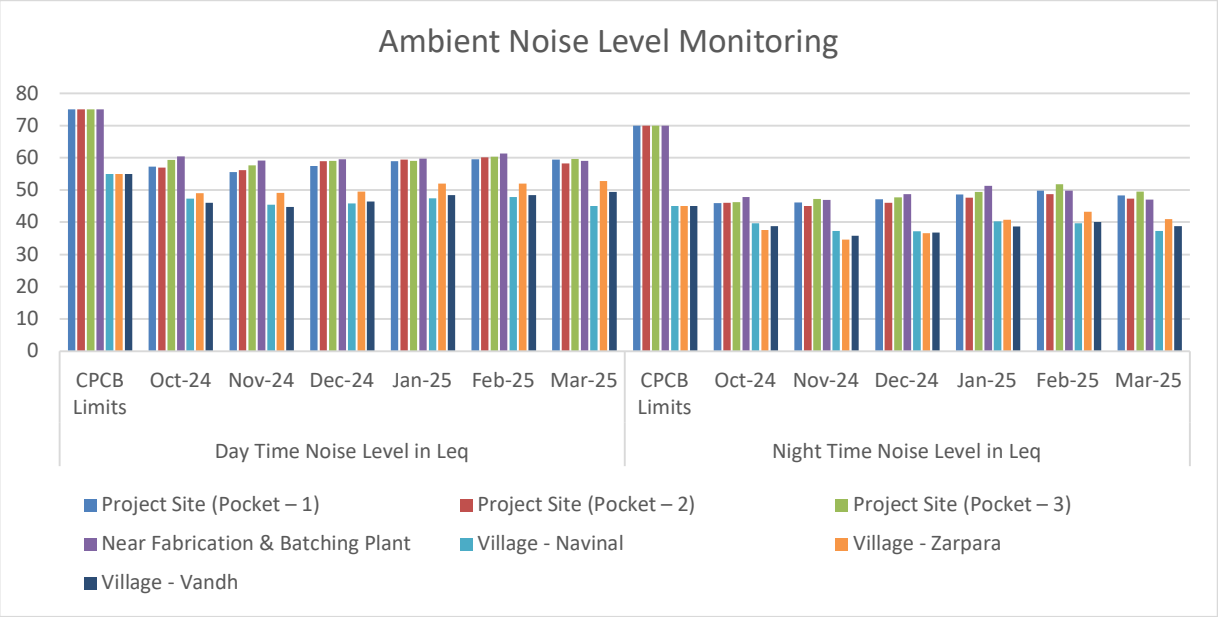
Observations

Industrial Zone

The Average Leq (equivalent continuous sound level) during the day for the industrial zone ranged from 61.3 dB(A) at Near Fabrication & Batching Plant to 55.5 dB(A) at Project site (Pocket-1). Similarly, the Leq during the night ranged from 51.8 dB(A) at Project site (Pocket-1) to 45.1 dB(A) at Project site (Pocket-2). Importantly, all these values remained within the CPCB (Central Pollution Control Board) limits specified for the industrial zone, both during daytime and night time.

Residential Zone

The Average Leq (equivalent continuous sound level) during the day in the residential zone varied from 52.7 dB(A) in Village Zarpara to 44.7 dB(A) in the village Vandh. Meanwhile, the Leq during the night ranged from 43.2 dB(A) in Village Zarpara to 34.6 dB(A) in Village Zarpara. It's worth noting that the ambient noise levels in these villages are affected by the local environment, and all the Leq values are compliant with permissible limits across all the villages.


Ambient Noise Level Monitoring
80
70
60
50
40
30
20
10
0
CPCB Limits
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
CPCB Limits
Oct-24
Nov-24
Dec-24
Jan-25
Feb-25
Mar-25
Day Time Noise Level in Leq
Night Time Noise Level in Leq
Project Site (Pocket – 1)
Project Site (Pocket – 2)
Project Site (Pocket – 3)
Near Fabrication & Batching Plant
Village - Navinal
Village - Zarpara
Village - Vandh

4.3 Water Quality

4.3.1 Ground Water Quality

Ground water was collected as grab samples from seven location sent to laboratory for analysis for various parameters.

The water quality findings from the ground water samples are outlined in the following table:

Sr. No.	Parameter	Unit	IS 10500 Standard Limits for drinking water		GW 01 Nani Khakhar	GW 02 Moti Khakhar	GW 03 Mota Kandagra	GW 04 Siracha	GW 05 Navinal	GW 06 Tunda	GW 07- Nana Bhadiya	GW 08 Deshalpar
			Desirable limit	Permissible Limit in the Absence of Alternate Source								
1	pH	pH scale	6.5-8.5	NR	8.35	8.36	8.16	8.36	8.38	8.42	8.38	7.92
2	Temp	o C	NS	NS	29.4	29.2	29.5	29	29	29.4	29.5	29.5
3	Turbidity	NTU	1	5	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)
4	TDS	mg/l	500	2000	580	1832	1756	1484	1348	1332	1240	1840
5	Electrical Conductivity	µmhos/ cm	NS	NS	880	2712	2640	2220	2020	1992	1900	2911
6	COD	mg/l	NS	NS	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)
7	BOD	mg/l	NS	NS	BDL (MDL:1.0)	BDL (MDL:1.0)	BDL (MDL:1.0)	BDL (MDL:1.0)	BDL (MDL:1.0)	BDL (MDL:1.0)	BDL (MDL:1.0)	BDL (MDL:1.0)
8	Phenol	mg/l	0.001	0.002	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL: .001)	BDL (MDL: .001)	BDL (MDL: .001)	BDL (MDL: 0.001)
9	Chlorides	mg/l	250	1000	144.2	937.3	565.8	461.5	426.8	402	390	970.4
10	Sulphate	mg/l	200	400	32.4	76.8	90	106.6	82.2	26.3	56	36.5
11	Total Hardness	mg/l	200	600	168	330	144	200	180	160	90	376
12	Ca++ Hardness	mg/l	NS	NS	100	160	74	110	84	60	46	190
13	Mg++ Hardness	mg/l	NS	NS	68	170	70	90	96	100	44	186

Sr. No.	Parameter	Unit	IS 10500 Standard Limits for drinking water		GW 01 Nani Khakhar	GW 02 Moti Khakhar	GW 03 Mota Kandagra	GW 04 Siracha	GW 05 Navinal	GW 06 Tunda	GW 07- Nana Bhadiya	GW 08 Deshalpar
			Desirable limit	Permissible Limit in the Absence of Alternate Source								
14	Total Alkalinity	mg/l	200	600	142	425	440	330	278	440	430	280
15	Nitrate	mg/l	45	NR	0.8	2.8	2.4	0.8	1.2	7.1	2	8.6
16	Fluoride	mg/l	1	1.5	0.4	2	0.55	1.25	1.02	4.35	1.5	0.68
17	Sodium	mg/l	NS	NS	86	520	478	392	384	368	278	510
18	Potassium	mg/l	NS	NS	2.4	9	5.1	4.2	3.9	4.6	5.6	4.5
19	Calcium	mg/l	75	200	40.1	64.1	29.7	44.1	33.7	24	18.4	76.2
20	Magnesium	mg/l	30	100	16.5	41.3	17	21.9	23.3	24.3	10.7	45.2
21	Salinity	mg/l	NS	NS	0.42	1.87	1.02	0.85	0.77	0.73	1.09	1.42
22	Total Nitrogen	mg/l	0.5	NR	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)	BDL (MDL:2.0)
23	Total Phosphorous	mg/l	NS	NS	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	ND
24	Dissolved Oxygen	mg/l	NS	NS	6.7	6.4	6.5	6.8	6.6	6.5	6.6	6.3
25	Ammonical Nitrogen	mg/l	NS	NS	BDL (MDL:0.2)	BDL (MDL:0.2)	BDL (MDL:0.2)	BDL (MDL:0.2)	BDL (MDL:0.2)	BDL (MDL:0.2)	BDL (MDL:0.2)	BDL (MDL:0.2)
26	SAR	-	NS	NS	2.9	12.4	13.2	12.1	11.4	12.7	12.7	11.4
Heavy Metals												
27	Arsenic (as As)	mg/l	0.01	0.05	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)
28	Cadmium (as Cd)	mg/l	0.003	NR	BDL (MDL:0.003)	BDL (MDL:0.003)	BDL (MDL:0.003)	BDL (MDL:0.003)	BDL (MDL:0.003)	BDL (MDL:0.003)	BDL (MDL:0.003)	BDL (MDL:0.003)
29	Chromium (as Cr)	mg/l	0.05	NR	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)

Sr. No.	Parameter	Unit	IS 10500 Standard Limits for drinking water		GW 01 Nani Khakhar	GW 02 Moti Khakhar	GW 03 Mota Kandagra	GW 04 Siracha	GW 05 Navinal	GW 06 Tunda	GW 07- Nana Bhadiya	GW 08 Deshalpar
			Desirable limit	Permissible Limit in the Absence of Alternate Source								
30	Copper (as Cu)	mg/l	0.05	1.5	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)
31	Cyanide (as CN)	mg/l	0.05	NR	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)
32	Iron (as Fe)	mg/l	0.3	NR	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)
33	Lead (as Pb)	mg/l	0.01	NR	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)	BDL (MDL:0.01)
34	Mercury (as Hg)	mg/l	0.001	NR	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)	BDL (MDL:0.001)
35	Manganese (as Mn)	mg/l	0.1	0.3	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)	BDL (MDL:0.1)
36	Nickel (as Ni)	mg/l	0.02	NR	BDL (MDL:0.02)	BDL (MDL:0.02)	BDL (MDL:0.02)	BDL (MDL:0.02)	BDL (MDL:0.02)	BDL (MDL:0.02)	BDL (MDL:0.02)	BDL (MDL:0.02)
37	Zinc (as Zn)	mg/l	5	15	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)	BDL (MDL:0.05)
38	Total Coliform	MPN	Shall not be detectable		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
39	Faecal Coliforms	MPN	Shall not be detectable		Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Report Ref. No. URC/24/XX/XXX & URB/24/XX/XXX					11/0605 11/0606	11/0603 11/0604	11/0545 11/0546	11/0575 11/0576	11/0573 11/0574	11/0601 11/0602	11/0571 11/0572	11/0622 11/0622

Observations :

These analysed results were subsequently compared against the IS:10500 Standard Limits for drinking water & are found well within Limits.

4.3.2 Surface Water Quality

Surface water sample were collected as grab samples from four location. Same has been sent to laboratory for analysis for various parameters.

The water quality findings from the surface water samples are outlined in the following table:

Sr. No.	Parameter	Unit	Classification for Inland Surface Water (CPCB)	SW 4 Nagavanti Nadi	SW 5 Zarpara village pond	SW 6 Navinal village pond	SW 07- Siracha village pond
			Class E	Nov-24	Nov-24	Nov-24	Nov-24
1	pH	pH Scale	6.5 to 8.5	8.38	8.10	8.04	7.84
2	Dissolved Oxygen	mg/l	NA	6.2	6.4	6.6	6.2
3	TDS	mg/l	2100	306	292	304	240
4	Electrical Conductivity	µmohs/cm	2250	515	450	502	370
5	BOD	mg/l	NA	6.4	3	4	2.4
6	Colour	Pt.co	-	BDL(MDL:5.0)	BDL(MDL:5.0)	BDL(MDL:5.0)	BDL (MDL: 5.0)
7	Total Hardness	mg/l	NA	58	120	76	70.4
8	Ca++ Hardness	mg/l	NA	28	20	50	36
9	Mg++ Hardness	mg/l	NA	30	17	26	34
10	Chlorides	mg/l	600	16	99.3	90.2	140.2
11	Sulphate	mg/l	1000	6.4	17.6	12	24
12	Nitrate	mg/l	NA	0.5	BDL(MDL:0.1)	0.6	BDL (MDL: 0.1)
13	Fluoride	mg/l	-	BDL (MDL: 0.2)	0.46	0.65	0.034
14	Phenol	mg/l	NA	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL (MDL: 0.001)
15	Ammonical Nitrogen	mg/l	NA	BDL(MDL:0.2)	BDL(MDL:0.2)	BDL(MDL:0.2)	BDL (MDL: 0.2)
16	SAR		26	1.2	2.34	1.5	2.1
17	Copper (as Cu)	mg/l	NA	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL (MDL: 0.05)
18	Iron (as Fe)	mg/l	NA	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL (MDL: 0.1)
19	Manganese (as Mn)	mg/l	NA	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL(MDL:0.1)	BDL (MDL: 0.1)
20	Mercury	mg/l	NA	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL (MDL: 0.001)
21	Cadmium (as Cd)	mg/l	NA	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL(MDL:0.003)	BDL (MDL: 0.003)
22	Arsenic (as As)	mg/l	NA	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL (MDL: 0.01)

Sr. No.	Parameter	Unit	Classification for Inland Surface Water (CPCB)	SW 4 Nagavanti Nadi	SW 5 Zarpara village pond	SW 6 Navinal village pond	SW 07- Siracha village pond
			Class E	Nov-24	Nov-24	Nov-24	Nov-24
23	Cyanide	mg/l	NA	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL (MDL: 0.05)
24	Lead (as Pb)	mg/l	NA	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL (MDL: 0.01)
25	Zinc	mg/l	NA	BDL (MDL: 0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL (MDL: 0.05)
26	Chromium (as Cr)	mg/l	NA	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL(MDL:0.05)	BDL (MDL: 0.05)
27	Boron	mg/l	2	BDL(MDL:0.5)	BDL(MDL:0.5)	BDL(MDL:0.5)	BDL (MDL: 0.5)
28	Total Coliform	MPN/100ml	-	Absent	Absent	Absent	Absent
29	COD	mg/l	-	12.2	32.4	20.2	12.2
			Report Ref. No.	URC/24/11/0695 URB/24/11/0695	URC/24/11/0609 URB/24/11/0610	URC/24/11/0607 URB/24/11/0608	URC/24/11/0697 URB/24/11/0697

Observations :

These analysed results were subsequently compared against the **Classification for Inland Surface Water (CPCB)** Class E & are found well within Limits.

4.3.3 Surface Water (Marine) Quality

Surface water (Marine) was collected as grab samples from three location. Same has been sent to laboratory for analysis for various parameters.

The water quality findings from the surface water (marine) samples are outlined in the following table:

Sr. No.	Parameter	Unit	Classification for Coastal marine water (CPCB)	SW 1- Intake channel of APL	SW 2- Kotadi Creek water	SW 3- Baradi mata creek
			SW I	Nov-24	Nov-24	Nov-24
1	pH	pH scale	6.5 to 8.5	8.33	8.46	8.44
2	Dissolved Oxygen	mg/l	5	6.4	6.2	6.5
3	Colour & Odour	-	No Colour No Odour	10 & Agreeable	10 & Agreeable	10 & Agreeable
4	Floating Matters	-	None	--	--	--

Sr. No.	Parameter	Unit	Classification for Coastal marine water (CPCB)	SW 1- Intake channel of APL	SW 2- Kotadi Creek water	SW 3- Baradi mata creek
			SW I	Nov-24	Nov-24	Nov-24
5	Total Suspended Solid	mg/l	None from Sewage or Industrial waste Origin	24	26	16
6	Turbidity	mg/l	-	5	1	0.1
7	BOD	NTU	-	2.8	5.5	3.8
8	Oil & Grease	mg/l	0.1	BDL(MDL:2.0)	BDL(MDL:2.0)	BDL(MDL:2.0)
9	Mercury as Hg	mg/l	0.01	BDL(MDL:0.001)	BDL(MDL:0.001)	BDL(MDL:0.001)
10	Lead (as Pb)	mg/l	0.01	BDL(MDL:0.01)	BDL(MDL:0.01)	BDL(MDL:0.01)
11	Cadmium (as Cd)	mg/l	0.01	0.05	0.06	BDL (MDL : 0.003)
12	Iron (as Fe)	mg/l	-	0.38	0.23	BDL (MDL : 0.1)
13	Manganese (as Mn)	mg/l	-	BDL (MDL : 0.1)	BDL (MDL : 0.1)	BDL (MDL : 0.1)
14	Total Coliform	ml (MPN)	-			
15	Sludge Deposits, Solid refuse floating Solids, Oil Grease and Scum	-	-	--	--	--
16	COD	mg/l	-	16.2	32.1	32.9
			Report Ref. No.	URC/24/11/0695 URB/24/11/0695	URC/24/11/0609 URB/24/11/0610	URC/24/11/0607 URB/24/11/0608

Observations :

These analysed results were subsequently compared against the Classification for Coastal marine water (CPCB)Class SW I & are found well within Limits

4.3.4 Sewage Water Quality

Sewage water samples was collected as grab samples from STP outlet and sent to laboratory for analysis for various parameters.

The water quality findings from the sewage water sampling locations are outlined in the following table:

Sr. No.	Location	MOEFCC Limits	STP Outlet					
			Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
1	pH @25°C	6.5 – 9.0	7.31	7.14	7	7.17	6.58	7.14
2	Total Suspended Solid	<50	18	18	28	22	26	24
3	Chemical Oxygen Demand (COD)	-	25.3	38.1	49	44.1	42.1	38.6
4	Biochemical Oxygen Demand (BOD) (5 days at 20 0C)	<30	8	7	17	9	21	16
5	Total Nitrogen	-	5.2	3.8	5.3	3.1	3.8	3.4
6	Total Phosphorus	-	2.1	1.7	1.6	1.5	1.8	2.2
7	Faecal Coliform	<1000	23	26	27	28	26	27

Report Ref. No. : URC/24/10/0350 dt. 23/10/2024, URC/24/11/0580 dt. 27/11/2024, URC/24/12/0166 dt. 02/01/2025, URC/25/01/0364 dt. 04/02/2025, URC/25/02/0618 dt. 04/03/2025, URC/25/03/0536 dt. 02/04/2025

Observations :

These analysed results were subsequently compared against the standards set by the Central Pollution Control Board (CPCB) are found well within Limits.

4.4 Soil Quality

Soil was collected as grab samples from four location & sent to laboratory for analysis for various parameters.

The soil quality findings from the soil samples are outlined in the following table:

Sr. No.	Parameter	Unit	ST1a Pocket 1	ST1c Pocket 2	Pocket 3
1	Porosity	%	47.3	33.4	33.4
2	Water Holding Capacity	ml/100 gm	30	30	30
3	Permeability	Cm/Sec	0.142	0.151	0.151
4	Particle Size Distribution				
a	Sand	%	72.2	76.8	76.8
b	Clay	%	9.6	10.6	10.6
c	Silt	NTU	18.2	12.6	12.6
5	Texture	%	Sandy Loam	Sandy Loam	Sandy Loam
6	Cation Exchange Capacity	--	26.2	25.9	25.9
7	SAR	meq/100g	3.85	3.3	3.3
8	Electrical Conductivity	--	142.2	350	350

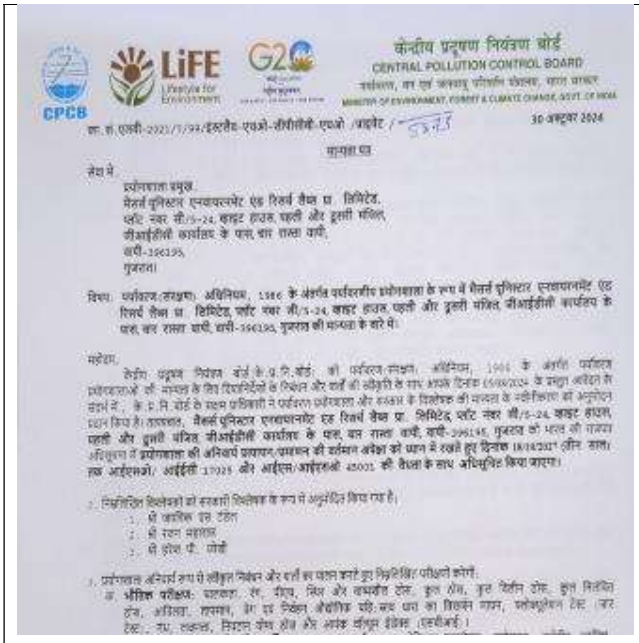
Sr. No.	Parameter	Unit	ST1a Pocket 1	ST1c Pocket 2	Pocket 3
9	Exchangeable Sodium	µs/cm	7.67	9.11	9.11
10	pH	%	9.3	7.9	7.9
11	Calcium	--	467.5	3056.9	3056.9
12	Magnesium	meq/100gm	141.7	99	99
13	Sodium	meq/100gm	370.3	419.6	419.6
14	Potassium	mg/kg	71.3	61.1	61.1
15	Total Organic Carbon	mg/kg	0.056	0.066	0.066
16	Available phosphorus	mg/kg	7.81	8.2	8.2
17	Available potassium	mg/kg	170.5	152.7	152.7
		Report Ref. No.	**URC/24/11/0691**	**URC/24/11/0692**	**URC/24/11/0693**

Observations :

These analysed results were subsequently compared against the standards set by the Central Pollution Control Board (CPCB) are found well within Limits.

ANNEXURE

Annexure 1: Laboratory Recognition by MOEFCC, NABL, GPCB Sch.II Auditor & NABET Certification



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD

30 अक्टूबर 2024

प्रमाण पत्र

सेवा में,

प्रयोगशाला प्रमुख,
मैसर्स यूनिस्टार एनवायरनमेंट एंड रिसर्च लैब प्रा. लिमिटेड,
प्लॉट नंबर सी/5-24, व्हाइट हाउस, पहली और दूसरी मंजिल,
जीआईडीसी कार्यालय के पास, चार रास्ता वापी,
वापी-396195,
गुजरात।

विषय: पर्यावरण (संरक्षण) अधिनियम, 1986 के अंतर्गत पर्यावरणीय प्रयोगशाला के रूप में मैसर्स यूनिस्टार एनवायरनमेंट एंड रिसर्च लैब प्रा. लिमिटेड, प्लॉट नंबर सी/5-24, व्हाइट हाउस, पहली और दूसरी मंजिल, जीआईडीसी कार्यालय के पास, चार रास्ता वापी, वापी-396195, गुजरात की मान्यता के बारे में।

महोदय,

केंद्रीय प्रदूषण नियंत्रण बोर्ड के ए.पी.बोर्ड. को पर्यावरण (संरक्षण) अधिनियम, 1986 के अंतर्गत पर्यावरण प्रयोगशालाओं की मान्यता के लिए दिशानिर्देशों के निर्धारण और शर्तों की स्वीकृति के साथ आपके दिनांक 15/08/2024 के प्रस्ता आवेदन से संदर्भ में, के.प्र.नि.बोर्ड के सक्षम प्राधिकारी ने पर्यावरण प्रयोगशाला और रकअप के दिशानिर्देश की मान्यता के नवीनीकरण को अनुमोदित प्रदान किया है। तदनुसार, मैसर्स यूनिस्टार एनवायरनमेंट एंड रिसर्च लैब प्रा. लिमिटेड, प्लॉट नंबर सी/5-24, व्हाइट हाउस, पहली और दूसरी मंजिल, जीआईडीसी कार्यालय के पास, चार रास्ता वापी, वापी-396195, गुजरात को भारत की राजपत्र अधिसूचना में प्रयोगशाला की अनियमित प्रयासण/प्रावधान की वर्तमान अवैधता को ध्यान में रखते हुए दिनांक 18/12/2027 (तीन साल) तक आईएसओ/ आईईसी 17025 और आईएस/आईएसओ 45001 की वैधता के साथ अधिसूचित किया जाएगा।

1. निम्नलिखित विश्लेषकों को रकवारी विश्लेषक के रूप में अनुमोदित किया गया है।
   1. श्री जावेद इब्राहिम
   2. श्री रवन महाजन
   3. श्री हेमंत पी. सोनी

2. प्रयोगशाला अनियमित रूप से स्वीकृत नियमन और शर्तों का पालन करते हुए निम्नलिखित परीक्षणों करेगी:
   क. भौतिक परीक्षण: पारदर्शी, रंग, पीएच, निम्न और वर्णमाला टोन, कुल ठोस, कुल घुलित ठोस, कुल निलंबित ठोस, अविलेय, तापमान, ईसी एवं निर्देश जैविक ऑक्सीजन मांग, प्रयोगशाला टेस्ट (जार टेस्ट), रंग, स्वकलर, निस्तारण योग्य ठोस और आर्क सीमुल डेडेस (एसीजेई)।

Laboratory Recognition by MOEFCC

National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

UNISTAR ENVIRONMENT AND RESEARCH LABS PVT. LTD. (LABORATORY DIVISION)

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

WHITE HOUSE, 1ST & 2ND FLOOR, PLOT NO. C/5/24, CHAR RASTA, VAPI, VALSAD, GUJARAT, INDIA

in the field of

TESTING

Certificate Number: TC-7753

Issue Date: 23/09/2022 Valid Until: 22/09/2024

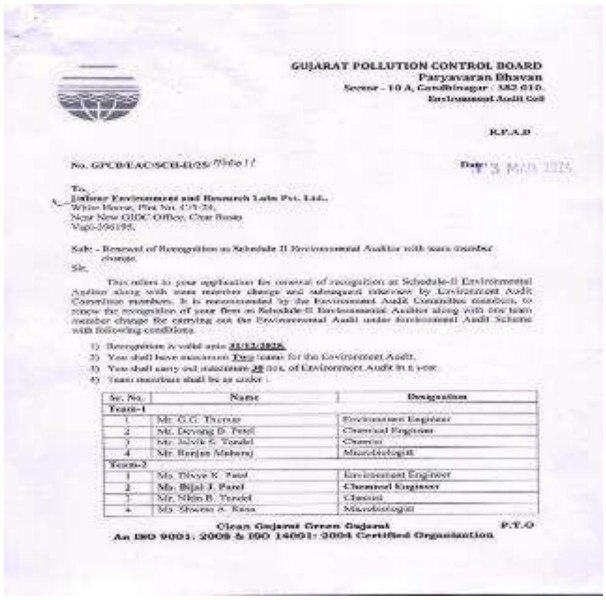
This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

Name of Legal Identity : UNISTAR ENVIRONMENT AND RESEARCH LABS PVT. LTD.

Signed for and on behalf of NABL

N. Venkateswaran
Chief Executive Officer

Laboratory Recognition by NABL



GUJARAT POLLUTION CONTROL BOARD
Paryavaran Bhavan
Sector - 10 A, Gandhinagar - 382 010.
Environment Audit Cell

R.P.A.D

No. GPCB/EAC/SCII-II/25/ Dated: 13 MAR 2024

To,
Unistar Environment and Research Labs Pvt. Ltd.,
White House, Plot No. C/5/24,
Near New GIDC Office, Char Rasta
Vapi-396195.

Sub: - Renewal of Recognition as Schedule II Environmental Auditor with team member change.

Sir,

This refers to your application for renewal of recognition as Schedule-II Environmental Auditor along with team member change and subsequent interview by Environment Audit Committee members. It is recommended by the Environment Audit Committee members, to renew the recognition of your firm as Schedule-II Environmental Auditor along with new team member change for carrying out the Environmental Audit under Environment Audit Scheme with following conditions.

1) Recognition is valid upto 31/12/2026.
2) You shall have minimum Two teams for the Environment Audit.
3) You shall carry out minimum 25 (six) of Environment Audit in a year.
4) Team members shall be as under :

Sr. No.	Name	Designation
Team-1		
1	Mr. G.C. Thumar	Environment Engineer
2	Mr. Devang B. Patel	Chemical Engineer
3	Mr. Jalvik C. Tandel	Chemist
4	Mr. Ranjan Mishra	Microbiologist
Team-2		
1	Ms. Divya K. Patel	Environment Engineer
2	Ms. Bijal J. Patel	Chemical Engineer
3	Mr. Nitin B. Tandel	Chemist
4	Mr. Shweta A. Rana	Microbiologist

Clean Gujarat Green Gujarat P.T.O
An ISO 9001: 2008 & ISO 14001: 2004 Certified Organization

Laboratory Recognition by GPCB

QUALITY COUNCIL OF INDIA

National Accreditation Board for Education and Training

Certificate of Accreditation

UniStar Environment and Research Labs Pvt. Ltd.

C-5/24, White House, Near GIDC Office, Char Rasta, Vapi Gujarat

The organization is accredited as Category-A under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3, for preparing EIA-EMP reports in the following Sectors -

S. No	Sector Description	Sector (as per) NABET	Sector (as per) MoEFCC	Cat.
1	Mining of minerals including opencast	1	1 (a) (i)	B
2	Metallurgical industries (ferrous & non-ferrous)	3	3 (a)	A
3	Manmade fibers manufacturing	19	5 (f)	A
4	Petrochemical based processing (processes other than cracking & reformation and not covered under the complexes)	20	5 (e)	A
5	Synthetic organic chemicals industry	21	5 (f)	A
6	Integrated paint industry	23	5 (h)	B
7	Building and construction projects	33	8 (a)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated April 28, 2023 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/18/2780 dated June 14, 2023. The accreditation needs to be renewed before the expiry date by UniStar Environment and Research Labs Pvt. Ltd., Vapi following due process of assessment.

Sr. Director, NABET
Dated: June 14, 2023

Certificate No.
NABET/EIA/2326/RA 0288

Valid up to
Feb 15, 2026

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website.

NABET Certification

Annexure 2: Calibration Certificates

UniStar
Environment and Research Labs Pvt. Ltd.

White House
Near G.I.D.C. Office, Char Rasta,
Vapi - 396 195. Gujarat, India.
Phone : +91 260 2433866 / 2426610
Email : response@uerl.in Website : www.uerl.in

MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (31.03.2023 to 22.09.2024) | QCI-NABET Accredited EIA & GW Consultant Organization | GPCB Recognized Environmental Auditor (Schedule II) | ISO 9001 : 2015 Certified Company | ISO 45001 : 2018 Certified Company

Calibration Certificate

Instrument Name	:	Respirable Dust Sampler
Instrument ID No.	:	UERL/AIR/RDS/27
Instrument Sr. No. Supplier	:	1751-DTA-2013, 1142-DTA-2013
Calibration Certificate No.	:	UERL/CC/RDS-27/0802/24-25
Date of Calibration	:	02/08/2024
Next Calibration due Date	:	01/08/2025

Sr. No.	Name of Unit Calibrated	Calibrator Traceable to	Calibration Certificate No. Date of Calibration
1.	Flow Meter	Top Loading Orifice Envirotech Calibration Laboratory Id No.: (UERL/MASTER/AIR/AA/MM/01)	ECL/UERLPL/2023-24/FLOW/2213 Date of Cali.: 06.08.2023
	ID. No. (UERL/AIR/RDS/FM/27)	Pressure Indicator Envirotech Calibration Laboratory	ECL/UERLPL/2022-23/MECH /3353 Date of Cali.: 22.10.2022
2.	Time Totalizer	Envirotech Calibration Laboratory	ECL/UERLPL/2022-23/ET/3351
	ID. No. (UERL/AIR/RDS/TT/27)	ID. No. (UERL/MASTER/AIR/TT/AA/01)	Date of Cali.: 22.10.2022
3.	Rotameter	Rotameter Envirotech Calibration Laboratory	ECL/UERLPL/2022-23/FLOW/3355
	ID. No. (UERL/AIR/RDS/RM/27)	ID. No. (UERL/MASTER/AIR/RM/02)	Date of Cali.: 22.10.2022

- UNCERTAINTY MEASUREMENT: Flow Meter : ± 0.061 m³/min.
- UNCERTAINTY MEASUREMENT: Time Totalizer : ± 0.031 hour
- UNCERTAINTY MEASUREMENT: Rotameter : ± 0.160 LPM

The reported uncertainty is the expanded uncertainty in measurement at 95 % Confidence level with coverage fact or k = 2 which corresponds to coverage probability of approximately 95 % of normal distribution

Prepared By:

Senior chemist

Approved By:

Technical manager

Regd. Office : 215, Royal Arcade, Near G.I.D.C.Office, Char Rasta,Vapi-396 195, Gujarat, India.
Extended Work Office : G.I.D.C., Dahej-II, Bharuch, Gujarat.
CIN:U73100GJ2007PTC051463

Calibration Certificate for RDS

UniStar Environment and Research Labs Pvt. Ltd.
White House
Near G.I.D.C. Office, Char Rasta,
Vapi - 396 195. Gujarat, India.
Phone : +91 260 2433966 / 2425610
Email : response@uerl.in Website : www.uerl.in

Calibration Certificate

Instrument Name	:	Respirable Dust Sampler
Instrument ID No.	:	UERL/AIR/RDS/34
Instrument Sr. No. Supplier	:	1768-DTB-2013, 1147-DTB-2013
Calibration Certificate No.	:	UERL/CC/RDS-34/0802/24-25
Date of Calibration	:	02/08/2024
Next Calibration due Date	:	01/08/2025

Sr. No.	Name of Unit Calibrated	Calibrator Traceable to	Calibration Certificate No. Date of Calibration
1.	Flow Meter	Top Loading Orifice Envirotech Calibration Laboratory Id No.: (UERL/MASTER/AIR/AA/MM/01)	ECL/UERLPL/2023-24/FLOW/2213 Date of Cali.: 06.08.2023
	ID. No. (UERL/AIR/RDS/FM/34)	Pressure Indicator Envirotech Calibration Laboratory	ECL/UERLPL/2022-23/MECH /3353 Date of Cali.: 22.10.2022
2.	Time Totalizer	Envirotech Calibration Laboratory	ECL/UERLPL/2022-23/ET/3351
	ID. No. (UERL/AIR/RDS/TT/34)	ID. No. (UERL/MASTER/AIR/TT/AA/01)	Date of Cali.: 22.10.2022
3.	Rotameter	Rotameter Envirotech Calibration Laboratory	ECL/UERLPL/2022-23/FLOW/3355
	ID. No. (UERL/AIR/RDS/RM/34)	ID. No. (UERL/MASTER/AIR/RM/02)	Date of Cali.: 22.10.2022

- UNCERTAINTY MEASUREMENT: Flow Meter : ± 0.061 m³/min.
- UNCERTAINTY MEASUREMENT: Time Totalizer : ± 0.031 hour
- UNCERTAINTY MEASUREMENT: Rotameter : ± 0.160 LPM

The reported uncertainty is the expanded uncertainty in measurement at 95 % Confidence level with coverage fact or k = 2 which corresponds to coverage probability of approximately 95 % of normal distribution

Prepared By:

Senior chemist

Approved By:

Technical manager

Page 1 of 1

UERL/AIR/F-73/00

Regd. Office : 215, Royal Arcade, Near G.I.D.C.Office, Char Rasta,Vapi-396 195, Gujarat, India.
Extended Work Office : G.I.D.C., Dahej-II, Bharuch, Gujarat.
CIN:U73100GJ2007PTC051463

Calibration Certificate for RDS

UniStar Environment and Research Labs Pvt. Ltd.
White House
Near G.I.D.C. Office, Char Rasta,
Vapi - 396 195, Gujarat, India.
Phone : +91 260 2433966 / 2425610
Email : response@uerl.in Website : www.uerl.in

MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (31.03.2023 to 22.09.2024) | QCI-NABET Accredited EIA & GW Consultant Organization | GPCB Recognized Environmental Auditor (Schedule-II) | ISO 9001 : 2015 Certified Company | ISO 45001 : 2018 Certified Company

Calibration Certificate

Instrument Name	:	Fine Particulate Sampler
Instrument ID No.	:	UERL/AIR/FPS/50
Instrument Sr. No. Supplier	:	APM – 550/129-DTL-2012
Calibration Certificate No.	:	UERL/CC/FPS-50/0803/24-25
Date of Calibration	:	03/08/2024
Next Calibration due Date	:	02/08/2025

Sr. No.	Name of Unit Calibrated	Calibrator Traceable to	Calibration Certificate No. Date of Calibration
1.	Rotameter ID. No. (UERL/AIR/FPS/RM/50)	Envirotech Calibration Laboratory (New Delhi) ID No. (UERL/MASTER/AIR/RM/01)	ECL/UERLPL/2023-24/FLOW/2214 Date of Cali.: 06.08.2023
2.	Time Totalizer ID. No. (UERL/AIR/FPS/TT/50)	Envirotech Calibration Laboratory ID. No. (UERL/MASTER/AIR/TT/AA/01)	ECL/UERLPL/2022-23/ET/3351 Date of Cali.: 22.10.2022

- UNCERTAINTY MEASUREMENT: Rotameter : ± 0.475 LPM
- UNCERTAINTY MEASUREMENT: Time Totalizer : ± 0.031 hour

The reported uncertainty is the expanded uncertainty in measurement at 95 % Confidence level with coverage fact or k = 2 which corresponds to coverage probability of approximately 95 % of normal distribution.

Prepared By:

Senior chemist

Approved By:

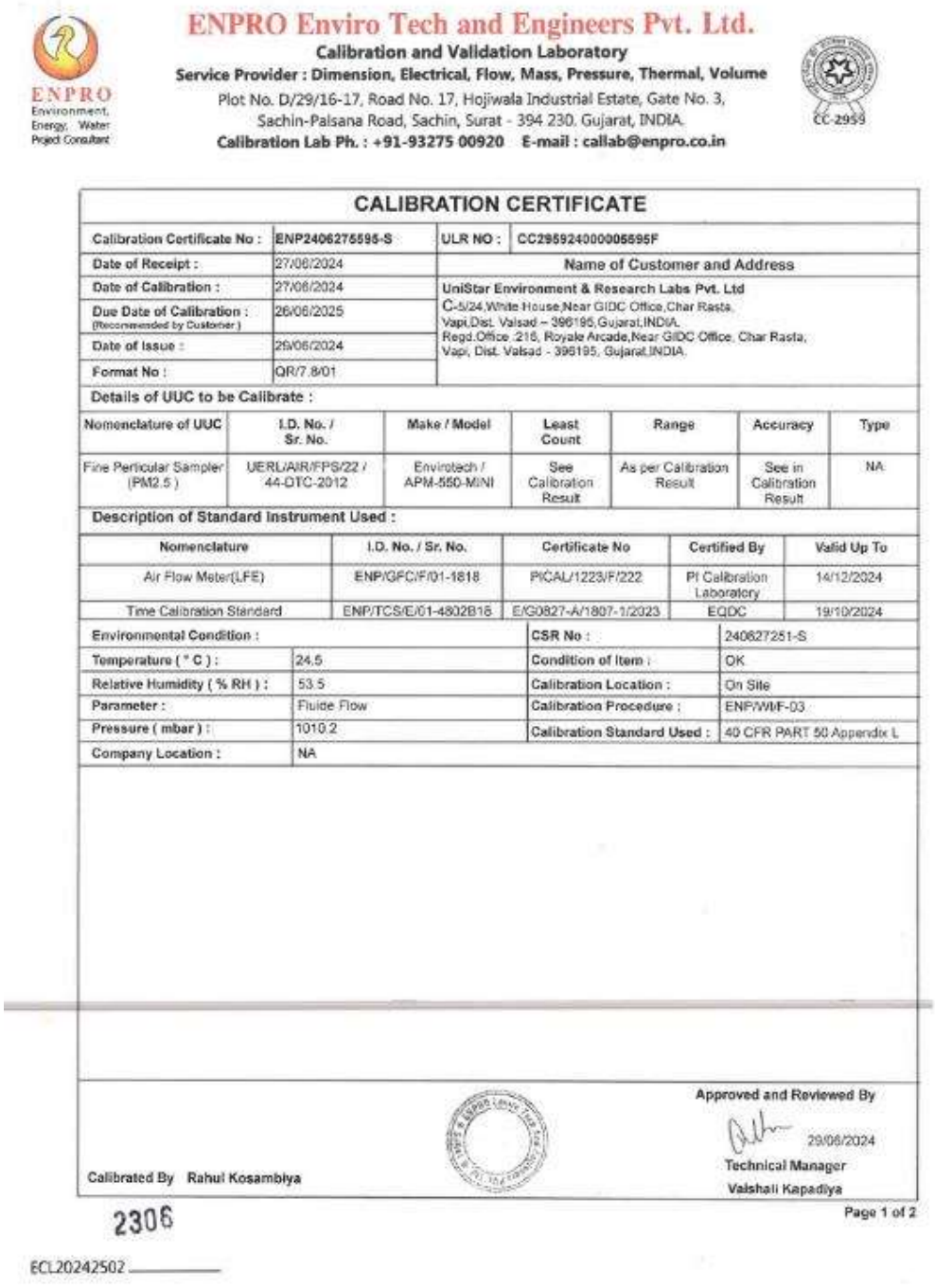
Technical manager

Page 1 of 1

UERL/AIR/F-75/00

Regd. Office : 215, Royal Arcade, Near G.I.D.C.Office, Char Rasta,Vapi-396 195, Gujarat, India.
Extended Work Office : G.I.D.C., Dahej-II, Bharuch, Gujarat.
CIN:U73100GJ2007PTC051463

Calibration Certificate for PM 2.5



ENPRO Enviro Tech and Engineers Pvt. Ltd.
Calibration and Validation Laboratory
Service Provider : Dimension, Electrical, Flow, Mass, Pressure, Thermal, Volume
Plot No. D/29/16-17, Road No. 17, Hojiwala Industrial Estate, Gate No. 3,
Sachin-Palsana Road, Sachin, Surat - 394 230. Gujarat, INDIA.
Calibration Lab Ph. : +91-93275 00920 E-mail : callab@enpro.co.in

CC-2959

CALIBRATION CERTIFICATE

Calibration Certificate No :	ENP2406275595-S	ULR NO :	CC295924000005595F
Date of Receipt :	27/06/2024	Name of Customer and Address	
Date of Calibration :	27/06/2024	UniStar Environment & Research Labs Pvt. Ltd C-5/24,White House,Near GIDC Office,Char Rasta, Vapi,Dist. Valsad – 396195,Gujarat,INDIA. Regd.Office :216, Royale Arcade,Near GIDC Office, Char Rasta, Vapi, Dist. Valsad - 396195, Gujarat,INDIA.	
Due Date of Calibration : (Recommended by Customer)	26/06/2025		
Date of Issue :	29/06/2024		
Format No :	QR/7.8/01		

Details of UUC to be Calibrate :

Nomenclature of UUC	I.D. No. / Sr. No.	Make / Model	Least Count	Range	Accuracy	Type
Fine Particular Sampler (PM2.5)	UERL/AIR/FPS/22 / 44-DTC-2012	Envirotech / APM-550-MINI	See Calibration Result	As per Calibration Result	See in Calibration Result	NA

Description of Standard Instrument Used :

Nomenclature	I.D. No. / Sr. No.	Certificate No	Certified By	Valid Up To
Air Flow Meter(LFE)	ENP/GFC/F/01-1818	PICAL/1223/F/222	PI Calibration Laboratory	14/12/2024
Time Calibration Standard	ENP/TCS/E/01-4802B16	E/G0827-A/1807-1/2023	EQDC	19/10/2024

Environmental Condition :		CSR No :	240627251-S
Temperature (° C) :	24.5	Condition of Item :	OK
Relative Humidity (% RH) :	53.5	Calibration Location :	On Site
Parameter :	Fluide Flow	Calibration Procedure :	ENP/WI/F-03
Pressure (mbar) :	1010.2	Calibration Standard Used :	40 CFR PART 50 Appendix L
Company Location :	NA		

Approved and Reviewed By
29/06/2024
Technical Manager
Vaishali Kapadiya

Calibrated By Rahul Kosambiya

2306

Page 1 of 2

ECL20242502

Calibration Certificate for PM 2.5

Matrix
Test & Cal LLP
CERTIFIED CALIBRATION & VALIDATION SERVICES

ilac-MRA
CC-2664

CALIBRATION CERTIFICATE

SUBJECT: CALIBRATION OF SOUND LEVEL METER	CERTIFICATE NO.: ML/MCH/0848/02/2024-25	
	Certificate Issue Date 08/07/2024	Page 1 of 1

1. **Scope**
1.1 **Service Request Details** — Calibration
1.1.1 **Service Request No.** — ML/0848/24-25
1.1.2 **Service Request Finalized On** — 04/07/2024
1.1.3 **Unique Lab Report Number (ULR No.)** — CC266424000061115F
1.1.4 **Discipline / Group** — Mechanical / Acoustics
1.1.5 **Name & Address of Organization** — **UNISTAR ENVIRONMENT RESEARCH LABS PVT. LTD.**
White House, 2nd Floor, Near G.I.D.C. Office, Char Rasta, Vapi, Gujarat, India, 396 195.

1.2 **Item Details**
1.2.1 **Condition of the Item** — Working
1.2.2

Nomenclature	SOUND LEVEL METER		
Make	Envirotech	Model No.	SLM 100
ID No.	UERL/AIR/SLM/098	Sr.No.	310-DTK-2015
Range	30 to 130 dB dB @1 kHz	Type	---
Least Count	0.1 dB @1 kHz	Accuracy / Accep. Crite.	NA
Department	---	Location	---

1.3 **Item Received On** — Dt. 05/07/2024
1.4 **Details of Test Equipments Used**

Instrument Name	Range	UID No.	Certificate No.	Make	Due Date
Sound Level Calibrator	94 dB & 114 dB	ML/MSLC/001	FCRI/NVL-C/0947/23/203	Lutron	23/08/2024

1.4.1 **Operating Procedures Used:** — **ML/SOP/M/AC/001**
1.4.2 **Reference Standard:** — IS : 9779:1981
1.5 **Date of Calibration:** — 06-July-2024
1.6 **Recommended Due Date of Calibration:** — **05-July-2025**
1.7 **OBSERVATIONS:**
1.7.1 **Laboratory Ambient:** Temperature: 24.5 °C (25±3) Humidity: 56.3 %RH (50±20)
1.7.2 **Parameter:Sound (dB @1 kHz)**
1.7.3

CALIBRATION RESULTS					
Sr. No.	Calibration Point	Set Value on Master (A)	Measured Value on IUC (B)	Error (B - A)	(±) Expanded Uncertainty
1	94	94	94.1	0.1	1.1 dB @1 kHz
2	114	114	114.4	0.4	1.1 dB @1 kHz

Note: The value mentioned above is the mean of 5 readings.

1.8 **General Remarks:**

- The reported uncertainty is the expanded uncertainty in measurement obtained by multiplying the standard uncertainty by the coverage factor k=2, which corresponds to a coverage probability of approximately 95.45% for a normal distribution.
- Uncertainty to be calculated at Max Error / Full Range of IUC
- Any anomalies/Discrepancies in the certificate should be brought to our notice within 30 days from the date of issue Certificate.
- IUC* (Instrument Under Calibration)
- The Measurements are metrologically traceable to applicable national /International Standards.
- Any hand written corrections (except @) or photocopies of the report invalidates this certificate.
- The results related to the item calibrated.

Calibrated By: Hemant Patel, Calibration Engineer	
Ranjit Rohit / Hitesh Patel Technical Director / Quality Manager	AUTHORISED SIGNATORY

End of Certificate

B–209 & B–210 2nd Floor, "B"Wing, M Cube,The Business Hub, Opp. Taluka Seva Sadan, Balitha. Vapi–396 195 Gujarat (India) Cell:098253 17475,Off: 097238 20970
Website : www.matrixlab.in, E–mail : info@matrixlab.co.in, matrixvapi@rediffmail.com

CERTIFICATE

Calibration Certificate for Sound Level Meter

Matrix Test & Cal LLP
CERTIFIED CALIBRATION & VALIDATION SERVICES

ilac-MRA

CC-2664

CALIBRATION CERTIFICATE

SUBJECT: CALIBRATION OF SOUND LEVEL METER	CERTIFICATE NO.: ML/MCH/0848/01/2024-25	
	Certificate Issue Date 08/07/2024	Page 1 of 1

1. Scope

1.1	Service Request Details	Calibration
1.1.1	Service Request No.	ML/0848/24-25
1.1.2	Service Request Finalized On	04/07/2024
1.1.3	Unique Lab Report Number (ULR No.)	CC266424000061114F
1.1.4	Discipline / Group	Mechanical / Acoustics
1.1.5	Name & Address of Organization	UNISTAR ENVIRONMENT RESEARCH LABS PVT. LTD. White House, 2nd Floor, Near G.I.D.C. Office, Char Rasta, Vapi, Gujarat, India, 396 195.

1.2 Item Details

1.2.1	Condition of the Item	Working		
1.2.2	Nomenclature	SOUND LEVEL METER		
	Make	Envirotech	Model No.	SLM 100
	ID No.	UERL/AIR/SLM/09A	Sr.No.	24DTE2008
	Range	30 to 130 dB dB @1 kHz	Type	---
	Least Count	0.1 dB @1 kHz	Accuracy / Accep. Crite.	NA
	Department	---	Location	---
1.3	Item Received On	Dt. 05/07/2024		

1.4 Details of Test Equipments Used

Instrument Name	Range	UID No.	Certificate No.	Make	Due Date
Sound Level Calibrator	94 dB & 114 dB	ML/MSLC/001	FCRI/NVL-C/0947/23/203	Lutron	23/08/2024

1.4.1	Operating Procedures Used:	ML/SOP/M/AC/001
1.4.2	Reference Standard:	IS : 9779:1981
1.5	Date of Calibration:	06-July-2024
1.6	Recommended Due Date of Calibration:	05-July-2025
1.7	OBSERVATIONS:	
1.7.1	Laboratory Ambient: Temperature: 25.4 °C (25±3)	Humidity: 52.0 %RH (50±20)
1.7.2	Parameter:Sound (dB @1 kHz)	

1.7.3 CALIBRATION RESULTS

Sr. No.	Calibration Point	Set Value on Master (A)	Measured Value on IUC (B)	Error (B - A)	(±) Expanded Uncertainty
1	94	94	94.1	0.1	1.1 dB @1 kHz
2	114	114	114.5	0.5	1.1 dB @1 kHz

Note: The value mentioned above is the mean of 5 readings.

1.8 General Remarks:

- The reported uncertainty is the expanded uncertainty in measurement obtained by multiplying the standard uncertainty by the coverage factor k=2, which corresponds to a coverage probability of approximately 95.45% for a normal distribution.
- Uncertainty to be calculated at Max Error / Full Range of IUC
- Any anomalies/Discrepancies in the certificate should be brought to our notice within 30 days from the date of issue Certificate.
- IUC* (Instrument Under Calibration)
- The Measurements are metrologically traceable to applicable national /International Standards.
- Any hand written corrections (except @) or photocopies of the report invalidates this certificate.
- The results related to the item calibrated.

Calibrated By: Hemant Patel, Calibration Engineer

AUTHORISED SIGNATORY

Ranjit Rohit / Hitesh Patel
Technical Director / Quality Manager

396195 MATRIX TEST & CAL LLP VAPI

End of Certificate

B-209 & B-210 2nd Floor, "B" Wing, M Cube, The Business Hub, Opp. Taluka Seva Sadan, Daman Road, Vapi-396 195 Gujarat (India) Cell:098253 17475,Off. 097238 20970
Website : www.matrixlab.in, E-mail : info@matrixlab.co.in, matrixvapi@rediffmail.com

CERTIFICATE

Calibration Certificate for Sound Level Meter

UniStar Environment & Research Labs Pvt. Ltd.

White House, Near GIDC Office, Char Rasta, Vapi,

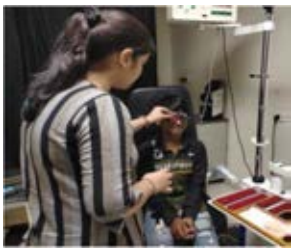
Gujarat, India – 396195

Annexure - III

MUNDRA PETROCHEM LIMITED

Corporate Environmental Responsibility

October 2024–March 2025



Contents

1. EXECUTIVE SUMMERY

This report highlights the significant accomplishments of Mundra Petrochem Limited (MPL)'s Corporate Environmental Responsibility (CER) initiatives for the fiscal year 2024-25. MPL remains dedicated to effecting positive change within the communities adjacent to its project activities, with an emphasis on environmental sustainability, community empowerment, and promoting a healthier society.

Educational Initiatives.

Addressing the Sustainable Development Goal of providing quality education, MPL's education initiative focuses on developing infrastructure, providing necessary resources to students, and promoting girl child education through awareness campaigns. There are several gaps in the educational system in the region that need to be addressed, and through systematic planning and execution, MPL's team is enhancing the quality of education in the area.

As part of this initiative, over 750 students attended a Career Counseling Seminar. More than 82 students were provided with transportation for pick-up and drop-off to attend school. Additionally, over 350 students received educational kits, including those designed for ITI students. School furniture was supplied to schools in Modhava village, and eight teachers have been appointed under the "Utthan" Sahayak program to enhance the educational skills of students. Educational awareness programs have been conducted by field experts, emphasizing the importance of environmental sustainability in daily life.

Skill development programs for young individuals have also been implemented, including a self-defense training program at Zarpara Girls Primary School, which had over 85 participants. School infrastructure improvements include the provision of adequate toilet facilities for female students, furniture, paver blocks, and a Saline Water Reverse Osmosis (SWRO) unit to provide safe drinking water. Efforts also include strengthening sanitation and hygiene within school premises.

Community Health Initiatives.

MPL's primary assessment identified the local fishing community as one of the most vulnerable. The goal of this initiative is to support the fishing community, including by providing essential medical assistance and health education. The project aims to reach over 60,000 people in 16 villages through disease prevention awareness drives, family planning workshops, menstrual hygiene and nutrition workshops, and general health sessions.

Under this initiative, more than 1,100 patients were examined. Among them, 453 patients were diagnosed with eye flu and treated by an eye specialist, while 98 patients were examined by a gynecologist, 537 patients were treated by general doctors, and 11 patients were examined by a pediatrician.

Additionally, a menstrual health awareness session was organized for girls and women. Hospital infrastructure improvements, including modern equipment for burn and intensive care units (ICU), were provided at GK & GAIMS Hospital in Bhuj to support burn cases within a 200 km radius. Clean and safe drinking water was made available to villagers and students through the installation of SWRO units in the villages of Tunda and Zarpara.

Sustainable Livelihood and women Empowerment.

MPL has organized programs to empower women, foster sustainable livelihoods, and cultivate environmental awareness within the community.

In coastal communities, women play a vital role in the fishing industry. They have been educated on hygiene and best practices for the fishing business. Additionally, menstrual health awareness initiatives have engaged over 100 women. Financial empowerment programs have supported over 300 marginalized fisherfolk community women. To improve women's health and hygiene, more than 450 sanitary pads were distributed.

Sustainable infrastructure projects included check dam restoration, percolation well construction, river and stream cleaning, culvert construction, and rooftop rainwater harvesting systems. Renovation of the check dam benefitted over 160 farmers by storing more than 180,000 cubic meters of water. Additionally, 122 percolation wells have been constructed, along with river/stream cleaning and pond deepening efforts. Culvert construction has supported irrigation for 38 hectares of land, benefiting more than 105 farmers.

Furthermore, over 165 rainwater harvesting systems were installed in the nearby community areas, increasing clean and safe drinking water capacity by approximately 1,650,000 liters, which achieved water-positive status in over three villages.

Community tree plantations covered an area of 9 acres, resulting in the planting of over 24,300 trees in FY 2024-25. Additionally, more than 500 farmers received assistance in cultivating fruit-bearing trees. An Eco Club was established for the community, involving 70 schools and over 6,000 students in environmental and sustainability awareness initiatives. A mangrove conservation awareness session engaged around 100 students.

A significant awareness drive on alternatives to single-use plastic (SUP) was organized, with participation from over 6,000 students.

Community Rural Infrastructure Development.

The Community Rural Infrastructure Development program by MPL encompasses a wide range of initiatives aimed at enhancing the living standards in rural areas. It focuses on water conservation through measures such as check dam restoration, de-siltation, and bore well recharge structures.

Road repair work was carried out in nearby villages and fisherfolk community areas. Paver blocks were installed in common gathering areas. Clear water facilities with a capacity of 20,000 liters were provided for household animals. Rooftop rainwater harvesting systems were installed in nearby villages.

Additionally, four SWRO units, with capacities of 3,000 liters per hour, 50 liters per hour, and 150 liters per hour, were provided for clean water in Tunda and Zarpara villages, benefiting villagers and students. School furniture and other infrastructure were also constructed in nearby villages.

An overview of CER Expenditure by MPL for the year 2024 – 2025:-

Sr. No.	Sector	CER Expenditure 2024 - 2025 (INR)
1	Educational Initiatives.	7367709
2	Community Health Initiatives.	18875165
3	Sustainable Livelihood and women Empowerment.	2966715
4	Community Rural Infrastructure Development.	15413381
5	Monitoring & Reporting	2462342
	Total	**47085312**

i.e. Approximate INR 470.853 Lakhs

Total CER expenditure incurred in various community welfare & eco – development activities was approximate INR 1301 Lakhs cumulative till March, 2025 including expenditure occurred INR 470.853 Lakhs for the year 2024 – 2025.

2. ABOUT MUNDRA PETROCHEM LTD

Mundra Petrochem Limited (MPL), a step-down subsidiary of Adani Enterprises Limited, is an emerging company with a substantial vision. MPL aims to become a significant player in India's petrochemical sector. The company's primary focus is on developing a greenfield PVC complex strategically located within SEZ notified land of Adani Ports and Special Economic Zone (APSEZ) at Mundra, Gujarat.

MPL's mission extends beyond production; it is dedicated to pioneering sustainable practices within the industrial sector, in alignment with the Adani Group's commitment to national development. The state-of-the-art facility is currently under engineering design, incorporating advanced technologies to minimize environmental impact. This commitment is further demonstrated through MPL's focus on community development via various Corporate Environmental Responsibility (CER) initiatives.

With pre and full operations of proposed project anticipated to commence in Jun-2026 and Oct-27, respectively, MPL is expected to create significant economic opportunities for the region. By promoting sustainable practices and empowering local communities, MPL aspires to set a benchmark for responsible industrial development in India.

MPL's Corporate Environmental Responsibility (CER) program surpasses mere carbon reduction efforts. It embodies a holistic approach grounded in rigorous scientific methodologies. This comprehensive initiative addresses environmental concerns while enhancing ecological resilience and empowering local communities. The subsequent sections of this report will explore the impactful outcomes achieved through MPL's extensive CER program.

3. SECTOR IDENTIFICATION BASED ON THE "CER" MANDATE

Mundra Petrochem Limited (MPL)'s CER action plan has been approved by the MoEF&CC as part of Environmental Clearance (EC) for the PVC project activities. As per the action plan, the activities were divided into four major impact sectors: -

- **Educational Support.**
- **Community Health Initiatives.**
- **Sustainable Livelihood & Women Empowerment.**
- **Community Rural Infrastructure Support.**

This report outlines the interventions implemented by MPL as part of the CER initiative. It provides a concise overview of the project details, including input, output, outcome, and impact (where applicable). The programs or activities carried out by MPL were in strict adherence with the provisions of action plan approved by the MoEF&CC, addressing the concerns raised during the public hearing process of the project activity.

4. CER INITIATIVES & INTERLINKAGE WITH SDGs.

Mundra Petrochem Limited has established a benchmark in business practices that extend beyond regulatory requirements, with the goal of creating a better world. Consequently, we have invested in initiatives designed to generate the maximum positive impact in the shortest time frame with long-lasting effects. Mundra Petrochem Limited's operations are aligned with Sustainable Development Goals—social, economic, and environmental—underpinned by a robust governance framework.

- End hunger and ensure access to safe, nutritious and sufficiant food.
- End all form of malnutrition.
- Ensure sustainable food production system and implement resilient agricultural practice.
- Investment in rural infrastructure.

- Promoting natural farming for a healthy lifestyle and conducting health camps to address the health issues.

- Ensure that all girls and boys complete free equitable and quality primary and secondary education.
- Bulding and upgrading education facilities.
- Providing transportation and school stuffs to students to attend the hasslefree education system.

- End all form of discrimination agaist all women and girls.
- Ensure women's full and effective participation
- Creating an inclusive environment for women in the community through participation in the decision-making process and other activities.

- Restoring water bodies and encouraging water harvesting through participatory actions
- Protect and restore waterrelated ecosystems
- Support and strengthen the participation of local communities in improving water and sanitation management.

- Promoting use of biogas for clean and affordable energy solution

- Full and productive employment and decent work for all women and men Creating livelihood opportunities for women and youth through skilling programs

- Empower and promote the social, economic and Ensure equal opportunity & reduce inequalities of outcome.
- Adopted policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.

- Providing holistic solutions through water management, sustainable agriculture, green energy, and resilience building through health and disaster management.

- Promoting green areas through plantation, preserving, and restoring mangrove ecosystems, and commencing IEC based awareness activities for building environmental stewardship.

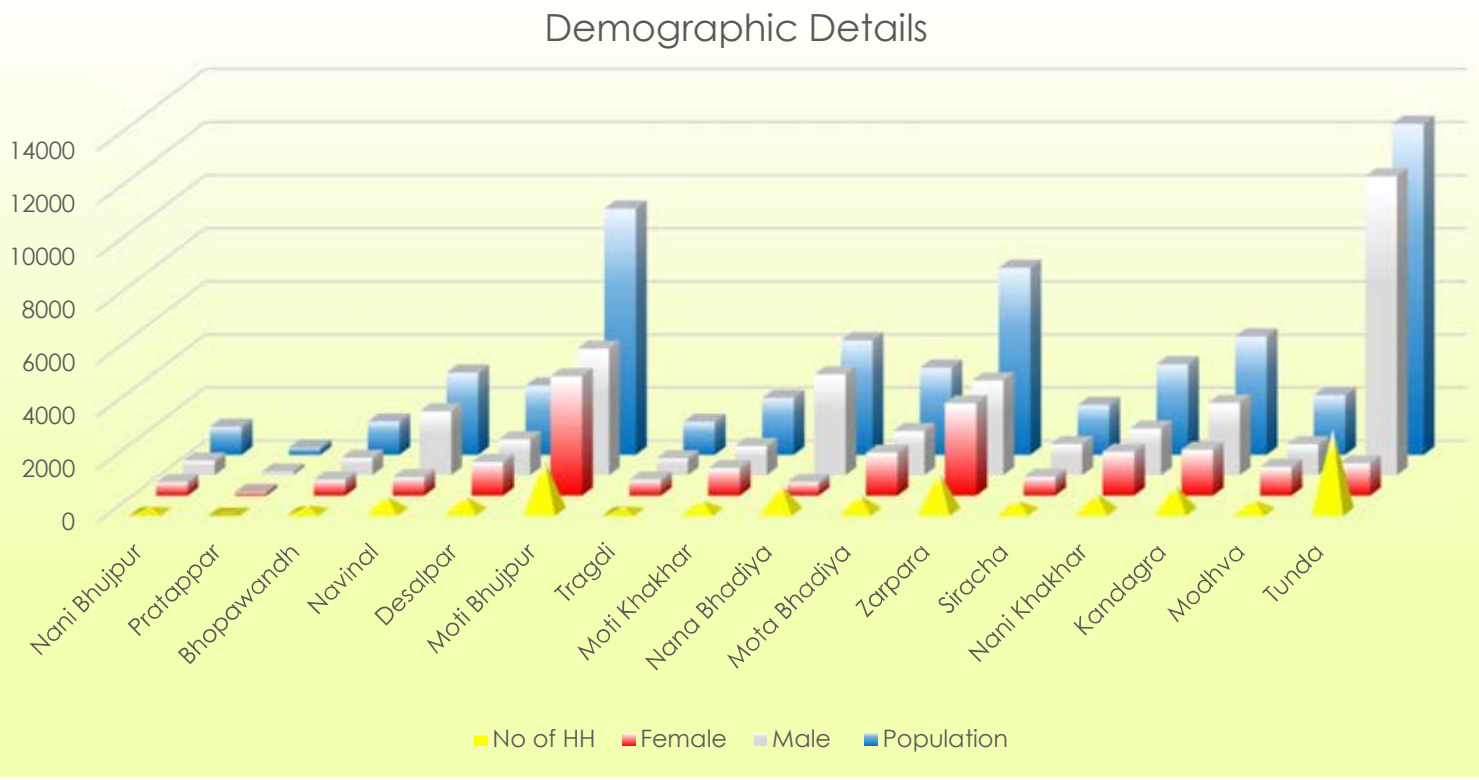
- Dedicated efforts are made to restore the mangrove ecosystem which supports many marine life forms.
- Sustainably manage and protect marine and coastal ecosystem.

- Increased afforestation and reforestation.
- Reduce the degradation of natural habitats, halt the loss of biodiversity.
- Integrate ecosystem and biodiversity values.
- Conservation of the local ecosystem through restoration action and mobilizing communities to minimize plastic consumption.

5. ABOUT REGION

Mundra, historic port town in Gujarat's Kutch district, boasts a hot, arid climate with rich biodiversity despite limited rainfall. Located on the Gulf of Kutch at around 46 feet elevation, this census town reflects the cultural diversity of the district. The ecology is surprisingly vibrant with mangroves and birdlife, but water scarcity necessitates conservation efforts. Mundra's industrial growth ingredients by sustainable development practices.

Demographic details the 16 study villages of Mundra are as under[1]:

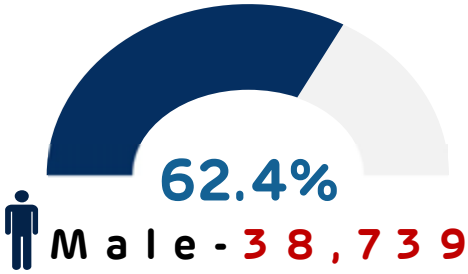


Sr. No.	Village Name	Population	Male	Female	No of HH
1	Nani Bhujpur	1056	551	505	210
2	Pratappar	268	136	132	48
3	Bhopawandh	1250	650	600	250
4	Navinal	3100	2406	694	602
5	Desalpar	2611	1350	1261	581
6	Moti Bhujpur	9278	4777	4501	1979
7	Tragdi	1238	636	602	216
8	Moti Khakhar	2139	1101	1038	436

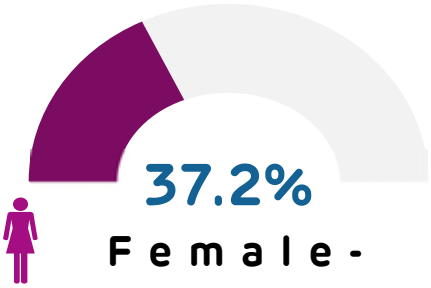
Sr. No.	Village Name	Population	Male	Female	No of HH
9	Nana Bhadiya	4318	3805	513	1011
10	Mota Bhadiya	3284	1669	1615	624
11	Zarpara	7052	3572	3480	1506
12	Siracha	1879	1171	708	429
13	Nani Khakhar	3412	1758	1654	691
14	Kandagra	4461	2729	1732	1015
15	Modhva	2250	1167	1083	450
16	Tunda	12471	11261	1210	3134

[1] The data is source from the Census, 2011

Total- 60,067



Male- 38,739



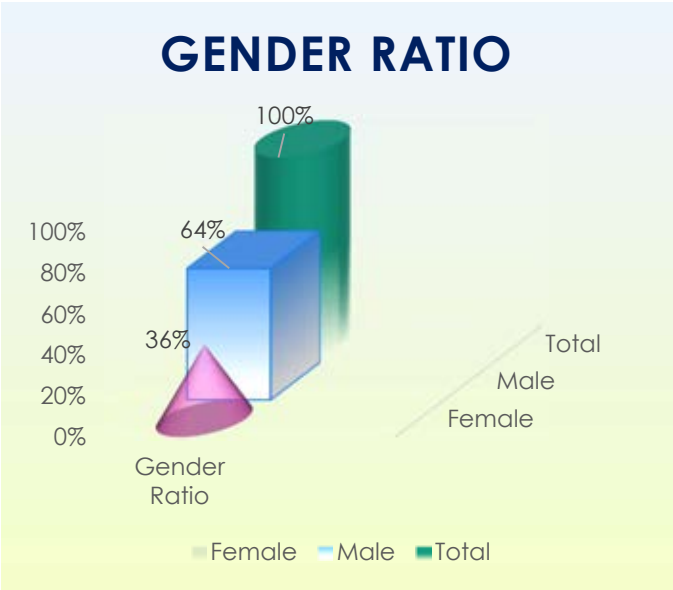
Female- 21,328

Household- 13,182

The chart presents the population data across different villages. Tunda, Moti Bhujpar has the highest population at 12,471 and 9278 respectively, significantly larger than most other villages. Zarpara and Kandagra also have relatively high populations. Several villages like Nani Khakhar and Desalpar have populations of around 3,000 to 4,000.

The chart highlights the variation in population size across rural areas, with some villages being quite populous while others have very small populations like Pratappar with just 268 residents. This data provides insights into the demographic distribution and density patterns in the region.

5.1 GENDER RATIO



In the collective populace of 16 villages, males significantly surpass females at a ratio of 9 to 1. Tunda village exhibits the most pronounced gender disparity, with males constituting 90% of its inhabitants. Across these villages, there are a total of 13,182 households, with Tunda boasting the highest count and Pratappar the lowest.

This disparity highlights a notable trend in gender distribution within rural communities, underscoring the need for further examination of socio – cultural dynamics and their implications on population demographics and societal structure.

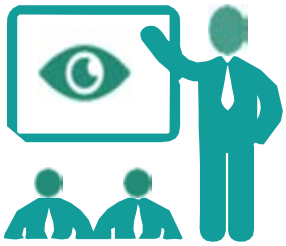
6. EDUCATION PROMOTIONAL INITIATIVE.

In this era of shaping future, the role of corporate responsibility in fostering sustainable development and empowering communities cannot be overstated. One such commendable endeavor is the "**Project Utthan**", Education Initiative undertaken by Adani Foundation (Under CSR), which stands as a testament to the organization's commitment towards creating a positive impact in society. The Utthan Initiative encompasses a multifaceted approach to enhance educational infrastructure, empower local institutions and foster community development. Through strategic interventions spanning infrastructure support, capacity building and community engagement, Adani Foundation (under CSR) has endeavored to address the educational needs of underserved communities and contribute to their holistic development. Mundra Petrochem Limited has supported various education promotion initiatives undertaken by Adani Foundation (under CSR / CER).

6.1 KEY INTERVENTIONS

Infrastructure Support to Local Institutions

MPL's commitment to improving educational infrastructure is exemplified by various initiatives, including the provision of essential resources such as office stationery, clean and Hygiene water availability, Additionally, constructing a sanitary facilities and renovating the primary school in underscore MPL's dedication to creating conducive learning environments for students.



Training & Capacity Building

Recognizing the pivotal role of educators in shaping young minds, MPL has invested in capacity building measures by hiring Utthan Sahayak and Shikshan Sahayak for government primary schools. Moreover, the distribution of education kits further empowers teachers and students with the necessary tools for effective learning and skill development.

Community Support

MPL's Education Initiative extends beyond the confines of school premises, reaching out to the broader community. By arranging transportation for underprivileged students, MPL ensures access to education for all, irrespective of socio-economic barriers. Furthermore, initiatives such as women awareness programs contribute towards fostering a more inclusive and empowered society.

6.2 RESULT AND OUTCOMES OF THE "UTTHAN" INITIATIVE.

This chapter details the significant achievements of the Education support initiative, highlighting improved educational access, enhanced learning outcomes and empowering students within the community.

Addressing the SDG of providing quality education, MPL's education institution in the form of developing infrastructure, providing necessary resources to students and encouraging girl child education through awareness. There are several gaps in the educational system in the region which need to be addressed and through systematic planning and execution, MPL's team is enhancing the quality of education in the region.

SOCIAL IMPACT

6.2.1 EDUCATIONAL KIT – SYLLABUS BOOKS SUPPORT

1168 Books for 276 students

ITI students were supported by providing syllabus Books to elaborate and strengthen the skill / knowledge for Plumbing, Wireman, Computer Operator and Programming Assistant (COPA) Electrician, Welder, Fitter and Mechanic Diesel. Books remain an indispensable resource for students as they serve as a foundational pillar, offering a structured and comprehensive approach to learning. Through this, students can unlock the opportunities for industrial employment or self-employment, so that area can be improved educationally and economically.

140+ students benefited with educational kits like, School bags, books, stationary items, Guidebooks, notebooks, etc.

Through these initiatives, students are able to interact daily school work and better at home as well.

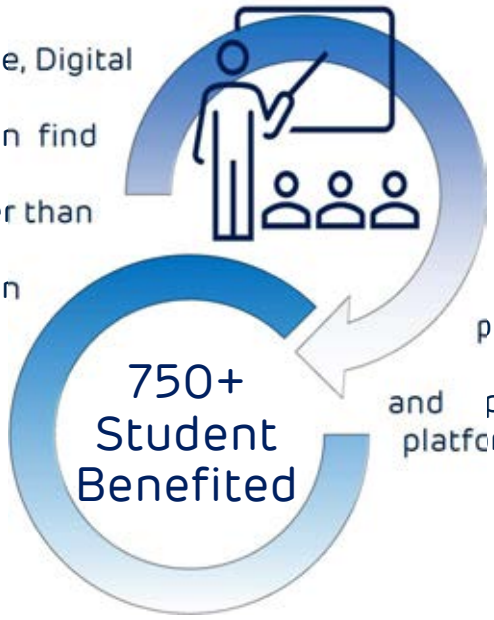
6.2.2 CAREER COUNSELING SEMINAR.

Mundra Petrochem Ltd., Adani Foundation and Kachchmitra have organized a mega career counseling seminar, at GKGH, Bhuj.

This seminar deeply focused on the different careers paths that students can chose after the 10th & 12th Standard. Students can understand his / her own ability to grow their career in skilled been developed within. So that, they can pick right path in so many career options.

This seminar has encompassed:

- Discussion on job profiles related to AI, Data science, Digital Marketing, and Technical trades.
- Shared government websites where students can find detailed information about job profiles in technical trades.
- Parents are advised to become pillars of trust rather than asserting ownership over their children.
- Unveiled a QR code, through this, students can virtually explore the "Yearly Career Guidance Book" published by the Education Department, Gujarat government.
- This seminar is not only benefited the students and parents of Kutch but also broadcasted live on digital platforms to reach students and parents across India.



6.2.3 HIGHER EDUCATIONAL OPPORTUNITIES FOR MARGINALIZED COMMUNITIES.



Reason for providing facilities:

- Not enough economical ground to support the expenses of high school.
- High Schools are very limited in fisherfolk villages, making it hard for families to afford transportation costs.
- The foundation of students is very poor due to negligence in primary education.
- Parents are uneducated and busy with daily labor, leaving no time to support their children education.

Impact of Providing facilities:

- To provide safe and reliable transportation for the children of the fisherfolk community.
- Vehicle transportation (two way) facilities are provided to more than 82 students - pick up & drop to attend the school.
- This initiative has significantly reduced transportation challenges and improved school attendance which contributes better educational outcomes. Drop out ratio have been reduced by 87%.
- Students from villages like Modhava, Tragadi Bandar & Zarpara Bandar are facilited.

6.2.4 "UTTHAN" SAHAYAK - TEACHERS

- Total 8 numbers of "Utthan" sahayak – teachers have been provided to fill the gape and enhance students' learning capacities, provided essential facilities to school and achieve better learning outcomes at the grassroots level.
- The Project focuses on transforming government primary schools into model institutions by implementing the following key initiatives.

Strengthening Government Primary Schools	Appointing an Utthan Sahayak	Providing Resources and Facilities	Introducing Vedic Math's & Abacus	Capacity Building for Government School Teachers	Special Focus on 'Priya' Vidyarthi's (Progressive Learners)	Training Students for Competitive Exams
Adopting and upgrading government primary schools to model schools.	Assigning a dedicated facilitator in each school to act as a catalyst for change.	Ensuring schools are equipped with necessary resources and infrastructure	Increasing students' logical and mathematical skills through Vedic Math's and Abacus training.	Conducting training programs to improve teachers' skills and teaching methods.	Providing additional support and tutoring for progressive learners.	Preparing students for various competitive examinations.

6.2.5 SKILL DEVELOPMENT PROGRAM

50+ Girls students participated.

Beauty Parlor is a field that involves ongoing learning and skills development due to its dynamic and evolving nature. By focusing on essential skills, participating in training programs, and adopting strategies for continuous improvement, participants can enhance their expertise and provide high-quality services to their clients, thereby increasing their economic value.

19 Girls

11 Boys

Total 30 numbers of young youth have attended Domestic Data Entry Operator (DDEO) - Skill development program.

6.2.6 AWARENESS THROUGH "BUILDING AS LEARNING AID (BALA)

Building as a Learning Aid (BaLA) offers a dynamic and multifaceted approach to the education. By incorporating wall painting activities into the curriculum, educators can enhance creativity, problem solving skills, and collaboration among students. As Mundra Petrochem Limited has relentlessly supporting to explore innovative teaching methods, building as a learning aid holds great promise for fostering a deeper and more engaging learning experience.

Under the Building as a Learning Aid (BaLA) initiatives, school walls and surfaces are transformed into learning aids, featuring educational concept like:

- Alphabets and numbers for foundational learning.
- Scientific diagrams to support STEM education.
- Maps and historical timelines for broader knowledge.
- The paintings are designed to be durable and require minimal upkeep, ensuring long -term benefits.

44 schools benefited

8590+ students interacted daily.

6.2.7 SELF DEFENSE TRAINING FOR GIRLS STUDENTS

To empower adolescent girls with self-defense skills and awareness to ensure their safety and boost confidence in challenging situations.

- ✓ 85+ Girls students participated
- ✓ Practical self-defense techniques and safety awareness were taught.
- ✓ Emphasis on recognizing good touch vs bad touch and knowing when to seek help.
- ✓ This empowers the girls by equipping them with skills and confidence to protect themselves and recognize unsafe situations.
- ✓ Promoting their overall safety and well-being.

6.2.8 SCHOOL INFRASTRUCTURE

MPL is deeply intended to create structure that has meaningful OR positive out come for the long lasting period. Further, this can improve the beauty of the educational institutions, so that students have positive impress to love the school environment. Considering this, MPL has constructed area with "Paver Blocks" at primary schools.

373 + students have access to clean water

Considering initiatives for clean water and sanitation for all, MPL has installed Saline Water Reverse Osmosis (SWRO) units having capacity of 50LPH at Primary school of Tunda Village and 150 LPH at Girls School of Zarpara village. More than 373 students are benefiting with this service.

Hygienic Sanitation Initiative is essential to address the lack of proper sanitation and hygiene facilities in schools as well as Girls hostel. This will encourages girls to promote better menstrual hygiene and aims to change regressive norms and practices related to menstruation.

100 + Girls students benefited

To create an engaging and nurturing environment for young children in Zarpara Primary School by constructing a dedicated Balvatika that support their mental and physical development through creative and educational activities.

To create an engaging and nurturing environment for young chlidren in Zarpara Primary School by constructing a dedicated Balvatika that supports their mental and physical develoment through creative and educational activities.

6.2.9 SPORT FACILITIES & EQUIPMENTS AT SCHOOLS

A critical component of this domain is the availability and use of appropriate sport equipment. For students, sport equipment is not merely about facilitating play but is integral to enhance health, developing skills, and improving academic performance. It is a fundamental aspect of promoting physical health, developing essential motor and cognitive skills, fostering social interactions, boosting confidence, and encouraging lifelong fitness habits.

Sport equipment for Archery have been provided to state level sport student to enhance the competitive sport activities at school level.

Ground mats are essential components in sports activities, providing both protection and a suitable playing surface. Further, ground mats provide the crucial role in sports by providing safety, performance and durability like Mates cushion falls and reduce the risk of injuries including it offers a stable, non – slip surface that enhance players' ability and speed and withstand the rigors of intense physical activity.

6.2.10 SCHOOL FURNITURE SUPPORT

- School furniture for students have been provided at Government School, village Modhava.

6.2.11 EDUCATIONAL AWARENESS PROGRAM

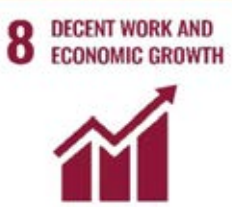


Environmental awareness program were conducted at more than 18 schools and about 2000 students were participated. In addition to this, villagers have also included in the awareness sessions and these sessions focused on sustainable practices and the importance of environmental conservation, particularly highlighting the need to reduce plastic usage and promote eco – friendly alternatives.


Education awareness sessions were conducted in fisherfolk Vasahat, Vadi vistar – Village Farm Residence areas of nearby villages to highlight the importance of education, particularly girl–child education.

To educate childrens on plastic free ecosystem, Eco-clubes were established for raise the climate change awarness. So, far 72 Utthan Sahayak have been trained who reaching over 6000+ studets through awarness seminar.

6.2.12 LINKAGE WITH SUSTAINABLE DEVELOPMENT GOALS

	The education support initiative enhances quality education and equal access, directly contributing overall goal of inclusive, equitable education for all. Ensure that all girls and boys complete free equitable and quality primary and secondary education. Building and upgrading education facilities. Providing transportation and school stuffs to students to attend the hassle-free education system.
	The education support initiative promotes gender equality by ensuring equal educational opportunities and empowering girls. End all form of discrimination against all girls through education.
	The education support initiative fosters economic growth by providing skills and knowledge. Full and productive employment and decent work for all women and men Creating livelihood opportunities for all and youth through skilling programs.
	The education support initiative reduces inequalities by providing equitable access to education.

7. COMMUNITY HEALTH INITIATIVES

MPL's primary assessment of the project revealed that the local fisherman community is one of the most vulnerable communities. The project aimed to empower fisherman community including villages like Navinal, Tragadi, Modhva, and Zarpara by providing vital medical assistant and health education. Through preventive disease awareness drives, family planning workshops, menstrual hygiene, nutrition workshops, and general health sessions, the project aim to reached over 60,000 peoples in 16 villages. This holistic approach led to a lasting impact: women gained knowledge to plan their families and stay healthy, while adolescents and women received support for menstrual hygiene and proper nutrition. Most importantly, the project fostered a sense of community by forming a Self-Help Group, ensuring this newfound knowledge continues to empower future generations.

7.1 KEY INTERVENTIONS

Medical Support

Medical support in the form of medicine, vaccine, testing and blood testing facilities are provided by Mundra Petrochem under CER to the local community members.

Menstrual Hygiene Workshops

The workshop aimed to address the gap in knowledge and access to proper menstrual hygiene management (MHM) resources faced by women and girls in the area. During the workshop Adolescent and women are supported for Menstrual hygiene awareness and capacity building trainings.

Health Awareness Workshop

Awareness sessions were organized by the MPL team with a special focus on the importance of vaccination, clean water, sanitation, and mental health.

Nutrition Workshop

Workshops focused on promoting healthy eating habits and tackling malnutrition in the project villages. Local residents participated in interactive sessions led by nutrition experts. Participants learned practical tips on food preparation, storage, and techniques to maximize nutrient intake.

7.2 RESULT AND OUTCOMES OF THE "COMMUNITY HEALTH" INITIATIVE.

This chapter outlines the significant achievements of the Community Health Initiatives being implemented by Munda Petrochem Limited under CER, detailing improvements in Health, outcomes, increased awareness and enhanced well – being within the community.

7.2.1 MEDICAL CAMP FOR COMMUNITY

A medical health checkup camp is an initiative designed to provide comprehensive medical examinations and screenings to a community. These camps are instrumental in promoting health awareness, early detection of diseases and facilitating timely medical intervention.

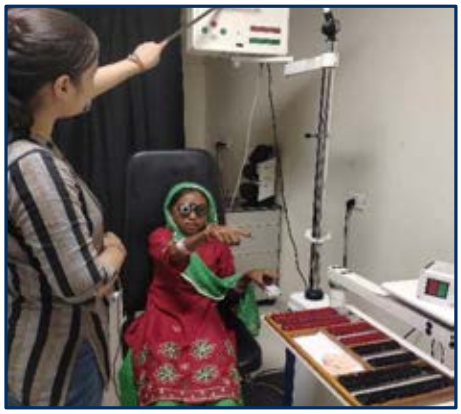
The objectives of a medical health checkup camp are:

Early Detection	Health Awarness	Accessibility	Community Health
•Identifying health issues at an early stage allows for more effective treatment and management	•Educating the community about common health problems, preventive measures and healthy lifestyle choices.	•Providing healthcare services to underserved or remote areas where medical facilities may be limited.	•Improving the overall health status of the community by addresing prevalent health concerns.

A comprehensive medical camp have been organized at nearby villages by Mundra Petrochem Limited. This camp have been organized with a dedicated teams of doctors, the camp catered to diverse health needs of the community. Each patient received personalized attention through check -ups and tailored prescriptions.

The team of doctors have Eye specialist, Gynecologist, General Doctors and Pediatricians.

This initiative underscored the critical importance of early detection and treatment of eye – related issues, ensuring the people specially children have a better chance at maintaining healthy vision as they grow.





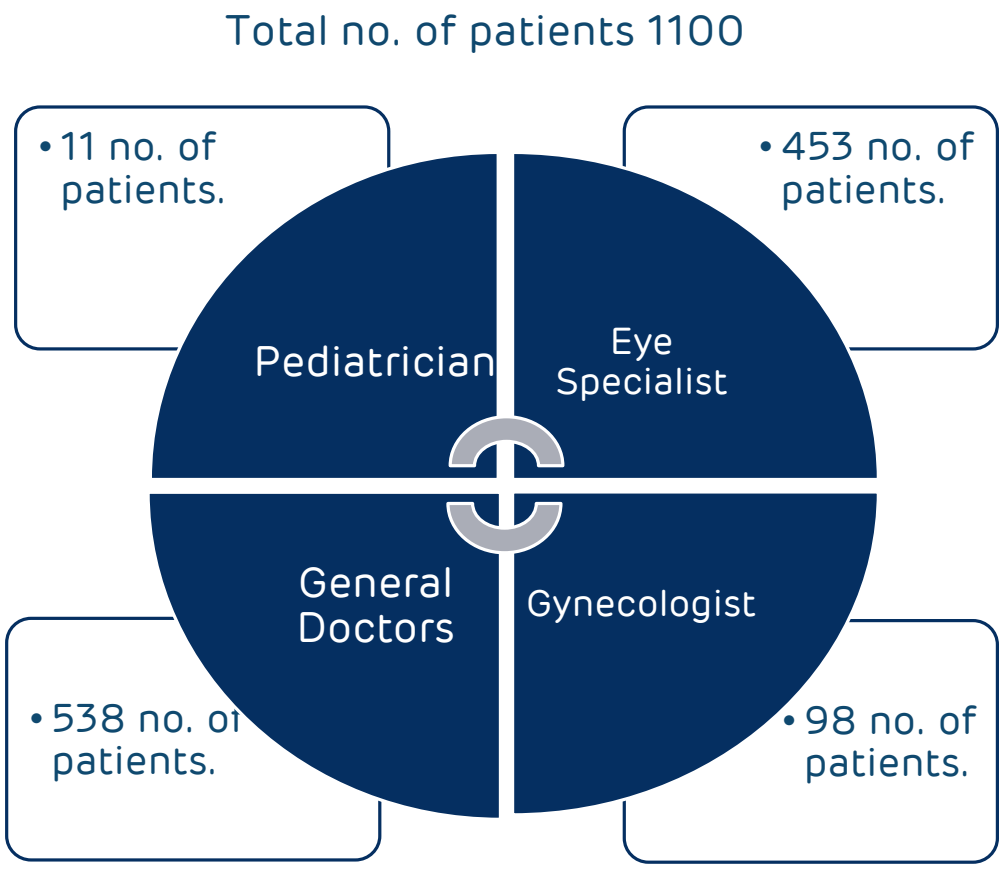
453+ Patients examine for Eye treatment.

To underscored the critical importance of early detection and treatment of eye-related issues, ensuring the children have a better chance at maintaining healthy vision as they grow.

The camp conducted in the schools and villages area. Eye check -up and health assessments have been carried out to identify common issues such as fungal infections, irritation and vision impairments often linked to coastal environmental conditions. All the patients received treatments like antifungal eye drops, lubricating drops, and oral medications. In addition to medical care, parents of students were educated on eye hygiene and preventive measures.

Regular follow-up check-ups were scheduled to monitor long term eye health and community awareness campaigns were launched to promote proper eye care. These efforts helped address immediate health concerns and instill sustainable practices, improving the overall health of the patients and the community.

Health camp participants:



Photographs of Health Camp at Nearby villages

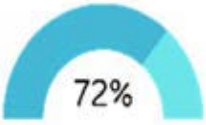
184 + Senior Citizens have attended General Health Camp which makes vital health services accessible and convenient.

Facilitated for multiple tests at one location such as:

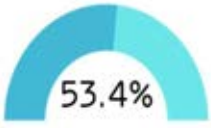
- ESR (Erythrocyte Sedimentation Rate)
- Serum Creatine.
- SGPT (Serum Glutamic Pyruvic Transaminase)
- Total Cholesterol.
- Random Blood Sugar.
- Complete Blood Test.

Further, this monsoon seasons, rainfall for region of the Mundra and Mandavi Taluka is higher then regular rainy season. Considering this scenario special health camp for rainy impacted area have been organized.

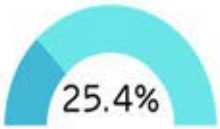
After heavy rain fall, 352+ villagers have been undergone for General Medical health check up. Following values observed:



Infected from Eye Flu



Suffering from Skin disease



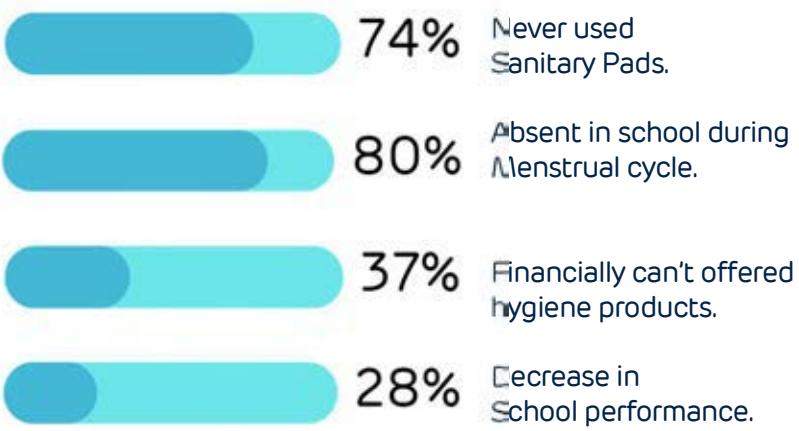
Distress with Gynec. diseases

7.2.2 MENSTRUAL HEALTH AWARNESS.

A comprehensive program on sanitary napkin distribution and menstruation hygiene was conducted at nearby villages with aiming to educate and empower them on menstrual health management. This initiative specifically targeted over 50 teenage girls and women from the villages.

Outcome of these awareness program:

Survey done in the event:



Outcome of the event

- Successfully educated all attendees on the importance of menstrual hygiene.
- Provided sanitary napkins.
- Assured them of reduced costs for future purchases.
- Encouraged them to prioritize health and hygiene over consuming additive items, fostering a positive shift in their habits.

7.2.3 HOSPITAL INFRASTRUCTURE

The Kutch region has a population of over 22 lakhs. To support this population, the Burn & Intensive Care Unit at GK & GAIMS General Hospital in Bhuj has been established with advanced facilities, modern technology, and specialized burn care. This unit aims to provide financial relief to patients and offer comprehensive care that addresses the physical, emotional, and psychological needs of burn patients.

The Burn & Intensive Care Units at GK & GAIMS, Bhuj has:

26 General Bed + 4 ICU Bed	Minor & Major Operational Theater Room	Dressing Room	Emergency Service 24 X 7

Impact of the Burn Care & Intensive Care Unit:

Directly benefits to 22 lakhs of people in kutch by providing timely and advanced burn care

Increase the survival rate of burn victims by offering immediate medical attention within the district

Reduces the risk of infections that can arise from long distance travel emergency situations.far

Alleviates the finacial strain on patients and their families by providing affordable and accessible healthcare locally.

STRENGTHENING COMMUNITY HEALTH CENTER

CHC having **1.5+ Lakhs** peoples uses medical facilities.

Infrastructure Improvement	Maternity Ward Hygiene upgradation.	Equipment & Technician support	Ambulance Services
• Comfortable resting areas for patient convenience. • Safe drinking water facility. • Aesthetic enhancement.	• Improved sanitation and hygiene conditions for safer maternal care	• Diagnostic room enhancement with essential medical equipment. • Technician assistance for accurate and timely medical analysis.	• Strengthened emergency response, covering remote areas.

7.2.4 COMMUNITY HEALTH – CLEAN WATER FACILITIES

Kutch Region is a water scarcity region and having saline coastal area for Mundra & Mandavi taluka, the availability for clean water is less for the live. The main objective of providing saline water reverse osmoses units at village Tunda is to serve clean water for the villagers as more than 10000 peoples are benefiting from the services. This purified water will enhance the quality of life and promote health in rural areas. This service is ensuring that students and people have continued access to clean & safe drinking water.

The installation of the RO plants has directly improved access to clean water, positively impacting the health and daily lives of the village community and school children.

7.3 LINKAGE WITH SUSTAINABLE DEVELOPMENT GOALS

3 GOOD HEALTH AND WELL-BEING	The healthcare initiative improved community well-being, aligning with the goal by enhancing access to essential health services and promoting healthy lives.
10 REDUCED INEQUALITIES	The healthcare initiative reduced inequalities by providing equitable access to medical services, aligning with overall goal of reducing disparities.

8. SUSTAINABILITY LIVELIHOOD AND WOMEN EMPOWERMENT

This chapter dives into the impact of MPL's comprehensive program on women empowerment and skilling. Further, how this program empowers women, fosters sustainable livelihoods and cultivates environmental awareness within the community. This chapter highlighted MPL's focus on building a better future and emphasizing the program's multifaceted approach.

8.1 KEY INTERVENTIONS

Women Empowerment

Women empowerment is a multifaceted concept that encompasses a range of activities at improving the economic, social and cultural status of women.

Skill Development

Skill development initiatives were caried out with the aim of building capacity for the local community members and help them become more employable through skill enhancement.

Sustainable Infrastructure

In an era marked by rapid urbanization and climate change, the pursuit of sustainable infrastructure has become imperative. Sustainable infrastructure refers to designing, constructing and maintaining systems that meet the needs of the present without compromising the ability of future generations to meet their own needs.

Climate Action

Community tree plantation and rural tree plantation activities have been carried out with aim to improve the green surface and carbon sequestration. Tree plantation is a vital activity that contributes significantly to the preservation of our environment. It involves planting trees in a planned to restore, conserve and enhance the natural landscape.

SOCIAL & ENVIRONMENTAL IMPACT

8.2 WOMEN EMPOWERMENT

In coastal communities, women play a vital role in the fishing industry, yet they often face challenges in maintaining hygiene standards while handling fish and lack access to knowledge about fishing business opportunities. To address these issues and empower women from the fishermen community, MPL has conducted an awareness campaign for the fisherman community. The aim for this awareness program is hygiene practices and fishing business education.

Hygiene Awareness

- ✓ Wash hand before & after handling fish.
- ✓ Use gloves to minimize direct contact.
- ✓ Store fish properly to maintain freshness.
- ✓ Regularly sanitize equipment.

Fishing Business Education

- ✓ Market insights: Understand local demand and pricing.
- ✓ Financial management: Budgeting and pricing strategies.
- ✓ Networking: Connect with industrial peers and experts.

25+ fisher women participated under awareness session.

8.3 HEALTH AND NUTRITION CAMP FOR WOMAN

Agenda

- ✓ Health awareness sessions focused on children's nutrition.
- ✓ Conducted based on Integrated Child Development Services, a government program in India focused on the wellbeing of children under 6 years and their mother.
- ✓ Educated mother on the role of essential nutrients and the impact of nutritional deficiencies.
- ✓ Provided practical example on incorporating nutritious, home-cooked meals and reducing junk food.
- ✓ Facilitated an interactive session where mothers actively participated and raised queries.

Impact

- ✓ Increased awareness among mothers about healthy dietary practices for their children.
- ✓ Empowered mothers to make informed nutrition choices, promoting healthier eating habits.
- ✓ Supported the prevention of malnutrition and improved the overall health and wellbeing of children in the community.
- ✓ Contributed to building a healthier, more informed community focused on child nutrition.

Further, with vision to empower women through comprehensive education, health initiatives and financial independence, fostering community support and sustainable development, MPL has provided training on menstrual health and hygiene and proper nutrition to 5000+ women.

2 Self Help Groups over 50 women

In each group to foster skill development and collective growth.

Financial empowering over 300

marginalized fisherfolk community women.

MPL aim to improve menstrual health among women by promoting the use of sanitary pads, thereby enhancing hygiene, comfort and overall well – being during menstruation.

- To address specific challenges and needs related to menstrual hygiene in the local fisher community.
- Many women in the community currently use cloth due to traditional practices and lack of awareness.
- It is an informative sessions with over 50 women, on the benefits of sanitary pads. They offer better hygiene, reduce the risk of infections and provide greater comfort and protection during menstruation. Sanitary pads also provided to encourage the transition from the cloth.

450+ Sanitary pad distributed

8.4 SWAVLAMBAN INITIATIVE

48+ beneficiaries

Innovative Mobility Solutions Program – "Fitting of Aids / Appliances items for Differently abled persons to make them Physically and Economically Fit" conducted for the nearby villagers.

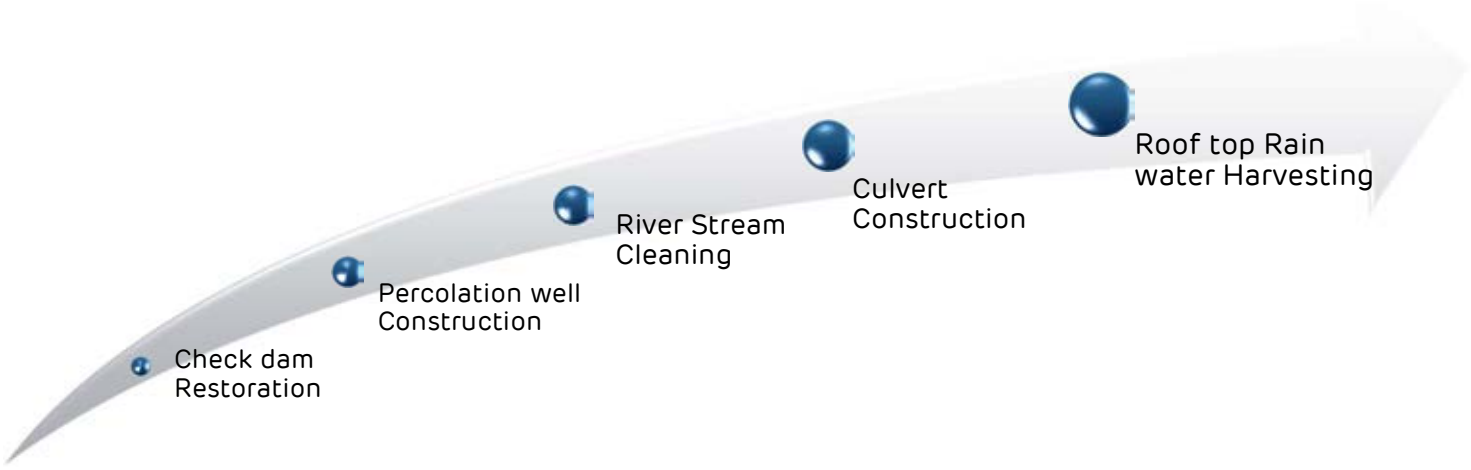
In this interpret, supporting and promoting self-reliance and welfare for differently abled individuals through the provision of aids and appliances. These devices enhance physical capabilities and economic opportunities by addressing the specific needs of each person, allowing them to lead more independent and productive lives.

This support includes items such as wooden cabins, battery-operated tricycles for those with mobility impairments, electrician kits, hand carts, harmoniums, hearing aids, livestock care kits, plumbing kits, printers, sewing machines, tricycles, tyre puncture repair kits, and wheelchairs.

8.5 SUSTAINABLE INFRASTRUCTURE

MPL's vision is to make 16 villages' water positive under MPL-CER activities through better percolation of water into the ground increasing water table and water quality.

The action plan is:



Check Dam Restorations:

- 60+ farmers benefited for agricultural purposes.
- ,80,000+ cubic meter water stored.
- Enough water resources for nearby villagers.

Percolation well construction:

122+ percolation well been constructed.

Water table level increases.

Salinity of ground water Decreases

Rever / Stream Cleaning & Pond Deepening:

cleaning of River / stream and pond deepening have been carried out.

Free flow of water up to the dam or Pond have been ensured.

21+ percolation well have been cleaned.

Water Storage Capacity increased.

Construction of Box Culvert for free flow of water into the Pond.

Benefited 38 hectors of land

105 + farmers benefited.

6800+ Cubic Meter water storage capacity increases.

Roof Top Rainwater Harvesting:

165 + RRWH constructed.

Increase clear drinking water capacity by 16,50,000 Liter.

3+ villages are water positive and till date cumulative there are 6+ villages are water positive.

8.6 CLIMATE ACTION

The climate crisis is one of the most pressing challenges of this period. To preserve biodiversity, sustainably utilize ecosystems, maintain essential ecological process and local communities through innovative climate action.

8.6.1 TREE PLANTATION

MPL has carried out tree plantation, as the process of planting trees in a targeted area and considering same is a critical environmental activity that supports biodiversity, combats climate change and promotes the overall health of the ecosystem. This practice has gained significant global attention, as the world grapples with the adverse effects of deforestation, urbanization and environmental degradation.

Tree plantation have been done with more than 10000+ trees (Native Species) at Nani Khakhar. The same plantation is being maintained by the expert.

Tree Plantation done at Borana with 14000+ native species. Further, tree plantation having 300 numbers of native species have been done at Road side from Tunda to Bhadia which are being maintain by M/s Sadbhavna Manavseva Trust and experts.

Total 24,300+ trees have been planted at nearby villages to combat climate change and enhance biodiversity. Further, 88536+ numbers of cumulative trees have been planted at nearby villages for the period up to March, 2025.

Miyawaki tree plantation & Drip irrigation methods were used.

M/s Manvseva Charitable Trust and M/s Yash Green are the Expert to maintain the trees to get survival rate more than 98%.

Survival rate of trees are 98% +

9+ acre land were used for tree plantation

CO_2 Sequestration

2124.864+ tCO_2e will Seq.

500+ farmers were assisted in cultivating fruit – bearing trees.

Increasing their income and promoting sustainable agriculture.

Biodiversity Boost – Birds are resting & roosting at tree plantation area.

Icrease the organic fertility for the soil.

Increase the CO2 Sequestration, so as, clean air.

8.6.2 ECO – CLUB: AN INITIATIVE TOWARDS GREEN FUTURE

MPL is dedicated to promoting a sustainable and eco-friendly future. Thus, MPL is creating Eco-clubs in schools that educate students about environmental conservation, promote plastic – free living and inspire sustainable practices for climate action.

70 Schools

6000+ Students

Impact of the work:

- Establish Eco-Clubs in 70 schools, engaging more than 6,000 students in environmental activities.
- Conducting awareness session at schools by expert lecturers, focusing on plastic pollution and its impact on the environment.
- Introduced plastic recycling initiative, turning waste into useful products like recycled plastic pots and benches.
- Educate students about Reduce, Reuse and Recycle principles.
- Educate students about Mangrove conservation and its important to the coastal area.
- Eco days like Environment Day, Earth Day, Mangrove Day, etc. have been celebrated at the different schools.

Eco Bricks schools exemplify how innovation and community collaboration can effectively tackle two critical global challenges: plastic waste and education. By converting waste into an asset, these institutions not only offer essential educational facilities but also foster a sense of environmental stewardship among students. To encourage motivation, students' work has been recognized by MPL through the awarding of certificates and educational prizes at the primary schools in the nearby villages.

8.6.3 MANGROVE CONSERVATION AND AWARNESS

Mangrove are salt tolerant trees and shrubs that thrive in coastal intertidal zones. These remarkable ecosystems are found in Mundra and Mandavi taluka' coastal area at the vicinity of the MPL premises. Mangrove forests are vital not only to the health of coastal environments but also to the communities that depend on them. This part is report represents into the importance of mangrove conservation.

Mangrove nursery have been developed for 10,000 numbers of mangrove species.

100+ students from school & colleges have been participated in Mangrove Day Celebration.

The theme – "Mangroves: Vital Guardian of Coastal Ecosystems" highlighted their role in protecting coastlines, supporting fisheries and sustaining local communities. Bio Diversity expert from the company, Professors from the collages elaborated the importance of mangroves and how they provide myriad of ecological, economical and social benefits. This awareness session also focus on how mangrove serve as critical habitats for a wide array of marine and terrestrial species, including fish, birds and invertebrates. The dense root systems of mangroves stabilize shorelines, preventing erosion and protecting coastal area from the impacts of storms and rising sea levels.

8.6.4 AWARNESS ON "ALTERNATIVE OF SINGLE USE PLASTIC"

Rejecting single use plastics means embracing sustainable alternatives that are kinder to our planet. To create awareness about the harmful effects of single use plastic, MPL has conducted awareness sessions at schools of nearby villages.

680+ students participated.

- Students learn the alternative of single use plastic.
- Students enhance their innovated knowledge for reusable items as they are excellent substitutes such as cloths bags, metal straws, Glass bottles and bamboo cutlery.

Further, to promote Reuse, Recover & Recycling, MPL has initiated use of plastic to make plastic pots and benches.

100 numbers of each Pots and Bench made from recycled plastic waste.

Manufacturing Bench from the recycled plastic have following Eco-benefits:

 192 Carbon emissions reduced (KgCO2e)	 Circular Eco system complete	 18144 KL Fresh water Conserved
 2400 Natural resources conserved (kg)	 960 Waste plastic recycled (kg)	 1440 waste silica recycled (kg)
 12 number of people gaining direct livelihood	 480 hr of Job created.	 25 number of people gainnig indirect livelihood

8.7 AWARENESS DRIVE ON CONSERVE WATER, PROTECT EARTH.

To raise awareness about water conservation and encourage students to adopt sustainable practices for optimal water usage, ensuring the preservation of water resources for future generations.

- ✓ 6000+ students educated in 70 schools.
- ✓ Important of water conservation, motivated to reduce water usage and teach them about various water bodies and their role in maintaining ecological balance.
- ✓ Drawing competition, skits, speech and extempore.
- ✓ These activities were designed to engage students creatively while imparting knowledge about the critical issue of water conservation.
- ✓ The campaign encouraged them to think critically about their water usage and adopt responsible habits.

EARTH DAY CELEBRATION

- ✓ Recognized the exemplary efforts of 4 pioneering farmers who have embraced chemical – free farming methods.
- ✓ Tribute to two village leaders for tireless advocacy and grassroots initiatives have propelled organic waste management effort to a new high.
- ✓ Encourage to reduce plastic usage, champion sustainable practices, nurture a symbiotic relationship with our planet.

8.8 LINKAGE WITH SUSTAINABLE DEVELOPMENT GOALS.

	MPLs initiative focused on livelihood generation and providing additional support to farmers works towards eliminating poverty.
	Enhance income generation opportunities provided to the local community and sustainable job creation will enable the local to fulfill basic needs like food and nutrition.
	Dedicated efforts through Workshop and promoting women farmers have created more equitable society.
	Major interventions were focused on building employability in the local community and creating a sustainable source of income.
	A non – discriminatory approach in beneficiary identification has reduced inequality.
	By integrating IEC based interventions and Eco club drive on awareness and community building will work towards building sustainable society.
	A significant effort has been put in promoting natural farming and conservation of local ecosystem through plantation and mangrove conservation.

9. COMMUNITY RURAL INFRASTRUCTURE DEVELOPMENT

community Rural infrastructure Development program by MPL encompasses a wide array of initiatives aimed at enhancing rural areas. It focuses on water conservation through measures like check dam restoration, de-siltation and bore well recharge structures. Infrastructure support includes sports facilities; renovation of educational and trailing centers and repair works in schools and infrastructure for fishing community across various villages. Additionally, the program addresses essential amenities like water tank (Awada) for domestic animal.

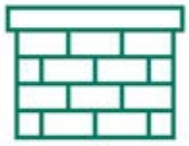
9.1 KEY INTERVENTION

Road Repairing / construction work

Road construction work is a cornerstone of modern civilization. It drives economic growth, enhances connectivity, promotes social integration and supports environmental sustainability.

Common Gathering Infrastructure

In the heart of any thriving community, common gathering infrastructure serves as the backbone that fosters interaction, collaboration and a sense of belonging. These infrastructures are essential for the social fabric, ensuring that people have spaces to meet, share and grow together.



Sustainable Infrastructure

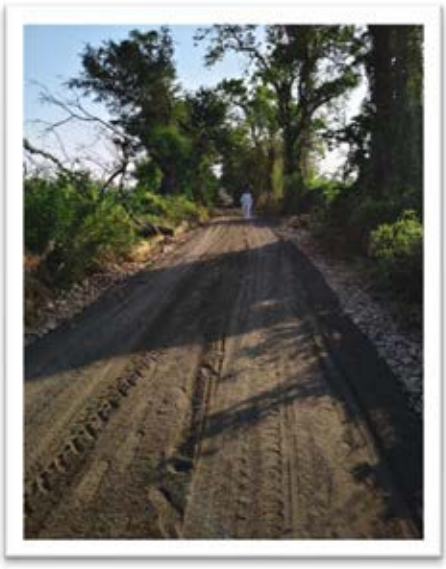
By adopting the development of sustainable infrastructure in rural areas, we can address the challenges of climate change, resources depletion and urbanization while promoting a more equitable and resilient future.

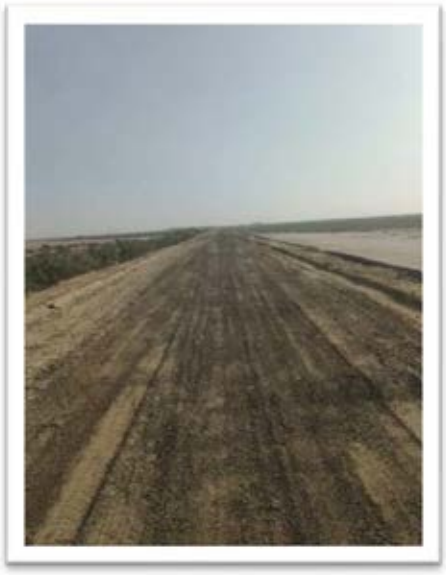
Educational Infrastructure

Developing educational infrastructure in villages is essential for fostering individual and community development. Despite the challenges, a combination of government support, community involvement, public – private partnership and innovative solutions can create sustainable educational opportunities for rural populations.

9.2 ROAD REPAIRING / CONSTRUCTION ACTIVITIES.

As roads are the key factor for development through transporting, shifting, movement of materials and other activities, MPL is giving the priority to provide good road for circulating economy as well as smooth functioning of rural development, specially in fisherfolk community.





- Renovation work for approach road at kutdi Bandar for fisherman Vasahat Village Tragadi & Modhava.
- Pavers walkway for Deshalpar Van at village Deshalpar.
- Pipe culvert repairing work for fisherman vasahat at Juna Bandar, Mundra.
- Renovation of Damage Bund and area filling with sand for fisherman vasahat at Juna Bandar, Mundra.
- Renovation of approach road for vadi vistar area i.e Nana Bhadiya, Mota Bhadiya, Lalyara and chach vadi vistar at Zarapara.
- Renovation of approach road for vadi vistar and Fisherman vasahat area at Zarpara.
- Road cleaning work at Mota Kandagra, Bidada, Tragadi, Modhava.

9.3 COMMON GATHERING INFRASTRUCTURE

Common gathering infrastructure is key point to vibrant the societies and moving towards the consecutive fruitful activities. MPL has constructed paver blocks at common gathering places like Jyoteshwar in Pratappar village, Vachhada dada in Zarpara village, Hanuman Temple in Bhujpar. etc.



9.4 CONSTRUCTION OF SHEDS

Sheds have proven to be valuable assets, enriching local spaces and enhancing the quality of life for participants. By providing opportunities for social interaction, skill development and other engagement, sheds contribute to the well-being of individuals and the overall health of the community. Sheds have been constructed at village Desalpar & Mota Bhadiya.



9.5 CLEAR WATER FACILITIES FOR HOUSE ANIMAL

Clean Water facilities provided at Modhava villages having capacity of 10,000 Litr each (2 Tanks) so that house animal can have easy access of clean water.

9.6 SUSTAINABLE INFRASTRUCTURE

As water is an essential part of live and to fulfill this requirement, MPL has constructed Roof top rainwater harvesting systems, repairing of check dams, cleaning of river / streams and percolation wells at nearby 16 villages from the plant premises.

165+ Rooftop Rainwater Harvesting system constructed.

16,50,000+ Liter clean water available at house step.

265+ farmers benefited for agricultural purposes through check dam repairing / construction and box culvert.

1,80,500+ cubic meter water stored.

122+ percolation well been constructed.

Water table level increases.

Salinity of ground water Decreases

Saline water Reverse Osmosis Plant installed at village Tunda with capacity of 3000 Ltr/hr. for villagers to have clean drinking water.

10000+ villagers are beneficiated.

Saline water Reverse Osmosis Plant installed at primary school, Tunda and Zarpara with capacity of 50 Ltr/hr. & 150 Ltr/hr for students to have clean drinking water.

373+ Students are benefited.

9.7 EDUCATIONAL INFRASTRUCTURE

As educational infrastructure is a fundamental component of a thriving education system, MPL has constructed school amenities and facilitated with furniture at school. Further, considering a robust educational infrastructure is crucial for providing quality education, promoting equality and fostering the holistic development of student, MPL has installed the Paver block and constructed pink toilet facilities for the girls at school premises.

Furniture provided at Modhava School.

60 no. benches

12no. Chairs

6 no. table

- Enhancing privacy and safety.
- Promoting gender neutrality.
- Preventing UTI
- Improved school Attendance.
- Empower Adolescent Girls.

500+ Girls students benefited.

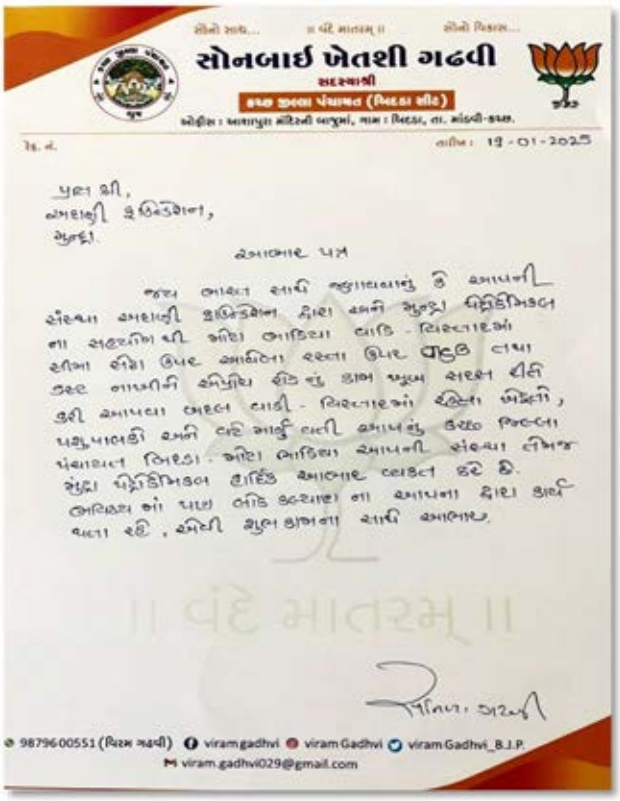
9.8 SANITARY FACILITIES

Creating sanitary facilities that are accessible to disabled persons is a critical aspect of inclusive design. By adhering to unique design principles and implementing the best practices, it can be ensured that these facilities provide dignity, safety and independence to all users.

9.9 LINKAGE WITH SUSTAINABLE DEVELOPMENT GOALS

	Increased water availability and quality will boost agricultural production.
	Dedicated efforts for enhancing rainwater storage will improve clean and safe drinking water option for household.
	Improved recharge and harvesting options will make local communities reliant against water stress.
	The water conservation initiative significantly increased storage capacity, enhancing climate resilience and promoting sustainable water management.

10. STAKEHOLDERS' APPRECIATION / FEEDBACK



સોનબાઈ ખેતશી ગઢવી

સદસ્યશ્રી

કચ્છ જીલ્લા પંચાયત (મિરઝા સીટ)

ઓફીસ : આશાપુરા મોટરની બાજુમાં, ગામ : મિરઝા, તા. માંડવી-કચ્છ.

તા. ૧૨-૦૧-૨૦૨૫

પુજ્ય શ્રી,
અમદાવાદી કુશિક્ષકોના,
મુન્દ્રા.

આભાર પત્ર

જાહેર આભાર સાથે જણાવવાનું કે આપની સંસ્થા અમદાવાદી કુશિક્ષકોના દ્વારા અમને મુન્દ્રા વિધાનસભા ના સહકારથી વરી ગોદા ભાડિયા વાડી - વિસ્તારમાં રહીના લોકો ઉપર આવેલા રસ્તા ઉપર પાકુ તથા ડસ્ટ નાખીની અમોરીયા રીતે નું કામ ખુબ સારસ્ત રીતે કરી આપવા બદલ વાડી - વિસ્તારમાં લોકો ખેડૂતો, પશુપાલકો અને વહે આવું વાળી આપવામાં કરણ મિલ્કત પંચાયત મિરઝા - ગોદા ભાડિયા આપની સંસ્થા લિમિટ મંદ્રા વિદ્યાર્થીઓ દ્વારિક આભાર વ્યકત કરે છે. અમિલિયા ખાં પાણ તમિક કરવાના ના આપના દ્વારા કાર્ય થતા રહે, એવી શુભ કામના સાથે આભાર.

વિરમ ગઢવી

9879600551 (વિરમ ગઢવી) viram gadhvi viram Gadhvi viram Gadhvi_B.J.P.
viram.gadhvi029@gmail.com

શિક્ષણ-નો અધિકાર

કસ્તુરબા ગાંધી બાલિકા વિદ્યાલય, રેલ્વેયાર(કચ્છ), મુંદરા-કચ્છ.
mob.8141313743

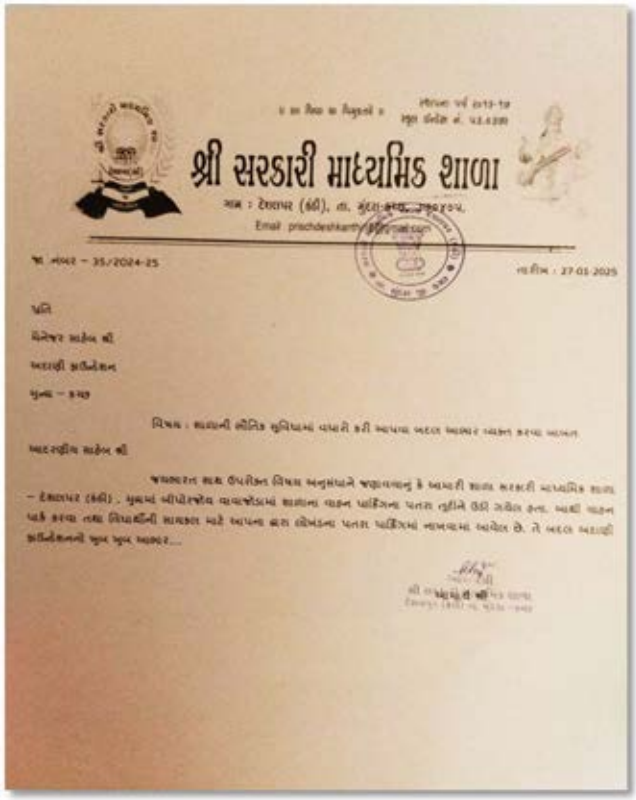
પ્રતિ,
અમદાવાદી કુશિક્ષકોના
અમદાવાદી પ્રોફેસરોશ્રીઓના

વિષય:- આભાર વ્યકત કરવા બાબત.

જય ભારત સહ ઉપરોકત વિષયના અનુસંધાને જણાવવાનું કે અમારી રજુઆતને ધ્યાનમાં રાખી આપની કંપની દ્વારા અમારી કસ્તુરબા ગાંધી બાલિકા વાર્ષિક સંમેલનમાં સ્ટાન્ડ ફ્રીમાં ૪ નંગ તથા પુથમ ફ્રીમિ પેડ ૬ નંગ ફ્રીમિટિંગ બાયરગનું અમારામ ખુબ જ સારી રીતે પૂર્ણ કરી આપવા બદલ અમો આપની કંપનીનો ખુબ જ દિલથી આભાર વ્યકત કરીએ છીએ.

આ કામ થવાથી વિદ્યાર્થીઓને જે અમારામાં પકડી હતી એ દુર થઈ નવી પડે તેનો અમને આનંદ છે તેથી ફરીથી આપની કંપનીનો અમે ખુબ-ખુબ આભાર વ્યકત કરીએ છીએ.

આપના આભારી
સહ



શ્રી સરકારી માધ્યમિક શાળા

ગામ : રેલ્વેયાર (કચ્છ), તા. મુંદરા-કચ્છ, ૩૭૦૧૦૫.

Email prschdeshkarm@gmail.com

ક્રમાંક : 35/2024-25

તારીખ : 27.01.2025

પ્રતિ
વિનેજર સાહેબ શ્રી
અદાણી ફાઉન્ડેશન
મુન્દ્રા - કચ્છ

વિષય : શાળાની ભૌતિક સુવિધામાં વધારો કરી આપવા બદલ આભાર વ્યકત કરવા બાબત.

આદરણીય સાહેબ શ્રી

જણાવવાનું કે ઉપરોકત વિષય અનુસંધાને જણાવવાનું કે અમારી શાળા સરકારી માધ્યમિક શાળા - રેલ્વેયાર (કચ્છ) , મુકામ ચીપોતરોય વાલજોડામાં શાળાના વાહન પાર્કિંગના પતરા તૂટીને ઉડી ગયેલા હતા. આથી વાહન પાર્ક કરવા તથા વિદ્યાર્થીની સાયકલ માટે આપના ફ્રી લોખંડના પતરા પાર્કિંગમાં નાખવામાં આવેલ છે. તે બદલ અદાણી ફાઉન્ડેશનનો ખુબ ખુબ આભાર...

11. NEWS HIGHLIGHTS

કચ્છમિત્ર

ભુજ - મંગળવાર, તા. ૨૫-૦૨-૨

અદાણી સંચાલિત જી.કે. જનરલ હોસ્પિટલમાં આધુનિક પ્લાસ્ટિક સર્જરી અને બર્ન્સ કેર યુનિટનું લોકાર્પણ કરતા અદાણી ફાઉન્ડેશનના ડાયરેક્ટર વી.એસ. ગઢવી, હેલ્થકેરના ડૉ. પંકજ દોશી વગેરે, ઈન્સેટમાં વિભાગ જોવા મળે છે.

કચ્છને પ્લાસ્ટિક સર્જરી-બર્ન્સ કેર યુનિટ અર્પણ

જી.કે. જનરલ હોસ્પિટલ-ભુજમાં પહેલી માર્ચથી સુવિધા કાર્યરત થશે

ભુજ, તા. ૨૪ : અદાણી ફાઉન્ડેશ પ્રેરિત કચ્છ કોપર અને કચ્છ પેટ્રોકેમ.ના સહયોગથી જી.કે. જનરલ હોસ્પિટલમાં કચ્છમાં એકમાત્ર અતિ આધુનિક સુવિધાથી સજ્જ પ્લાસ્ટિક સર્જરી અને બર્ન્સ કેર યુનિટ (દાઝી ગયેલા દર્દી માટે સઘન સુવિધાયુક્ત વોર્ડ) જનતાને અર્પણ કરાયું હતું, જે પહેલી માર્ચથી વિધિવત કાર્યરત બનશે, તેવું જણાવાયું હતું.

જી. કે. જનરલ હોસ્પિટલના ગ્રાઉન્ડ ફ્લોરમાં બનાવેલા એકમને ખુલ્લું મૂકતા અદાણી ફાઉન્ડેશનના ડાયરેક્ટર વી. એસ. ગઢવીએ કચ્છમાં આરોગ્ય ક્ષેત્રે ઊભી થયેલી આ સુવિધાને આશીર્વાદ સમાન ગણાવી હતી તેમજ દાઝી જવાના ગંભીર બનાવોમાં કચ્છ બહાર જવાના ધક્કાથી દર્દીઓને રાહત મળશે તેનો સંતોષ વ્યક્ત કર્યો હતો.

અદાણી હેલ્થકેર ગ્રુપના હેડ ડૉ. પંકજ દોશીએ ઉદ્‌ઘાટન પ્રસંગે સંદેશો આપતાં જણાવ્યું હતું કે, કચ્છ માટે આ યુનિટ સીમાચિહ્નરૂપ બની આરોગ્ય સુવિધામાં વધારો કરશે. મુંદરા અદાણી પોર્ટના એક્ઝિક્યુટિવ ડાયરેક્ટર રક્ષિત શાહે પણ મુલાકાત લીધી હતી. હોસ્પિટલના પ્લાસ્ટિક સર્જન ડૉ. મહાલક્ષ્મી પિલ્લાઈએ માહિતી આપી હતી.

ગેઈમ્સના મેડિકલ ડાયરેક્ટર ડૉ. બાલાજી પિલ્લાઈએ જણાવ્યું હતું કે, આ બર્ન્સ યુનિટમાં ત્રણ ઓપરેશન થિયેટર છે, જે પૈકી બે મોડ્યુલર પ્રકારના છે, જેમાં બર્ન્સ, પ્લાસ્ટિક અને રિકન્સ્ટ્રક્શન સર્જરી કરાશે, જ્યારે ત્રીજું માઈનોર છે, જ્યાં ડ્રેસિંગ હાથ ધરાશે. બર્ન્સ વોર્ડમાં છ અલગ-અલગ રૂમ છે તેમજ નર્સિંગ સ્ટેશન, કાઉન્સેલિંગ રૂમની સુવિધા ઉપલબ્ધ છે.

જી. કે.ના ચીફ મેડિકલ સુપ્રિ. ડૉ. નરેન્દ્ર હીરાણીએ જણાવ્યું હતું કે, પ્લાસ્ટિક સર્જરીના જટિલ અને પોલિટ્રોમા ઓપરેશન પણ હાથ ધરાશે.

આ પ્રસંગે ઉદ્યોગપતિ દીપેશ શ્રોફ, પ્રીતિબેન શ્રોફ, ચૈતન્ય શ્રોફ, અદાણી ફાઉન્ડેશનના સી.એસ.આર. હેડ પંક્તિબેન શાહ, કિશોર ચાવડા, મુંદરા પેટ્રોકેમ.ના એચ.આર. હેડ પરીન પંચાલ, જી.કે.ના તબીબો ઉપસ્થિત રહ્યા હતા.

અદાણી ફાઉન્ડેશન દ્વારા શાળાઓની પ્લાસ્ટિક મુક્ત પહેલ બની આદર્શ

એક હજાર કિલો પ્રતિ માસ પ્લાસ્ટિકનું રિસાયકલિંગ : અદાણી ફાઉન્ડેશનના ૭૫ થી વધુ ઉત્થાન સહાયક શિક્ષકોએ સમજાવ્યા સિંગલ યુઝ પ્લાસ્ટિકના જોખમો

અબતક

સાંધ્ય દૈનિક

અદાણી ફાઉન્ડેશન દ્વારા પ્લાસ્ટીક મુક્ત શાળા અભિયાનમાં દર મહિને એક ટન પ્લાસ્ટીકનું કરાય છે 'રીસાયકલીંગ'

શાળાઓના ૬૦૦૦ વિદ્યાર્થીઓની પ્લાસ્ટીક મુક્તિ અભિયાનમાં અવિરત સેવા

અદાણી ફાઉ. દ્વારા શાળાઓની પ્લાસ્ટિક મુક્ત પહેલ બની આદર્શ : ૧૦૦૦ કિલો પ્રતિ માસ પ્લાસ્ટિકનું રિસાયકલિંગ

...ર્વે કચેરીના વિકાસ માટે બજેટમાં જોગવાઈ કરાઈ

અદાણી જૂથ દ્વારા 'પ્લેનેટ જોઈએ કે પ્લાસ્ટિક' થીમ હેઠળ વિશ્વ પૃથ્વી દિવસની ઉજવણી

જળસંચય, વૃક્ષારોપણ અને ગાય આધારિત ખેતી પૃથ્વીનું જતન કરશે

(પ્રતિનિધિ દ્વારા)

![દિવ્ય ભાસ્કર] ભુજ 02-05-2024

આગામી સમયને અનુલક્ષીને નર્મદાના નીર પણ સાવચેતી પૂર્વક વાપરવા હાકલ

અદાણી ફાઉન્ડેશન દ્વારા છ તાલુકામાં જળસંગ્રહ અભિયાનનો આરંભ

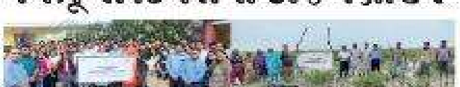
અદાણી ફાઉન્ડેશનની કચ્છના ૨૧ ગામોમાં વરસાદી પાણીના સંગ્રહ માટેની કામગીરી પુરજોશમાં

કચ્છમાં ચેકડેમ તળાવ નવસર્જન કુદરતી જળસ્ત્રોતને પુનઃજીવીત કરી વરસાદના પાણીના એક ટીપાને એળે નહીં જવા દેવાય

પ્લાસ્ટિક છોડો ; પ્રાકૃતિક ખેતી અપનાવો

અદાણી જૂથ દ્વારા 'પ્લેનેટ જોઈએ કે પ્લાસ્ટિક' થીમ હેઠળ વિશ્વ પૃથ્વી દિવસ ઉજવાયો

અદાણી ફાઉન્ડેશન અને મુંદ્રા પેટ્રોકેમિકલ લી - મુન્દ્રા દ્વારા વિશ્વ મેનગ્રૂવ્સ દિવસની ઊજવણી કરવામાં આવી



અદાણી ફાઉન્ડેશન અને મુંદ્રા પેટ્રોકેમિકલ લી - મુન્દ્રા દ્વારા વિશ્વ મેનગ્રૂવ્સ દિવસની ઊજવણી

વાત્સલ્યમ્ સમાચાર
રમેશ મહેશ્વરી - મુન્દ્રા કચ્છ

અદાણી હાઉસ ખાતે કચ્છ યુનિવર્સિટીના સમાજ કાર્ય વિભાગ અને માંડવી ની સરકારી વિજ્ઞાન કોલેજ ના વિદ્યાર્થીઓ સાથે એક દિવસીય વર્કશોપનું આયોજન કરવામાં આવ્યું. આ વર્કશોપનો હેતુ વિદ્યાર્થીઓને મેનગ્રૂવ્સ પર્યાવરણીય મહત્વ અને સંરક્ષણ વ્યૂહરચનાઓ અંગે માહિતગાર કરવાનું હતું. વર્કશોપ ને સ્વાગત સંબોધન સાથે અદાણી ફાઉન્ડેશન ના ગુજરાત સી.એસ.આર. ના હેડ પંક્તિબેન શાહ એ સૌને આ વર્કશોપ ની મહત્વતા અને તેના હેતુ થી માહિતગાર કર્યા ... અદાણી ફાઉન્ડેશન, મુંદ્રા પેટ્રોકેમિકલ લી. અને કચ્છ કોપર લી. ના સંયુક્ત ઉપક્રમે બની રહેલ બાયોડાયવર્સિટી નોલેજ એન્ડ ઇન્ટરપ્રિટેશન સેન્ટર નો પરિચય વિડિયો બતાવી આપ્યો. આ સેન્ટર ની મહત્વતા અને તેના પ્રદાન ના વિવિધ પાસાઓ પર ચર્ચા ... એવા ડો.પીરવ મહેતા (પ્રિન્સિપાલ, ગવર્મેન્ટ સાયન્સ કોલેજ,માંડવી) અને ડો. માનસી ગોસ્વામી મુખ્ય વક્તા રહ્યા. ડો. પીરવ મહેતા એ મેનગ્રૂવ્સ ના અનુકૂલનો તેની વિશેષતાઓ અને તેના સંવર્ધન અંગેની વિસ્તૃત માહિતી આપીને મેનગ્રૂવ્સ ના મહત્વપૂર્ણ ...

અદાણી ફાઉ.મુંદ્રાની ભૂમિને લીલીછમ બનાવવા કૃતસંકલ્પ
નવા ૧૨,૦૦૦ વૃક્ષોનું વાવેતર, વૃક્ષમિત્રોને રૂા.૧૦,૦૦૦ નો ચેક અર્પણ

મુંદરા,તા.૧૯

અદાણી ફાઉન્ડેશનપર્યાવરણ જતનના સહિતના સમાજોપયોગી કાર્યોમાં સતત અગ્રેસર છે. મુંદરા નજીકના પીપરી અને નાની ખાખર ગામે 'અદાણી વન'નું ખાતમુહર્ત કરવામાં આવ્યું હતું. જેમાં વૃક્ષારોપણ થકી પર્યાવરણ સંરક્ષણ ક્ષેત્રે અભુતપૂર્વ યોગદાન આપતા ૧૨૦૦૦ વૃક્ષોનું વાવેતર કરી 'અદાણીવન' ઉભુ કરવામાં આવશે. ધારાસભ્ય

અનિરૂદ્ધભાઈ દવેનાવરદહસ્તે ખાતમુહૂર્ત બાદવૃક્ષમિત્રોને ?.૧૦,૦૦૦ના ચેક અર્પણ કરવામાં આવ્યા હતા.

મુંદરા ની આસપાસના વિસ્તારમાં હરિયાળી ફેલાવી લીલોછમ બનાવવા અદાણી ફાઉન્ડેશને બીડું ઝડપ્યું છે. 'અદાણી વન'ના ખાતમુહર્ત સાથેતેમાં ડ્રીપ ઈરીગેશનની વ્યવસ્થા પણ કરવામાં આવી છે. ત્રણ વર્ષમાં શુષ્ક વિસ્તારમાં વૃક્ષોની માવજત કરીહરિયાળી પાથરવા એડીચોટીનું જોર લગાવવામાં આવશે. આ ભગીરથ કાર્યમાંસહભાગી બની તેને સફળ બનાવવા સરપંચ સહિત સર્વ ગામ લોકોએ ભારે ઉત્સાહ દાખવ્યો હતો.

કાર્યક્રમના મુખ્ય અતિથી અને ધારાસભ્ય અનિરુદ્ધભાઈ દવેએ અદાણી ફાઉન્ડેશનની સફળ કામગીરીને બિરદાવી સૌને શુભેચ્છાઓ પાઠવી હતી. ઉલ્લેખનીય છે કે, મુંદ્રા પેટ્રોકેમ લીમીટેડના સહયોગથી નાની ખાખર ખાતે ૧૦,૦૦૦ વૃક્ષો રોપવામાં આવ્યા હતા. આ પ્રવૃતિ ''એક વૃક્ષ માઁ કે નામ'' અંતર્ગત કરવામાં આવી હતી.

મુંદરામાં ચેર વાવેતર જાગૃતિ માટે કાર્યક્રમો

અદાણી ફાઉન્ડેશનના પ્રયાસોથી જળાશયો છલોછલ, જનતા ખુશખુશાલ
અદાણી પરિવાર સાથે ભળી ગામલોકોએ જળાશયોમાં નવા નીરને વધાવ્યા

મારું પહેલું અને અંતિમ દા

અદાણી ફાઉન્ડેશનના પ્રયાસોથી જળાશયો છલોછલ, લોકોમાં ખુશી
તળાવો ઉંડા કરવાથી ૧૫૦ એકર જમીનને પિયતનો લાભ તેમજ રોકડિયા પાકો લેતા ખેડૂતોની ૩૦૦ એકર જમીન અને ત્રણ હજારથી વધુ પશુઓને પીવા માટે પાણી મળશે

અમદાવાદ, તા. ૪

અદાણી ફાઉન્ડેશન જળ સંરક્ષણ, જળ સંવર્ધન અને જળ વ્યવસ્થાપન ક્ષેત્રે પ્રશંસનીય કામગીરી કરી રહ્યું છે. ચાલુ વર્ષે મેઘરાજાની અનરાધાર મહેરથી કચ્છના જળાશયો છલકાઈ રહ્યા છે. જળસંગ્રહ માટેના ઉત્તમ અવસરને જોઈ અદાણી ફાઉન્ડેશને પહેલેથી જ વ્યાપક કામગીરી આરંભી છે. મુંદ્રા, માંડવી, અબડાસા, લખપત, રાપર, અંજાર અને ભુજ તાલુકાના ૭૦થી વધુ ગામોમાં જળ સંરક્ષણની કામગીરી કરવામાં આવી છે. જેમાં બોરવેલ રિચાર્જ, ભૂગર્ભ ટાંકામાં જળસંગ્રહ અને નવા કુવા બનાવવાના કામો સામેલ છે.

કચ્છમાં સારો વરસાદ થતાં તળાવો અને જળાશયોની સાથે લોકોનો આનંદ પણ ઉછાળા મારી રહ્યો છે. માંડવી તાલુકાના બીદડા તેમજ મુંદ્રા તાલુકાના મોટી ખાખર ગામે જળસંરક્ષણ ક્ષેત્રે અદાણી ફાઉન્ડેશનની ઉમદા કામગીરીને વધાવવા અદાણી પરિવારને નવાજવામાં આવ્યું હતું. જેમાં એપીએસઈઝેડના એક્ઝિક્યુટીવ ડાયરેક્ટર રક્ષિતભાઈ શાહ, સીઈઓ સુજલ શાહ તથા અદાણી ફાઉન્ડેશનના સીએસઆર હેડ પંક્તિબેન શાહ સહિત સમગ્ર ટીમને સરપંચો તેમજ ગ્રામજનોની હાજરીમાં તળાવોમાં નવા નીરને વધાવવામાં આવ્યા હતા.

અબડાસા તાલુકામાં આ વર્ષે પાંચ ગામોમાં તળાવો ઊંડા ઉતારવા, પાળ સફાઈ, ઓગન રીપેરિંગ તથા આવ સુધારણાની કામગીરી વરસાદ પહેલા જ પૂર્ણ કરવામાં આવી છે.

હોથીયાય ગામમાં અદાણી સિમેન્ટ સાંઘીપુરમના પ્લાન્ટ હેડ વિવેક મિશ્રા, સિક્યુરીટી હેડ કર્નલ [illegible] સહિત સરપંચ હાજી ઈસ્માઈલભાઈ સહિત આગેવાનોના હસ્તે જળાશયોમાં નવા નીરને વધાવવામાં આવ્યા હતા.

તળાવો ઉંડા કરવાની કામગીરીથી ૧૫૦એકર જમીનને પિયતનો લાભ મળશે. જ્યારે રોકડિયા પાકો લેતા ખેડૂતોની ૩૦૦ એકર જેટલી જમીન અને ત્રણ હજારથી વધુ પશુઓને પીવા માટે પાણી મળશે.

'જલ હૈ તો કલ હૈ' અંતર્ગત વરસાદી જળને દરિયામાં વહી જતું અટકાવી અદાણી ફાઉન્ડેશન દ્વારા લોકભાગીદારીથી સ્તુત્ય પ્રયાસો હાથ ધરવામાં આવી રહ્યા છે.

અબતક

મુન્દ્રાની ભૂમિને લીલીછમ બનાવવાનો અદાણી ફાઉન્ડેશનનો નિર્ધાર
પીપરી-નાની ખાખર ગામે 'અદાણીવનનું' ખાતમુહુર્ત કરાયું
નવા ૧૨,૦૦૦ વૃક્ષોનું વાવેતર: વૃક્ષમિત્રોને ચેક અર્પણ

adani

Annexure – IV

Air Pollution Controlling Measures during construction phase at GPVC site.

Mundra Petrochem Limited has prepared and implemented an Environmental Management Plan for construction phase vide internal documentation no. MG000-HSE-000-BD-7002 Dated 21.03.2024 with incorporating the Air Pollution Controlling Measures during construction activities. Presently, The PVC project is currently in the final design, detailed engineering, and procurement stage. Simultaneously, construction activities are ongoing at the site. The following APC measures have been taken for the activities during construction phase.

Sr. No.	Affected Environmental component	Likely Impacts in absence of mitigation measures	Mitigation measures have been taken	Remark
1	Air Quality	• Traffic congestion. • Increase in ambient air pollution (Increase in levels of NOx, SPM, Dust Hazards. Etc.) • Risk Accidents.	• On site use of concreate batching plant. • Only PUC certified vehicles are allowed to enter the premises. • Water sprinkling have been carried out to stabilize the dust prone areas. • Preventive maintenance of transport, heavy equipment and construction equipment have been carried out on regular intervals. • Low Sulphur fuel i.e Diesel are being used. • PPEs / masks have been used at high dust generating area. • AAQM have been carried out at construction site as well as at surrounding villages. • DG sets having complied with GPCB/CPCB norms are in used.	• Impacts are temporary and short distances, as coarse particles are settling within the short distance from the activities during the construction phase. • Water sprinkling details have been recorded. • Monthly Monitoring has been carried out through a recognized laboratory. • Record for the DG sets with complying GPCB/CPCB norms have been maintained with respective units / user.
2	Road Traffic due to vehicle movement for transportation of manpower, materials and equipment.	• Vehicular exhaust and dust emissions on the road. • Noise generation • Risk involved in transportation activity such as accidents damage to properties etc.	• Only PUC certified vehicles are allowed to enter the premises. • The speed of vehicles has been restricted to certain speed limits to control the spillage, emissions OR air born generation.	• Entry and exit of vehicles' registration / records have been maintained. • Vehicle movement security systems have been in service so that

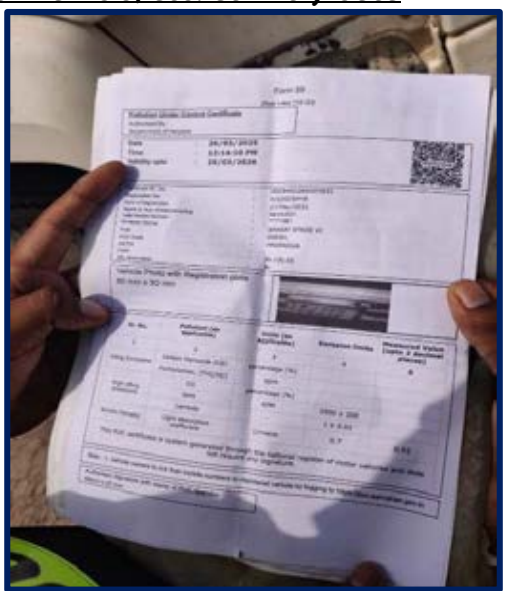
Sr. No.	Affected Environmental component	Likely Impacts in absence of mitigation measures	Mitigation measures have been taken	Remark
			• Idling trucks and dumper on the roads are not allowed. • Construction materials are brought in batches with covered with tarpaulin sheets. • Defensive driving / awareness training has been provided to drivers on regular interval.	Photographs / video of each vehicle have been recorded during entry of vehicles.

Photographs:

Water Sprinkling on Internal Roads

Material Covered with Sheet during transportation

Checking Vehicle's documents like PUC, etc. at Entry Gate



Batching Units / Facilities have been set up inside the premises

Use of E-vehicles for construction / site activities

D.G. Sets having adequate stake height and Acoustic system covered on it.

Annexure – V

Tree Plantation Activities

Trees are decisive to the strength of our planet and well-being of its inhabitants. Tree plantation has been carried out, as the process of planting trees in a community area played a crucial role in contesting climate change by captivating carbon dioxide and releasing oxygen (purifying air), facilitated through habitat and food for wide range of wildlife, supporting biodiversity and maintaining ecological balance. This practice has gained significant consideration, as some grapples with the adverse effects of deforestation, urbanization and environmental degradation.

Tree plantation have been done with more than 10000+ trees (Native Species) at Nani Khakhar. The same plantation is being maintained by the expert.

Tree Plantation done at Borana with 14000+ native species. Further, tree plantation having 300 numbers of native species have been done at Road side from Tunda to Bhadia which are being maintain by M/s Sadbhavna Manavseva Trust and experts.

Total 24,300+ trees have been planted at nearby villages to combat climate change and enhance biodiversity. Further, 88536+ numbers of cumulative trees have been planted at nearby villages for the period up to March, 2025.

Miyawaki tree plantation & Drip irrigation methods were used.

M/s Manvseva Charitable Trust and M/s Yash Green are the Expert to maintain the trees to get survival rate more than 98%.

Survival rate of trees are 98% +

9+ acre land were used for tree plantation

CO_2 Sequestration

2124.864+ tCO_2e will Seq.

500+ farmers were assisted in cultivating fruit – bearing trees.

Increasing their income and promoting sustainable agriculture.

Biodiversity Boost – Birds are resting & roosting at tree plantation area.

Icrease the organic fertility for the soil.

Increase the CO2 Sequestration, so as, clean air.

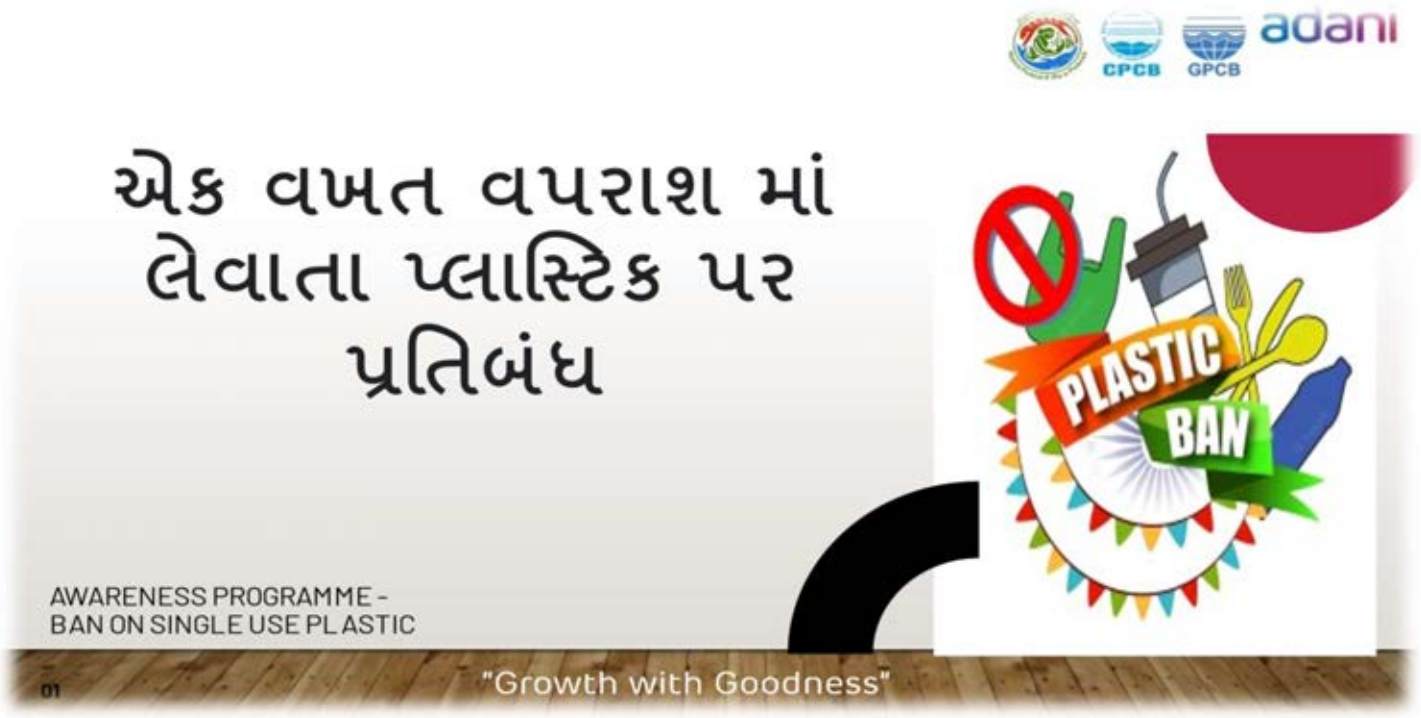
Tree Plantation Details

Sr. No.	Details of Expert Agency	Name of Species	Number of Species	Survival rate
1	M/s Manavseva	Ficus Virens	8	98-100%
2	Charitable Trust	Millettia Pinnata	20	
3	(Planting + 2 year	Arborvitae	15	
4	maintenance)	Azadirachta indica	49	
5	Tunda to Bhadiya	Ficus religiosa	41	
6	Village Road	Ficus benghalensis	34	
7		Arachis pintoi	20	
8		Samanea saman	11	
9		Tamarindus indica (Khati Ambali)	27	
10		Tamarindus Indica. (Mithi Ambali)	22	
11		Terminalia arjuna	23	
12		Syzygium Cumini	20	
13		Syzygium cumini (Jamun – Big Fruit)	10	
14	M/s Yash Green	Syzygiium samarangense	1715	98-100%
15	(Planting + 2 year	Prunas amygdalus	183	
16	maintenance)	pithecellobium dulce	2000	
17	Village: Borana	Senna Siamea	995	
18	(14000 Trees)	Cascabela thevetia	200	
19	&	Cassia fistula	1635	
20	Nani Khakhar	Cusuarina Equisetifolia	715	
21	(10000 Trees).	Moringa olieifera	765	
22		Azadirachta indica	1835	
23		Delonix regia	400	
24		Tamarinda	1574	
25		Date palm / Phoenix Dactylifera	650	
26		Croton (plants)	50	
27		Carissa carandas	180	
28		Ceiba pentandra	1304	
29		Albizia labbeck	420	
30		Morus (plant)	600	
31		Cedrus deodara	152	
32		Ficus religiosa	962	
33		Pentaclethra macroloba	125	
34		vechellia nilotica	515	
35		Gurva	535	
36		Samanea saman	95	
37		Seilver (disambiguation)	80	
38		Coconut tree(cocos nucifera)	174	
39		Banyan	6	
40		Ficus racemosa	57	
41		Woshingtonia robusta	2	
42		Betula Pendula	1120	
43		Bauhinia	500	
44		Tecoma stans	397	

45		Prosopis cinararia	330	
46		Banmboo	55	
47		Exora Coccinea	70	
48		Hibiscus	10	
49		Jasminum sambac	10	
50		Euphorbia ingens	20	
51	M/s Yash Green	Bodhi Tree	100	
52	(Planting + 2 year	Aegle marmelos	5	
53	maintenance)	Mimusops elengi	5	
54	Village: Borana	Manilkara zapota	5	
55	(14000 Trees)	Lemon	9	98-100%
56	&	Cymbopogon	5	
57	Nani Khakhar	Curry tree	5	
58	(10000 Trees).	Thespesia populnea	13	
59		Bougainvillea	50	
60		Syzygium Cumini	668	
61		Terminalia Catappa	255	
62		Bauhinia Racemosa	240	
63		Pongamia Pinnata	670	
64		Peltophorum	300	
65		Psidium Guajava	500	
66		Manilkara Hexandra	200	
67		Ficus Benghalensis	214	
68		Pongamia Pinnata	100	
69		Tamarindus Indica	220	
		Total	**24300**	

Annexure – VI

Awareness Program on "Ban on Single Use Plastic"



Awareness program on "Ban on Single use plastic" has been conducted at Government Schools and Self Help Groups of nearby villages as per The Plastic Waste Management Rules 2016 and amended from time to time, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022.

Awareness Program has covers CPCB Notifications, prohibited plastic items, complications created by plastic waste, awareness on plastic waste, plastic recycling numbers and its meaning.

The central aim of the plastic – free drive is to empower and enlighten students as key representatives of change, enabling them to disseminate awareness and instill the practice of reducing single use plastic within their community.

1. Educate: Spread awareness about the harmful effects of plastic on the environment, marine life, soil health and human well – being.

2. Engage: Mobilize community members, especially the youth and family members to actively participate in plastic waste reduction activities.

3. Implement: Introduce sustainable alternatives to ensure proper disposal and recycling.

Green School: Eco club for enlarging awareness on environment, sustainability, wildlife conservations, mangrove conservation, alternative of single use of plastics etc. have been established and under these 70 numbers of school from nearby villages, Mandavi and Mundra town area have been covered and more than 6000 students are participated in above said various awareness activities.

In line with this, "No Plastic Drive" – alternative of Single use plastic, in Utthan Schools has encouragingly motivated students behavior. Under this, Eco Clubs were established to further raise climate change awareness and promote a plastic free environment.



150+ numbers of Utthan Sahayak teachers, workers and employee have been trained by Expert on Reduced, Reuse and Recycle – "No to single use plastic".



Cloth Bags, Stationery were distributed for the participants to motivate the activities.



Further, Beach cleaning work have been organized at Kashivishvnath Beach, Mandvi. Over there,

1000 mtr Beach cleaning work done, specially single used plastic cleared.

200 + students and 80 Utthan Sahayak teachers were actively participated in Coastal Clean and Awareness session.

Further, to promote Reuse, Recover & Recycling, MPL has initiated use of plastic to make plastic pots and benches.

100 numbers of each Pots and Bench made from recycled plastic waste.

Manufacturing Bench from the recycled plastic have following Eco-benefits:

		
192 Carbon emissions reduced (KgCO2e)	Circular Eco system complete	18144 KL Fresh water Conserved
		
2400 Natural resources conserved (kg)	960 Waste plastic recycled (kg)	1440 waste silica recycled (kg)
		
12 number of people gaining direct livelihood	480 hr of Job created.	25 number of people gainnig indirect livelihood

Annexure - VII

adani

O/C

Ref: AEL/MPL/ENV/EC/2022 –September/01 Date: 02/09/2022

To,
Ms. Praveena D.K. (IAS),
Collector & DM,
Collector Office, Jilla Seva Sadan,
Bhuj – Kachchh, 370 001

Subject: Environment Clearance (EC) for proposed Project "**VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat** by M/s Adani Enterprises Ltd.

Reference: EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022

Respected Ma'am,

With reference to above subject, this is to inform that Ministry of Environment, Forest and Climate Change has granted Environment Clearance for our project "**Industry-II activity i.e. VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA** (as a part of Proposed Coal to Poly-Vinyl Chloride (PVC) Project of AEL in land notified as Industrial area of APSEZ, Ta-Mundra, Dist-Kachchh, Gujarat, comprising of IND-I projects i.e. Semi Coke–2030 KTPA, Cement–6 MTPA; Clinker–4 MTPA, IND-II projects i.e. VCM– 2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA and IND-III projects i.e. Acetylene–860 KTPA & Caustic Soda–1310 KTPA) and Calcium Carbide–2900 KTPA (Not Specified in EIA Notification)) by M/s Adani Enterprises Ltd." vide EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022.

As required under general condition No. **B - (vi)** of EC, we are submitting herewith copy of Environment Clearance for the said project for your reference, please.

Thanking You.

Yours Faithfully,

Authorized Signatory for Adani Enterprises Ltd.

Praveen Anant (Environment - Head)

Encl: As Above

Adani Enterprises Ltd
"Adani Corporate House",
Shantigram, Near Vaishno Devi Circle,
S. G. Highway, Khodiyar
Ahmedabad 382 421
Gujarat, India
CIN: L51100GJ1993PLC019067

Tel. + 91 79 2656 5555
Fax + 91 79 2555 5500
info@adani.com
www.adani.com

Registered Office: "Adani Corporate House", Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad - 382421

adani

Copy to:

1). **The District Development Officer,**
Jilla Pachayat, Opposite Surmandir Multiplex,
Bhuj – Kachchh, 370 001

2). **The Taluka Development Officer,**
Taluka Panchayat, Mundra
Ta: Mundra Dist: Kachchh, 370 421

3). **The General Manager,**
District Industries Center, Near New Green Hospital, Bhuj – Kachchh, 370 001

4). **The Regional Officer,**
Gujarat Pollution Control Board (Kachchh East),
Room no.215,216 & 217, 2nd Floor, Administration Office Building, Deendayal Port Trust,
Sector – 08, Gandhidham – Kachchh, 370 201

Adani Enterprises Ltd
"Adani Corporate House",
Shantigram, Near Vaishno Devi Circle,
S. G. Highway, Khodiyar
Ahmedabad 382 421
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Registered Office: "Adani Corporate House", Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad - 382421

adani

Ref: AEL/MPL/ENV/EC/2022 –September/03

Date: 02/09/2022

To,
The Sarpanch, Shri / Talati Cum Mantri, Shri
Gram Panchayat,
Village: _____
Ta: _____, Dist: Kachchh (List Attached)

Subject: Environment Clearance (EC) for proposed Project "**VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat** by M/s Adani Enterprises Ltd.

Reference: EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022

Respected Sir / Ma'am,

With reference to above subject, this is to inform that Ministry of Environment, Forest and Climate Change has granted Environment Clearance for our project "**Industry-II activity i.e. VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA** (as a part of Proposed Coal to Poly-Vinyl Chloride (PVC) Project of AEL in land notified as Industrial area of APSEZ, Ta.-Mundra, Dist-Kachchh, Gujarat, comprising of IND-I projects i.e. Semi Coke–2030 KTPA, Cement–6 MTPA; Clinker–4 MTPA, IND-II projects i.e. VCM– 2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA and IND-III projects i.e. Acetylene–860 KTPA & Caustic Soda–1310 KTPA) and Calcium Carbide–2900 KTPA (Not Specified in EIA Notification)) by M/s Adani Enterprises Ltd." vide EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022.

As required under general condition No. **B - (vi)** of EC, we are submitting herewith copy of Environment Clearance for the said project for your reference, please.

Thanking You.
Yours Faithfully,

Authorized Signatory for Adani Enterprises Ltd.

Praveen

Praveen Anant (Environment - Head)

Encl: As Above
Copy to:

1). **The Taluka Development Officer,**
Taluka Panchayat, Mundra
Ta: Mundra Dist: Kachchh, 370 421

2).
Gujarat Pollution Control Board (Kachchh East),
Room no.215,216 & 217, 2nd Floor, Administration
Office Building, Deendayal Port Trust,
Sector – 08, Gandhidham – Kachchh, 370 201

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info@adani.com
www.adani.com

Ref: AEL/MPL/ENV/EC/2022 –September/06/01 Date: 02/09/2022

To,
Shri Naran Gadhavi,
President - Kheti Vikas Seva Trust,
Village: Zarpara, Taluka: Mundra,
Dist-Kutch- 370 405

Subject: Environment Clearance (EC) (for Industrial activities pertain to Industry – 2 & 3) of proposed Project "**Coal to Poly-Vinyl Chloride (PVC) Project in land notified as Industrial area of APSEZ near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Adani Enterprises Ltd"**. – reg.

Reference: 1. EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022
2. EC Identification No. - EC22A013GJ127411, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022

Respected Sir,

With reference to above subject, this is to inform that Ministry of Environment, Forest and Climate Change has granted Environmental Clearance for following Industrial activities pertain to Industry – 2 & 3 of proposed Project "**Coal to Poly-Vinyl Chloride (PVC) Project in land notified as Industrial area of APSEZ near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Adani Enterprises Ltd"**.

Sr. no.	Type of Activities	Name of Activities	Details of Environmental Clearance	Enclosed as
1	Industry – 2	VCM– 2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA	EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022	Annexure – I
2	Industry – 3	Acetylene–860 KTPA & Caustic Soda–1310 KTPA)	EC Identification No. - EC22A013GJ127411, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022	Annexure – II

Accordingly, in compliance of general condition no. B(VI) & B(VII) of above refer letter sr. no. 1 & 2 respectively, we are enclosing herewith copies of Environmental Clearances for your reference, please.

Thanking You.
Yours Faithfully,

Authorized Signatory for Adani Enterprises Ltd.

Praveen Anant (Environment - Head)

Encl: As Above

Adani Enterprises Ltd
"Adani Corporate House",
Shantigram, Near Vaishno Devi Circle,
S. G. Highway, Khodiyar
Ahmedabad 382 421
Gujarat, India
CIN: L51100GJ1993PLC019067

Tel. + 91 79 2656 5555
Fax + 91 79 2555 5500
info@adani.com
www.adani.com

Annexure - VIII

Vinay Kumar Singh

From: Vinay Kumar Singh
Sent: Monday, May 12, 2025 4:30 PM
To: uh-gpcb-kute@gujarat.gov.in
Cc: ms-gpcb; ro-gpcb-kute@gujarat.gov.in; IRO Gandhinagar
Subject: Environment Statement (Form – V) for the FY 2024-25 for the Project "Poly-vinyl Chloride (PVC)" near Village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Mundra Petrochem Limited – Reg.
Attachments: 02. Form V PVC Project 2024-25.pdf

Ref: MPL/ENV/GPCB – Form – V/2025 –May/02 **Date:12/05/2025**

To, **PCB ID:86184**

The Unit Head, (Kutch District)
Gujarat Pollution Control Board,
Paryavaran Bhavan, Sector-10A,
Gandhinagar – 382 010
E-mail : uh-gpcb-kute@gujarat.gov.in

Subject: Environment Statement (Form – V) for the FY 2024-25 for the Project "Poly-vinyl Chloride (PVC)" near Village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Mundra Petrochem Limited – Reg.

Reference : 1) CTE no. 59301 granted by GPCB vide letter no. GPCB/ (PCB ID: 86184)/ 16246 dated 13/12/2022.
2) Amended CTE letter no. PC/CCA-KUTCH-2104/GPCB ID 86184/738939 Dated 12/04/2023.
3) MPL/ENV/GPCB – Form – V/2024 – May/02 Dated 18/05/2024.

Respected Sir,

With reference to the Consent to Establish issued by GPCB vide above refer letter dated 13/12/2022, amended vide letter dated 12/04/2023 for the project "Poly-vinyl Chloride (PVC)" near Village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Mundra Petrochem Limited.

The PVC project is currently in the final design, detailed engineering, and procurement stages, with construction activities also underway at the site. Enclosed is the soft copy of the Environment Statement (Form – V) for the fiscal year 2024–25 for your reference and records.

We hope you will find the above in order.

Thanking you,

Vinay Kumar Singh
CSO & BU Environment Head

Encl: As Above

Copy to : 1. Member Secretory, GPCB : ms-gpcb@gujarat.gov.in
2. Regional Office, GPCB (Kutch East): ro-gpcb-kute@gujarat.gov.in
3. Integrated Regional Office, MoEF&CC, Gandhinagar: iro.gandhingr-mefcc@gov.in

O/C

Annexure - IX

adani

Ref: AEL/MPL/ENV/EC/2022 – September/05 Date: 06/09/2022

To,
Shri Shrawan Kumar Verma, IFS (Addl. Charge)
Deputy Director General of Forests (C)
Integrated Regional Office, Gandhinagar,
Ministry of Environment, Forest and Climate Change,
A-Wing–407 & 409, Aranya Bhawan, Near CH-3 Circle,
Sector-10A, Gandhinagar – 382010

एकीकृत क्षेत्रीय कार्यालय, गाँधीनगर
Integrated Regional Office, Gandhinagar
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,
Ministry of Environment, Forest & Climate Change,
Govt. of India / भारत सरकार
कक्ष क्र. 407 व 409 ए विंग अरण्य भवन
Room No.407 & 409, A wing Aranya Bhavan
गाँधीनगर (गुजरात) / Gandhinagar(Gujarat)
09/09/22

Subject: Environment Clearance (EC) for proposed Project "**VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat** by M/s Adani Enterprises Ltd.

Reference: EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA II(I) dated 31/08/202

Respected Sir,

With reference to above subject, this is to inform that Ministry of Environment Forest and Climate Change has granted Environment Clearance for our project "Industry-II activity i.e. VCM–2002 KTPA, PVC–2000 KTPA, Ethylene Glycol– 400 KTPA (as a part of Proposed Coal to Poly-Vinyl Chloride (PVC) Project of AEL in land notified as Industrial area of APSEZ, Ta-Mundra, Dist-Kachchh, Gujarat, comprising of IND-I projects i.e. Semi Coke– 2030 KTPA, Cement–6 MTPA; Clinker–4 MTPA, IND-II projects i.e. VCM– 2002 KTPA, PVC– 2000 KTPA, Ethylene Glycol– 400 KTPA and IND-III projects i.e. Acetylene–860 KTPA & Caustic Soda–1310 KTPA) and Calcium Carbide–2900 KTPA (Not Specified in EIA Notification)) by M/s Adani Enterprises Ltd." vide EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022. Copy enclosed as **Annexure – A**.

Accordingly, in compliance of EC condition No. B(ix), we are submitting herewith copies of following News papers (**Annexure – B**) stating "*the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB (GPCB) and may also be seen at Website of the Ministry at https://parivesh.nic.in/* as well as on Company website at https://adanienterprises.com/-/media/e1f0a2365908404bbf62e8c4d4b83969.ashx" for your reference, please.

Adani Enterprises Ltd
"Adani Corporate House",
Shantigram, Near Vaishno Devi Circle,
S. G. Highway, Khodiyar
Ahmedabad 382 421
Gujarat, India
CIN: L51100GJ1993PLC019067

Tel. + 91 79 2656 5555
Fax + 91 79 2555 5500
info@adani.com
www.adani.com

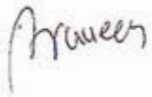
Registered Office: "Adani Corporate House", Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad - 382421

adani

Sr. no.	Name of News Paper	Language	Date of Publication
1	Kutch Mitra	Gujarati	05/09/2022
2	Gujarat Samachar	Gujarati	05/09/2022
3	The Times of India	English	05/09/2022

Thanking You.
Yours Faithfully,

Authorized Signatory for Adani Enterprises Ltd,



Praveen Anant (Environment - Head)

Encl: As Above

Copy to:

1). **The Member Secretory,**
Gujarat Pollution Control Board,
Paryavaran Bhavan,
Sector – 10 A,
Gandhinagar 382 010

2). **The Regional Officer,**
Gujarat Pollution Control Board
(Kuchchh East),
Room no.215,216 & 217, Second floor,
Administration Office Building,
Gandhidham – Kuchchh, 370 201

Adani Enterprises Ltd
"Adani Corporate House",
Shantigram, Near Vaishno Devi Circle,
S. G. Highway, Khodiyar
Ahmedabad 382 421
Gujarat, India
CIN: L51100GJ1993PLC019067

Tel. + 91 79 2656 5555
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info@adani.com
www.adani.com

Registered Office: "Adani Corporate House", Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad - 382421

અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

શાંતિગ્રામ, એસ. જી. હાઈવે, અમદાવાદ - ૩૮૨૪૨૧. (ગુજરાત)

જાહેર નોટિસ

મે. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ, APSEZ ઔદ્યોગિક જમીન, વાંઢ & ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત ખાતે પ્રસ્તાવિત **"ઇન્ડસ્ટ્રી - ૨ એકટીવીટી જેવીકે વી.સી.એમ - ૨૦૦૨ કે.ટી.પી.એ., પી.વી.સી. - ૨૦૦૦ કે.ટી.પી.એ., ઇથીલીન ગ્લાયકોલ - ૪૦૦ કે.ટી.પી.એ.** (જે સૂચિત કોલ ટુ પોલી-વિનાયલ (પી.વી.સી.) પ્રોજેક્ટ ના ભાગ રૂપે મે. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ દ્વારા પ્રસ્તાવિત, APSEZ ઔદ્યોગિક જમીન, વાંઢ & ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત, જેમાં ઇન્ડસ્ટ્રી - ૧ પ્રોજેક્ટ - સેમી કોક - ૨૦૩૦ કે.ટી.પી.એ.; સિમેન્ટ - ૬ એમ.ટી.પી.એમ; ક્લિનકર - ૪ એમ.ટી.પી.એમ; ઇન્ડસ્ટ્રી - ૨ પ્રોજેક્ટ - વી.સી.એમ - ૨૦૦૨ કે.ટી.પી.એ., પી.વી.સી. - ૨૦૦૦ કે.ટી.પી.એ., ઇથીલીન ગ્લાયકોલ - ૪૦૦ કે.ટી.પી.એ, અને ઇન્ડસ્ટ્રી - 3 પ્રોજેક્ટ - એસિટિલિન - ૮૬૦ કે.ટી.પી.એ. અને કોસ્ટિક સોડા - ૧૩૧૦ કે.ટી.પી.એ અને કેલ્શિયમ કાર્બાઇડ - ૨૯૦૦ કે.ટી.પી.એ. (EIA નોટિફિકેશન માં દર્શાવેલ નથી) ના ભાગ રૂપે સમાવેશ થાય છે.)" માટે ની પર્યાવરણીય મંજૂરી મિનિસ્ટ્રી ઓફ એન્વિરોમેન્ટ, ફોરેસ્ટ અને ક્લાઇમેટ ચેન્જ, નવી દિલ્લી ના પત્ર ક્રમાંક : **EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022** ના રોજ પ્રાપ્ત થયેલ છે. સદરહુ માન્યતા અંગેનો પત્ર ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ ની ઓફિસ માં તેમજ મિનિસ્ટ્રી ઓફ એન્વિરોમેન્ટ, ફોરેસ્ટ અને ક્લાઇમેટ ચેન્જ ની વેબ સાઈટ https://parivesh.nic.in પરથી પણ જોઈ શકાશે. તદ્ ઉપરાંત એન્વિરોન્મેન્ટ ક્લીયરન્સ ની કોપી કંપનનીની વેબસાઈટ https://www.adanienterprises.com/-/media/e1f0a2365908404bbf62e8c4d4b83969.ashx પર પણ જોઈ શકાશે.

sd-

પ્રોદ્યુત માજી (પ્રોજેક્ટ.હેડ)

મે. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

News Paper: Gujarat Samachar, Page no:9, Date:05/09/2022,
Language: Gujarati

અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

શાંતિગ્રામ, એસ. જી. હાઇવે, અમદાવાદ - ૩૮૨૪૨૧. (ગુજરાત)

જાહેર નોટિસ

મે. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ, APSEZ ઔદ્યોગિક જમીન, વાંઢ & ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત ખાતે પ્રસ્તાવિત **"ઇન્ડસ્ટ્રી - ૨ એકટીવીટી જેવીકે વી.સી.એમ - ૨૦૦૨ કે.ટી.પી.એ., પી.વી.સી. - ૨૦૦૦ કે.ટી.પી.એ., ઇથીલીન ગ્લાયકોલ - ૪૦૦ કે.ટી.પી.એ.** (જે સૂચિત કોલ ટુ પોલી-વિનાયલ (પી.વી.સી.) પ્રોજેક્ટ ના ભાગ રૂપે મે. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ દ્વારા પ્રસ્તાવિત, APSEZ ઔદ્યોગિક જમીન, વાંઢ & ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત, જેમાં ઇન્ડસ્ટ્રી - ૧ પ્રોજેક્ટ - સેમી કોક - ૨૦૩૦ કે.ટી.પી.એ.; સિમેન્ટ - ૬ એમ.ટી.પી.એમ; ક્લિનકર - ૪ એમ.ટી.પી.એમ; ઇન્ડસ્ટ્રી - ૨ પ્રોજેક્ટ - વી.સી.એમ - ૨૦૦૨ કે.ટી.પી.એ., પી.વી.સી. - ૨૦૦૦ કે.ટી.પી.એ., ઇથીલીન ગ્લાયકોલ - ૪૦૦ કે.ટી.પી.એ, અને ઇન્ડસ્ટ્રી - ૩ પ્રોજેક્ટ - એસિટિલિન - ૮૬૦ કે.ટી.પી.એ. અને કોસ્ટિક સોડા - ૧૩૧૦ કે.ટી.પી.એ અને કેલ્શિયમ કાર્બાઇડ - ૨૯૦૦ કે.ટી.પી.એ. (EIA નોટિફિકેશન માં દર્શાવિલ નથી) ના ભાગ રૂપે સમાવેશ થાય છે.)" માટે ની પર્યાવરણીય મંજૂરી મિનિસ્ટ્રી ઓફ એન્વિરોમેન્ટ, ફોરેસ્ટ અને ક્લાઇમેટ ચેન્જ, નવી દિલ્લી ના પત્ર ક્રમાંક : **EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022** ના રોજ પ્રાપ્ત થયેલ છે. સદરહુ માન્યતા અંગેનો પત્ર ગુજરાત પ્રદુષણ નિયંત્રણ બોર્ડ ની ઓફિસ માં તેમજ મિનિસ્ટ્રી ઓફ એન્વિરોમેન્ટ, ફોરેસ્ટ અને ક્લાઇમેટ ચેન્જ ની વેબ સાઇટ https://parivesh.nic.in પરથી પણ જોઇ શકાશે. તદ્ ઉપરાંત એન્વિરોન્મેન્ટ ક્લીયરન્સ ની કોપી કંપનીની વેબસાઇટ https://www.adanienterprises.com/-/media/e1f0a2365908404bbf62e8c4d4b83969.ashx પર પણ જોઇ શકાશે.

sd-
પ્રોદ્યુત માજી (પ્રોજેક્ટ હેડ)
મે. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

News Paper: Kutchmitra, Page no:5, Date:05/09/2022,
Language: Gujarati

Adani Enterprises Limited

Shantigram, S.G. Highway, Ahmedabad-382421. (Gujarat)

PUBLIC NOTICE

M/s Adani Enterprises Limited, APSEZ Industrial Land, Near Village Vandh & Tunda, Taluka Mundra, District - Kachchh, Gujarat has been accorded Environmental Clearance (EC) for project **"Industry - II activity i.e. VCM - 2002 KTPA, PVC - 2000 KTPA, Ethylene Glycol - 400 KTPA** (as a part of Proposed Coal to Poly-Vinyl Chloride (PVC) Project of AEL in land notified as industrial area of APSEZ, Ta. - Mundra, Dist - Kachchh, Gujarat, comprising of IND - I projects i.e. Semi Coke–2030 KTPA, Cement - 6 MTPA; Clinker - 4 MTPA, IND-II projects i.e. VCM - 2002 KTPA, PVC - 2000 KTPA, Ethylene Glycol - 400 KTPA and IND - III projects i.e. Acetylene - 860 KTPA & Caustic Soda - 1310 KTPA and Calcium Carbide - 2900 KTPA (Not Specified in EIA Notification)) by M/s Adani Enterprises Ltd." by Ministry of Environment, Forest and Climate Change, Government of India vide **EC Identification No. - EC22A020GJ133762, File No. - IA-J-11011/149/2021-IA-II(I) dated 31/08/2022.** The said clearance letter is available at website of the Ministry of Environment, Forest and Climate Change at https://parivesh.nic.in and also available at office of the Gujarat Pollution Control Board (GPCB). Copy of EC is also kept at website of the company at https://www.adanienterprises.com/-/media/e1f0a2365908404bbf62e8c4d4b83969.ashx

sd-
Pradyut Maji (Project Head)
M/s Adani Enterprises Limited

News Paper: The Times of India, Page no:11, Date:05/09/2022, Language: English