

To,

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Subject: Six monthly compliance report (October, 2022 to March, 2023) of Environment Clearance (EC) for the project activities "Semi Coke-2030 KTPA, Calcium Carbide-2900 KTPA, Cement-6 MTPA; Clinker-4 MTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Mundra Petrochem Limited.

Reference : 1). EC Identification no EC22A009GJ154137, File no. IA-J-11011/423/2021-IA-II(IND-I) Dated 26/09/2022.
2). F.No.IA-J-11011/423/2021 – IA – II(Ind-I) Dated 23/12/2022.

Respected Sir,

With reference to above subject, MoEF&CC vide above refer letter dated 26/09/2022 has granted environment clearance for the project activities " Semi Coke-2030 KTPA, Calcium Carbide-2900 KTPA, Cement-6 MTPA; Clinker-4 MTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat by M/s Adani Enterprises Limited". Followed by, Moef&CC vide above refer letter dated 23/12/2022 has transferred the Environment Clearance on the name of M/s Mundra Petrochem Limited from M/s Adani Enterprises Limited.

Presently, the coal to PVC Project is under basic & detail engineering and process design stage. However, we are hereby submitting soft copy of the six monthly EC compliance report for the period October, 2022 to March, 2023.

Thanking you,



Vinay Kumar Singh
General Manager – Environment & Sustainability

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2. Member Secretary, GPCB : ms-gpcb@gujarat.gov.in
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Mundra Petrochem Limited

Introduction:

Mundra Petrochem Limited, wholly owned stepdown subsidiary of Adani Enterprises Limited (AEL) intends to setup a Coal to PVC Project at Mundra, Kachchh, Gujarat. The 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 Coal to PVC Project.

For implementation of this project, various plants such as Semi-Coke Plant, Calcium Carbide Plant, Acetylene Plant, Caustic Soda (Chlor-Alkali process) Plant, VCM Plant, PVC Plant, Ethylene Glycol Plant and Cement Plant are proposed to be established.

PVC Produced from the facility will cater to the domestic market and replace imports in the domestic market. By- Products from the plant would be marketed in either in domestic market or export market depending upon market conditions.

Ministry of Environment Forest and Climate Change has granted Environment Clearance for proposed project "Coal to 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

Considering the company's long term business strategy, the proposed project is transferred from M/s Adani Enterprises Limited (AEL) to M/s Mundra Petrochem Limited (MPL). MPL is a wholly owned stepdown subsidiary company of M/s Adani Enterprises Limited (AEL), incorporated under the provision of Company Act, 2013 for carrying out various business activities for Semi-Coke, Calcium

Carbide, Cement & Clinker, VCM, PVC, Ethylene Glycol, Chlor-alkali and acetylene plants and associated products in 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)

Presently, the Coal to PVC project is under basic & detail engineering and process design stage, however, initial site preparation & construction activities have been started at the project site. The financial closure of the project shall be carried out after commissioning of the project.

Point wise Compliance of Environmental Clearance for Industrial activity-I- Proposed Semi Coke–2030 KTPA, Calcium Carbide–2900 KTPA, Cement–6 MTPA; Clinker–4 MTPA vide EC Identification No: EC22A009GJ154137, File No: IA-J-11011/423/2021-IA-II(IND-I) Date: 26/09/2022 & subsequent EC Transfer vide File no. IA-J-11011/423/2021-IA-II(IND-I) Dated 23/12/2022

S. No	Conditions	Status
A	Specific Conditions	
(i)	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. Project proponent shall abide by all the orders and judicial pronouncements, made from time to time, passed by Hon'ble High Court of Gujarat in PIL No. 36 of 2022.	Noted & agreed with requirement
(ii)	The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.	Noted & agreed with requirement. Consent to establish has been obtained from GPCB.
(iii)	The project proponent shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.	Noted and shall be complied with. Remarks- Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Environmental protection measures and safeguards in line with the applicable regulatory requirements and best available technologies are being considered in the detailed project engineering design and same will be implemented accordingly during execution of work.

S. No	Conditions	Status
(iv)	<p>The project proponent shall utilize modern technologies for capturing of carbon emitted and shall also develop carbon sink/carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO, MoEF&CC in this regard.</p>	<p>Noted and shall be complied with.</p> <p>Remarks- Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Best available practices will be adopted to develop the carbon sink/carbon sequestration resources for capturing of carbon emitted . The implementation report for the same will be submitted to the IRO, MoEF&CC at the time of operation.</p>
(v)	<p>The activities and the action plan proposed by the project proponent to address the issues raised during public hearing and socio-economic issues in the study area shall be completed as per the schedule presented before the Committee and as described in the EIA report in letter and spirit.</p>	<p>Noted and being complied with the requirements.</p> <p>Remarks- Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Action plan proposed to address the issues raised during public hearing and socio-economic issues in the study area shall be implemented as project progress at site. However, MPL has already initiated CER activities in all villages surrounding to project area and total CER expenditure incurred in various community welfare & eco-development activities during the period from November 2022 to March 2023 approx. 4.4 Cr aligned with CAPEX incurred till date.</p> <p>The detailed CER activities with expenditures are summarized in Annexure-V.</p>
(vi)	<p>There are many water bodies including Jarpara Lake, Khari River, Nagavanti River, Dhanesri River, Phot River, Gulf of Kuchchh, Baradi Mata Creek, Kotdi Creek, Modhva Coast exists within the project site. A robust Drainage Conservation scheme to protect the natural drainage and its flow parameters; along with Soil conservation scheme and multiple Erosion control measures shall be implemented.</p>	<p>Noted and shall be complied with.</p> <p>Remarks- water bodies like Jarpara Lake, Khari River, Nagavanti River, Dhanesri River, Phot River, Gulf of Kuchchh, Baradi Mata Creek, Kotdi Creek, Modhva Coast are outside of the project site. However, Adequate drainage conservation scheme along with Soil Conservation and Erosion Control measures will be adopted as per best available practices to protect the natural drainage and its flow followed by soil and erosion control at Coastal area.</p>

S. No	Conditions	Status
(vii)	As all the natural drainage including the micro drainage flows into the Gulf of Kutch, a drainage conservation plan shall be implemented. An adequate robust Erosion control and Soil Conservation Program (like Storm water diversion; Storm water drains with catch pits to trap run off material; Garland drains; Retention walls; Settling Ponds; Wheel washing arrangement; Silt removal from settling ponds and utilization; Greening & Paving; Excavated soil preservation for landscaping) shall be implemented.	Noted and shall be complied with. Remarks- Adequate drainage conservation scheme along with Soil Conservation and Erosion Control measures will be adopted as per best available practices to protect the natural drainage.
(viii)	The Efforts shall be made to achieve power consumption of 70 units/tonne of Portland Pozzolana cement (PPC) and 95 units/tonne of cement for Ordinary Portland Cement and thermal energy consumption of 670 kcal/Kg of Clinker.	Noted and shall be complied with.
(ix)	Most of the transportation of raw material is by road, the distance of which is within 10 km. Project Proponent shall use overhead belt conveyor wherever possible. Action plan shall be prepared and implemented in a time bound manner from the date of issue of Environment Clearance after obtaining requisite statutory permissions from the concerned competent authority.	Noted and shall be complied with. Presently, Coal to PVC project is under development of basic & detail design and engineering stage. A detailed action plan on "transportation of raw material" in environment friendly manner will be prepared after finalization of plant design & engineering.
(x)	The project proponent shall develop Greenbelt over an area at least 107.14 ha by planting 2,67,600 number of trees in 5 years from the grant of EC. The saplings selected for the plantation should be of sufficient height, preferably 6-ft. In addition to this as committed by the PP, Industry shall deploy a uniform greenbelt of equal width all-round the plant boundary, it will reduce the width of the green belt by 15 to 25 meters on seaward side of the project and will increase the width of the greenbelt on landward side of the project maintaining the total 33% of the greenbelt. The budget earmarked for the plantation shall be ₹75 crore and shall be kept in separate account and should be audited annually. The PP should annually submit	Noted and shall be complied with the requirements. Remark: Project is under detailed designing stage. However, Green belt having requisite width will be developed in phased manner, mainly along the plant periphery, in downward wind direction, and along roadsides etc. Selection of plant species will be done in consultation with the State Forest Department. Further, adequate width of greenbelt will be developed in the plant side adjacent to the Mangrove Forest. Further, budget earmarked for the same will be kept in separate account and shall be audited annually once activities started and report on the same shall be submitted once activities started.

S. No	Conditions	Status
	<p>the audited statement along with proof of activities viz. photographs (before & after with geolocation date & time), details of expert agency engaged, details of species planted, number of species planted, survival rate, density of plantation etc. to the Regional Office of MoEF&CC before 1st July of every year for the activities carried out during previous year.</p>	
(xi)	<p>The total water requirement for Coal to PVC project will be 222.875 MLD. This will be met by internal recycling of 62 MLD and makeup water of 160.053 MLD from APSEZL Seawater Desalination plant. No groundwater extraction is permitted</p>	<p>Noted and shall be complied with the requirements. Remarks: no groundwater will be extracted for construction as well as operational activities. Water requirement will be fulfilled through APSEZ limited – Seawater Desalination plant.</p>
(xii)	<p>All stockyards shall be having impervious flooring and shall be equipped with water spray system for dust suppression. Stock yards shall also have garland drains to trap the runoff material.</p>	<p>Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Adequate facilities for dust control will be installed to arrest the dust or to prevent the generation of air born at stockyards area. Also, garland drains will be also provided to trap the runoff materials at stockyards.</p>
(xiii)	<p>Slip roads shall be provided at the gates and along crossings on main roads. All internal and connecting road to the Highway shall be black topped/ concreted with suitable load in term of Million Standard Axle (MSA) as per IRC guidelines.</p>	<p>Noted and shall be complied with the requirements. Remarks: internal and connecting road to highway for proposed project will be constructed as per IRC guidelines.</p>
(xiv)	<p>Performance monitoring of pollution control equipment shall be taken up yearly and compliance status in this regard shall be reported to the concerned Regional Office of the MoEF&CC.</p>	<p>Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. During operation phase, performance monitoring of pollution control equipment will be conducted at prescribed interval and report on the same will be submitted to I.R.O. of the MoEF&CC.</p>

S. No	Conditions	Status
(xv)	Project Proponent shall implement the recommendations of CSIR-CIMFR on the Report which was conducted on validation of technology proposed for Semi-Coke Unit to evaluate all the environmental concerns arising out of the project activities and their conformity to the Indian Standards issued vide G.S.R. 277 (E) dated 31 March 2012 pertaining to Coke -Oven Plant.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Recommendation proposed by CSIR-CIMFR for Semi coke plant shall be implemented for meeting the requirements of G.S.R. 277 (E) dated 31 March 2012 pertaining to Coke -Oven Plant.
(xvi)	Coke Oven Gas shall be desulfurized.	Noted. The project is under detailed design stage.
(xvii)	Coke oven plant shall be equipped with modified wet quenching system.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage.
(xviii)	Dioxin and furans shall be monitored twice a year during co-processing of hazardous waste and report shall be submitted to the Regional Office of the MoEF&CC.	Noted and shall be complied with the requirements. Remarks: Dioxin and furans will be monitored twice a year during coprocessing of hazardous waste (if any) and report will be submitted to the Regional Office of the MoEF&CC.
(xix)	Project proponent shall develop separate drainage system for storm water and industrial waste water and effectively prevent the pollution of natural waterbody.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Drainage system will be designed considering "Zero Liquide Discharge" concept. So, there will be no any impact on natural waterbody through industrial waste water. A separate drainage system for storm water shall also be developed.
(xx)	Particulate matter emissions from cement mill stacks shall be less than 20 mg/Nm ³ .	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Adequate APCM equipment will be installed to comply the statutory norms.

S. No	Conditions	Status
(xxi)	Entire waste water shall be treated and reused for plantation and dust suppression within the premises. Also, STP water shall be reused in plantation with a view to conserve fresh water.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Proposed project will be on "Zero Liquid Discharge" concept and treated water will be re-used for cooling water, gardening, or other industrial activities to conserve the fresh water. Also, treated water from STP will be used for irrigation purpose for horticulture & greenbelt development.
(xxii)	As committed by the project proponent to adopt the 15 villages, where habitation exists within the study area of the project site, namely Vandh, Tunda, Kandagara, Shiracha, Navinal, Jarpara, Mota Bhadiya, Tragadi, Nana Bhadiya, Nani Khakar, Moti Khakhar, Deshalpar, Moti Bhujpur, Nani Bhujpur and Modhva, Project Proponent shall adopt these villages and prepare and implement a robust plan to develop them into model villages in next 10 years.	Noted and being complied with the requirements. Remarks: In order to know the present social status and needs of the local community, a "Baseline & Need Assessment Study" is also carried out through third party professional agency involving various stakeholders- local villagers, administration etc. and the recommendation of the study is further included in the CER plan for implementation in phased manner. MPL has already initiated CER activities in all villages surrounding project area and total CER expenditure approx. INR 4.4 Cr. incurred in various community welfare & eco-development activities for the period from November, 2022 to March, 2023. was. The detailed CER activities with expenditures are summarized in Annexure-V .
(xxiii)	Hot air dryer shall not be installed. Flue gases of preheater shall be used to dry the slag/bottom ash.	Noted and shall be complied with the requirements. Remarks: project is under detailed designing stage.
(xxiv)	DeSOx system shall be provided dry type. NOx level shall be maintained below 600 mg/Nm ³ by using best available technology.	Noted and shall be complied with the requirements. Remarks: project is under detailed designing stage. Adequate APCM will be taken to control the pollutant withing the stipulated emission norms.
(xxv)	Petcoke dosing shall be controlled automatically to control SO ₂ emission from chimney within the prescribed limits.	Noted and shall be complied with the requirements. Remarks: project is under detailed designing stage. Adequate APCM will be taken to

S. No	Conditions	Status
		control the pollutant withing the stipulated emission norms.
(xxvi)	The PP shall develop a control strategy and mitigation plan that incorporates the pollution control measures. The Clean Air practices shall be adopted like mechanical collectors, wet scrubbers, fabric filters (baghouses), electrostatic precipitators, combustion systems (thermal oxidizers), condensers, absorbers, adsorbers, and biological degradation.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Adequate APCM will be taken to control the pollutant withing the stipulated emission norms.
(xxvii)	Sufficient numbers of additional truck mounted Fog/Mist water cannons shall be operated regularly inside the project premises and also in the surrounding villages to arrest suspended dust in the atmosphere. The PP to this effect shall implement a time bound Action Plan, and the compliance shall be submitted to IRO, MoEFCC.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Necessary APCM shall be implemented to control the suspended dust in the atmosphere. Necessary AAQM shall be conducted in project and nearby community area and in case of higher level of suspended dust observed, necessary action shall be implemented & action taken report will be submitted to IRO, MoEF&CC after during project execution activities at site.
(xxviii)	A proper action plan must be implemented to dispose of the electronic waste generated in the industry	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage.
(xxix)	The total quantity of particulate matter generated (kg/month) and the percentage of this captured by pollution control units, must be reported every six months.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. During operation stage, Six monthly report incorporating details of total generation of particulate matter and captured quantity will be submitted to concerned authority.
(xxx)	The project proponent shall take utmost importance in protecting, conserving and enhancing the wildlife fauna in areas falling under their operational activities, especially the aquatic/ marine/ estuarine ecosystems. The recommendations of the approved Site-Specific Wildlife	Noted and shall be complied with the requirements. Remark: The project is under detailed design stage. Consultation process with the Forest Department, Kachchh, Bhuj, is also initiated for implementation of wildlife conservation plan. Activities as proposed in

S. No	Conditions	Status
	Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report to the concerned Regional Office of the MoEF&CC.	the wildlife conservation plan have been initiated. Details of activities performed as per approved site-specific wildlife management plan is attached as Annexure - I . The copy of the same report is being furnished to the Regional Office of the MoEF&CC.
(xxxii)	The project proponent shall not disturb the nearby Mangrove Forest and shall take necessary steps to protect, conserve and enhance them.	Noted and shall be complied with the requirements. Remarks: Project is under detailed designing stage. Utmost priority will be given to conserve and protect the nearby mangroves forest during construction as well as operation phase.
(xxxiii)	The project proponent shall implement the Disaster/ Risk Management SOPs and protocols, as the Kutch area is prone to periodic cyclone storms. All the recommendations made in the risk assessment report shall be implemented and compliance status in this regard shall be furnished to the Regional Office of the MoEF&CC along with the six monthly compliance report.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. At present, HAZOP review for the process plants is being carried out for all process units under Coal to PVC complex for identifying all potential hazard and operability problems and access the associated risks and safeguards along with risk reduction measures with help of guide words by structured review. Moreover, a detailed Risk Assessment study for entire Green PVC Complex will also be carried out and Emergency Preparedness Plan and Disaster Management Plan will be prepared for further implementation. Further compliance status of the same will be submitted to the Regional Office of the MoEF&CC along with the six monthly compliance report."
(xxxiiii)	The project proponent shall comply with all the mitigation measures suggested by other divisions of MoEF&CC including Industry-II, Industry-III, Infra-I and also state departments like SPCB in the instant inter-linked PVC to Coal project.	Noted and shall be complied with the requirements.

S. No	Conditions	Status
(xxxiv)	<p>The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. In this regard, CPCB has issued a direction to all the State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) on 30/06/2022 to ensure the compliance of Notification published by Ministry on 12/08/2021. The technical guidelines issued by the CPCB in this regard is available at https://cpcb.nic.in/technical-guidelines-3/. All the project proponents are hereby requested to sensitize and create awareness among people working within the Project area as well as its surrounding area on the ban of SUP in order to ensure the compliance of Notification published by this Ministry on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report being submitted by the project proponents.</p>	<p>Noted and shall be complied with the requirements. Remarks: awareness Programme has been conducted at nearby village for ban on single use plastic. Copy of the same is enclosed as Annexure - II.</p>
B	General Conditions	
I.	Statutory compliance:	
(i)	<p>The Environment Clearance (EC) granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc., required to be obtained or standards/conditions to be followed under any other Acts/Rules/Subordinate legislations, etc., as may be applicable to the project.</p>	<p>Agreed with requirements</p>
II.	Air quality monitoring and preservation	
(i)	<p>The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment</p>	<p>Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Necessary OCEMS / CEMS will be installed and same will be</p>

S. No	Conditions	Status
	<p>dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants), as amended from time to time), G.S.R 277 (E) dated 31st March 2012 (Coke Oven Plants) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories</p>	<p>connected to SPCB and CPCB servers as per the norms during operation phase.</p>
(ii)	<p>The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.</p>	<p>Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage.</p>
(iii)	<p>The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120°each), covering upwind and downwind directions.</p>	<p>Noted and shall be complied with the requirements. Remarks: Project is under detailed designing stage. CAAQMS will be installed as per the requirement during operation phase. However, Ambient Air quality monitoring have been carried out through NABL accredited laboratory at suitable locations & report of the same is enclosed as Annexure - III & IV.</p>
(iv)	<p>The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.</p>	<p>Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.</p>

S. No	Conditions	Status
(v)	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(vi)	The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(vii)	Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(viii)	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(ix)	Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(x)	Provide wind shelter fence and chemical spraying on the raw material stock piles	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(xi)	Provide Low NOX burners as primary measures and SCR /NSCR technologies as secondary measure to control NOX emissions.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(xii)	Have separate truck parking area and monitor vehicular emissions at regular interval.	Noted and shall be complied with the requirements. Remarks: Project is under detailed designing stage.
(xiii)	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.

S. No	Conditions	Status
(xiv)	Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(xv)	Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(xvi)	Land-based APC system shall be installed to control coke pushing emissions.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(xvii)	Monitor CO, HC and O2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(xviii)	Vapor absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
III.	Water quality monitoring and preservation	
(i)	The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25thAugust, 2014 (Cement) and subsequent amendment dated 9thMay, 2016 (Cement) and 10th May, 2016 (in case of Co-processing Cement) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants), as amended from time to time), G.S.R 277 (E) dated 31st March 2012 (Coke Oven Plants) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.

S. No	Conditions	Status
	(Protection) Act, 1986 or NABL accredited laboratories.	
(ii)	The project proponent shall regularly monitor ground water quality at least twice a year (pre and post-monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognized under Environment (Protection) Act, 1986 and NABL accredited laboratories	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(iii)	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Modular STPs have been installed for construction phase. Engineering design of the STPs is in progress for treatment of domestic effluent during operational phase.
(iv)	Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(v)	Water meters shall be provided at the inlet to all unit processes in the cement plant.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(vi)	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(vii)	The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
IV.	Noise monitoring and prevention	

S. No	Conditions	Status
(i)	Noise quality shall be monitored as per the prescribed Noise Pollution (Regulation and Control) Rules, 2000 and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	Noted and shall be complied with the requirements. Remarks: Project is under detailed designing stage.
(ii)	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	Noted and shall be complied with the requirements. Remarks: Project is under detailed designing stage.
V.	Energy Conservation measures	
(i)	Waste heat recovery system shall be provided for kiln and cooler.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(ii)	The project proponent makes efforts to achieve power consumption less than 65 units/ton for Portland Pozzolona Cement (PPC) and 85 units/ton for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.	Noted and shall be complied with the requirements during operational phase. Remarks: Project is under detailed designing stage.
(iii)	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly	Noted and shall be complied with the requirements. Remarks: Project is under detailed designing stage. Possibilities are being explored to use more renewable energy including solar power generation on roof tops of buildings, for solar light system for all common areas, streetlights, parking around project area in the project design phase.
(iv)	Provide the project proponent for LED lights in their offices and residential areas.	Noted and shall be complied with the requirements. Remarks: Project is under detailed designing stage. Energy efficiency measures are being considered in the project design. Best available lighting equipment/LED will be provided at offices and residential area.
VI.	Waste management	
(i)	Used refractories shall be recycled as far as possible.	Noted and shall be complied with the requirements.

S. No	Conditions	Status
		Remarks: Project is under detailed designing stage. However, Used refractories will be recycled."
VII.	Green Belt	
(i)	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees in the plant premises.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. A detailed Life cycle assessment study is being carried out through third party professional agency. On finalization of project design and LCA study, GHG emissions inventory for the plant will be prepared along with reduction strategy by incorporating carbon sequestration scheme through plantation Programme after commissioning of the project."
(ii)	Project proponent shall submit a study report within six months on Decarbonisation program, which would essentially consist of company's carbon emissions, carbon budgeting/ balancing, carbon sequestration activities and carbon offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition pathway from fossil fuels to Renewable energy etc. All these activities/ assessments should be measurable and monitorable with defined time frames.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. A detailed decarbonation program shall be prepared after design & detailed engineering of the different processes. An action plan for the same will be prepared, implemented, monitored and same shall be submitted."
VIII.	Public hearing and Human health issues	
(i)	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. At present, HAZOP review for the process plants is being carried out for all process units under Coal to PVC complex for identifying all potential hazard and operability problems and access the associated risks and safeguards along with risk reduction measures with help of guide words by structured review.

S. No	Conditions	Status
		Moreover, a detailed Risk Assessment study for entire Green PVC Complex will also be carried out and Emergency Preparedness Plan and Disaster Management Plan will be prepared for further implementation. "
(ii)	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. It will be ensured that all workmen are equipped with necessary PPEs. Further, heat stress analysis for the workmen who work in high temperature work zone will be carried out in operation phase & necessary PPEs will be provided.
(iii)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. On commencement of operations, Occupational health surveillance of the workers will be done on a regular basis in operation phase and records of the same shall be maintained.
IX.	Environment Management	
(i)	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 30/09/2020. As part of Corporate Environment Responsibility (CER) activity, company shall adopt villages based on the socio-economic survey and undertake community developmental activities in consultation with the village Panchayat and the District Administration as committed	Noted and shall being complied with the requirements. Remark: To improve the socio-economic conditions of the study area, various eco-developmental measures including community welfare activities are initiated in phased manner under Corporate Environmental Responsibility are initiated in phased manner will be undertaken by involving local villages and administration. In order to know the present social status and needs of the local community, a "Baseline & Need Assessment Study" is also carried out through third party professional agency involving various stakeholders- local villagers, administration etc. and the recommendation of the study is further

S. No	Conditions	Status
		<p>included in the CER plan for implementation in phased manner.</p> <p>MPL has already initiated CER activities in all villages surrounding project area and total CER expenditure approx.. INR 4.4 Cr. incurred in various community welfare & eco-development activities for the period from November, 2022 to March, 2023. The detailed CER activities with expenditures are summarized as Annexure - V.</p>
(ii)	<p>The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.</p>	<p>Environmental policy of the company is enclosed as "Annexure - VI".</p>
(iii)	<p>A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.</p>	<p>Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Further, A separate Environmental Management Cell having qualified persons with specialization in Environmental Science / Engineering has been developed in which EMC head is directly reporting to Head of Organization i.e. CEO as per company hierarchy. Furthermore, full-fledged environment laboratory will be developed at site to carryout environmental monitoring activities.</p>
X.	Miscellaneous	

S. No	Conditions	Status
(i)	<p>The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently</p>	<p>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 30th September, 2022. (i.e within 7 days of grant of Environmental Clearance).</p> <ol style="list-style-type: none"> 1. Kutch Mitra (Gujarati Language) 2. Gujarat Samachar (Gujarati Language) 3. The Times of India (English Language). <p>Copies of the same are enclosed as Annexure – VII. Further, copy of EC letter and News Papers are also submitted to Regional Office, MoEF&CC, Gandhinagar through vide our letter no. AEL/MPL/ENV/MoEF&CC/2022 – September/11 dated 30/09/2022. Copy enclosed as Annexure – VIII."</p>
(ii)	<p>The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.</p>	<p>The copies of the Environmental Clearance letter vide our following letter nos. have 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.</p> <ol style="list-style-type: none"> 1. AEL/MPL/ENV/MoEF&CC/2022-September/08 Dated 28/09/2022. 2. AEL/MPL/ENV/MoEF&CC/2022-September/09 Dated 28/09/2022. 3. AEL/MPL/ENV/MoEF&CC/2022-September/11 Dated 30/09/2022. <p>"</p>
(iii)	<p>The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.</p>	<p>Six monthly compliance report of stipulated environment clearance conditions including results of monitored data being uploaded on company's website i.e https://www.adanienterprises.com.</p>

S. No	Conditions	Status
(iv)	The project proponent shall monitor the criteria pollutants level namely, PM ₁₀ , SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company	Noted and shall be complied with the requirements after commissioning of the project. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage.
(v)	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Six monthly compliance report on stipulated environmental conditions being uploaded on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
(vi)	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Presently, Coal to PVC project is under development of basic & detail design and engineering stage. However, Environmental Statement for the year 2022-2023 will be prepared and Submitted to Gujarat Pollution Control Board within stipulated time period and same will be also available on Company Website i.e https://www.adanienterprises.com .
(vii)	The project proponent 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, commencing the land development work and start of production operation by the project.	Noted and shall be complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage.
(viii)	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Noted and being complied with the requirements. Remarks: Presently, Coal to PVC project is under development of basic & detail design and engineering stage. However, CER Activities have been initiated and status of the same in enclosed as " Annexure - V ".
(ix)	The PP shall put all the environment related expenditure, expenditure related to	Noted and being complied with the requirements.

S. No	Conditions	Status
	<p>Action Plan on the PH issues, and other commitments made in the EIA/EMP Report etc. in the company web site for the information to public/public domain. The PP shall also put the information on the leftover funds allocated to EMP and PH as committed in the earlier ECs and shall be carried out and spent in next three years, in the company web site for the information to public/public domain.</p>	<p>Remarks - Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Action plan proposed to address the issues raised during public hearing and socio-economic issues in the study area shall be implemented as project progress at site. However, MPL has already initiated CER activities in all villages surrounding to project area and total CER expenditure incurred in various community welfare & eco-development activities during the period from November 2022 to March 2023 approx. 4.4 Cr aligned with CAPEX incurred till date.</p> <p>Further, the capital cost & annual recurring cost towards the environmental protection measures is earmarked and expenditures related to environmental protection measures will be separately tracked and reported as part of EC compliance and same will be made available in company website.</p> <p>The detailed CER activities with expenditures are summarized in Annexure-V.</p>
(x)	<p>No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).</p>	<p>Agreed with requirement.</p>
(xi)	<p>The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.</p>	<p>Agreed with requirement.</p>

Annexures

No.	Name
I	Activities as per approved Wild Life Conservation Plan
II	Awareness Program on "Ban on Single use Plastic
III	AAQM Reports at Project site
IV	AAAQM Reports in nearby villages
V	CER Activities
VI	Environment Policy
VII	Copy of News Papers
VIII	Letter to IRO, MoEF&CC Gandhinagar

Annexure – I Activities for Wildlife Conservation Plan

Awareness program for "Wildlife conservation" for surrounding area has been conducted at near by village. The details covers under wildlife conservation are need of wild life conservation, definition of wildlife, importance of wild life conservation, methods of wildlife conservations, actions taken by Adani foundations for conservation activities at near by villages.



Further, other activities like plantation program for conservation of habitat artificial concrete water pond of 1000 Lit Capacity to provide drinking water facility to wild animals and Mangrove plantation have been initiated in consultation with District Forest Department, Kutch.



Annexure – II Awareness Program on “Ban on Single Use Plastic”

Awareness program for “Ban on Single use plastic” has been conducted at 6 Government Schools and 3 Self Help Groups of nearby villages as per The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. Awareness Program has covers CPCB Notification Dated 12/08/2021, prohibited plastic items, problems of plastic waste, awareness of plastic waste, plastic recycling numbers and its meaning.



એક વખત વપરાશ માં
લેવાતા પ્લાસ્ટિક પર
પ્રતિબંધ

AWARENESS PROGRAMME -
BAN ON SINGLE USE PLASTIC



Annexure III



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 (12.01.2020 to 17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-11)

ISO 9001:2015 Certified Company

ISO 45001:2018 Certified Company

TEST REPORT (AMBIENT AIR MONITORING)

Test Report No.:	URA/23/03/A-MP001	Report Issue Date	04/04/2023
Sample ID No.:	URA/ID/A-23/03/001		
Name & Add. of Customer	M/S. MUNDRA PETROCHEM LIMITED Survey No. 180, South of APL Road, Near Adani Power Plant, APSEZ, Tunda Village, Mundra, Kachchh, Gujarat, 370421		
Dates of Sampling	24/03/2023	Date of Testing	26/03/2023
Sampling Procedure	UERL/AIR/SOP/07		
Location of Sampling / Monitoring	Project Site (Near to Pocket -1)		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/04	Respirable Dust Sampler	1714-DTE-2010 2681-DTC-2005	22/07/2022	21/07/2023
UERL/AIR/FPS/07	Fine Particulate Sampler	271-DTE-2010	22/07/2022	21/07/2023

➤ **General Sampling / Monitoring Observation**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.24
3.	Volume of Air Sampled for PM ₁₀	m ³	1786
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

DISCIPLINE - CHEMICAL			NAME OF GROUP - ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQS)	Test Method
1.	Particulate Matter as PM ₁₀	µg/m ³	66.20	100	IS - 5182, Part - 23
2.	Particulate Matter as PM _{2.5}	µg/m ³	23.54	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide as SO ₂	µg/m ³	11.25	80	IS - 5182, Part - 2
4.	Nitrogen Dioxide as NO ₂	µg/m ³	19.30	80	IS - 5182, Part - 6
5.	Carbon Monoxide as CO	mg/m ³	<0.01	4.0	IS - 5182, Part - 10
6.	Ozone as O ₃	µg/M ³	12.25	180	IS - 5182, Part - 9
7.	Ammonia as NH ₃	µg/m ³	<5.0	400	UERL/AIR/SOP/05
8.	Lead as Pb	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel as Ni	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic as As	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene as C ₆ H ₆	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo (a) Pyrene (BaP)	ng/m ³	<0.1	1.0	IS - 5182, Part - 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:	
Opinion & Interpretation (if required):	

***** End of Report *****

Checked By:

Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:

Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/06

Note: This report is subject to Terms and Conditions mentioned overleaf.

Regd. Office : 215, Royal Arcade, Near G.I.D.C., Office, Char Rasta, Vapi-396 195. Gujarat.

Extended Work Office : G.I.D.C., Dahej-II, Bharuch, Gujarat.

CIN: U73100GJ2007PTC051463

**TEST REPORT
(AMBIENT AIR MONITORING)**

Test Report No.:	URA/23/03/A-MP005	Report Issue Date	04/04/2023
Sample ID No.:	URA/ID/A-23/03/005		
Name & Add. of Customer	M/S. MUNDRA PETROCHEM LIMITED Survey No. 180, South of APL Road, Near Adani Power Plant, APSEZ, Tunda Village, Mundra, Kachchh, Gujarat, 370421		
Dates of Sampling	27/03/2023	Date of Testing	29/03/2023
Sampling Procedure	UERL/AIR/SOP/07		
Location of Sampling / Monitoring	Project Site (Pocket – 1)		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/04	Respirable Dust Sampler	1714-DTE-2010 2681-DTC-2005	22/07/2022	21/07/2023
UERL/AIR/FPS/07	Fine Particulate Sampler	271-DTE-2010	22/07/2022	21/07/2023

➤ **General Sampling / Monitoring Observation**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.22
3.	Volume of Air Sampled for PM ₁₀	m ³	1756
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

DISCIPLINE - CHEMICAL			NAME OF GROUP - ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQS)	Test Method
1.	Particulate Matter as PM ₁₀	µg/M ³	73.22	100	IS – 5182, Part - 23
2.	Particulate Matter as PM _{2.5}	µg/M ³	30.24	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide as SO ₂	µg/M ³	13.52	80	IS – 5182, Part – 2
4.	Nitrogen Dioxide as NO ₂	µg/M ³	21.44	80	IS – 5182, Part - 6
5.	Carbon Monoxide as CO	mg/m ³	<0.01	4.0	IS – 5182, Part – 10
6.	Ozone as O ₃	µg/M ³	11.30	180	IS – 5182, Part – 9
7.	Ammonia as NH ₃	µg/m ³	<5.0	400	UERL/AIR/SOP/05
8.	Lead as Pb	µg/m ³	<0.50	1.0	IS – 5182, Part – 22
9.	Nickel as Ni	ng/m ³	<1.0	20	IS – 5182, Part – 22
10.	Arsenic as As	ng/m ³	<1.0	6.0	IS – 5182, Part – 22
11.	Benzene as C ₆ H ₆	µg/m ³	<1.0	5.0	IS – 5182, Part – 11
12.	Benzo (a) Pyrene (BaP)	ng/m ³	<0.1	1.0	IS – 5182, Part – 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:
Opinion & Interpretation (if required):

***** End of Report *****

Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)

UERL/AIR/F-05/06

Note: This report is subject to Terms and Conditions mentioned overleaf.

**TEST REPORT
(AMBIENT AIR MONITORING)**

Test Report No.:	URA/23/03/A-MP006	Report Issue Date	04/04/2023
Sample ID No.:	URA/ID/A-23/03/006		
Name & Add. of Customer	M/S. MUNDRA PETROCHEM LIMITED Survey No. 180, South of APL Road, Near Adani Power Plant, APSEZ, Tunda Village, Mundra, Kachchh, Gujarat, 370421		
Dates of Sampling	27/03/2023	Date of Testing	29/03/2023
Sampling Procedure	UERL/AIR/SOP/07		
Location of Sampling / Monitoring	Project Site (Pocket – 3)		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/34	Respirable Dust Sampler	1768-DTB-2013	02/08/2022	01/08/2023
		1147-DTB-2013		
UERL/AIR/FPS/21	Fine Particulate Sampler	20-DTC-2012	02/08/2022	01/08/2023

➤ **General Sampling / Monitoring Observation**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.25
3.	Volume of Air Sampled for PM ₁₀	m ³	1800
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

DISCIPLINE - CHEMICAL			NAME OF GROUP - ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQS)	Test Method
1.	Particulate Matter as PM ₁₀	µg/M ³	61.55	100	IS – 5182, Part - 23
2.	Particulate Matter as PM _{2.5}	µg/M ³	25.30	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide as SO ₂	µg/M ³	10.45	80	IS – 5182, Part – 2
4.	Nitrogen Dioxide as NO ₂	µg/M ³	17.86	80	IS – 5182, Part - 6
5.	Carbon Monoxide as CO	mg/m ³	<0.01	4.0	IS – 5182, Part – 10
6.	Ozone as O ₃	µg/M ³	10.50	180	IS – 5182, Part – 9
7.	Ammonia as NH ₃	µg/m ³	<5.0	400	UERL/AIR/SOP/05
8.	Lead as Pb	µg/m ³	<0.50	1.0	IS – 5182, Part – 22
9.	Nickel as Ni	ng/m ³	<1.0	20	IS – 5182, Part – 22
10.	Arsenic as As	ng/m ³	<1.0	6.0	IS – 5182, Part – 22
11.	Benzene as C ₆ H ₆	µg/m ³	<1.0	5.0	IS – 5182, Part – 11
12.	Benzo (a) Pyrene (BaP)	ng/m ³	<0.1	1.0	IS – 5182, Part – 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:
Opinion & Interpretation (if required):

***** End of Report *****

Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/06

Note: This report is subject to Terms and Conditions mentioned overleaf.

Annexure IV



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MoEF&CC (GOI) Recognized Environmental Laboratory under the EPA-1986 (12.01.2020 to 17.03.2023)

QCI-NABET Accredited EIA Consultant Organization

GPCB Recognized Environmental Auditor (Schedule-11)

ISO 9001 : 2015 Certified Company

ISO 45001 : 2018 Certified Company

TEST REPORT (AMBIENT AIR MONITORING)

Test Report No.:	URA/23/03/A-MP003	Report Issue Date	04/04/2023
Sample ID No.:	URA/ID/A-23/03/003		
Name & Add. of Customer	M/S. MUNDRA PETROCHEM LIMITED Survey No. 180, South of APL Road, Near Adani Power Plant, APSEZ, Tunda Village, Mundra, Kachchh, Gujarat, 370421		
Dates of Sampling	25/03/2023	Date of Testing	27/03/2023
Sampling Procedure	UERL/AIR/SOP/07		
Location of Sampling / Monitoring	Village - Vandh		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/34	Respirable Dust Sampler	1768-DTB-2013 1147-DTB-2013	02/08/2022	01/08/2023
UERL/AIR/FPS/21	Fine Particulate Sampler	20-DTC-2012	02/08/2022	01/08/2023

➤ **General Sampling / Monitoring Observation**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.25
3.	Volume of Air Sampled for PM ₁₀	m ³	1800
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

DISCIPLINE - CHEMICAL			NAME OF GROUP - ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQS)	Test Method
1.	Particulate Matter as PM ₁₀	µg/M ³	72.25	100	IS - 5182, Part - 23
2.	Particulate Matter as PM _{2.5}	µg/M ³	27.54	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide as SO ₂	µg/M ³	13.25	80	IS - 5182, Part - 2
4.	Nitrogen Dioxide as NO ₂	µg/M ³	21.48	80	IS - 5182, Part - 6
5.	Carbon Monoxide as CO	mg/m ³	<0.01	4.0	IS - 5182, Part - 10
6.	Ozone as O ₃	µg/M ³	8.20	180	IS - 5182, Part - 9
7.	Ammonia as NH ₃	µg/m ³	<5.0	400	UERL/AIR/SOP/05
8.	Lead as Pb	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel as Ni	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic as As	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene as C ₆ H ₆	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo (a) Pyrene (BaP)	ng/m ³	<0.1	1.0	IS - 5182, Part - 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:
Opinion & Interpretation (if required):

***** End of Report *****

Checked By:

Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:

Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/06

Note: This report is subject to Terms and Conditions mentioned overleaf.

Regd. Office : 215, Royal Arcade, Near G.I.D.C., Office, Char Rasta, Vapi-396 195. Gujarat.

Extended Work Office : G.I.D.C., Dahej-II, Bharuch, Gujarat.

CIN: U73100GJ2007PTC051463

**TEST REPORT
(AMBIENT AIR MONITORING)**

Test Report No.:	URA/23/03/A-MP004	Report Issue Date	04/04/2023
Sample ID No.:	URA/ID/A-23/03/004		
Name & Add. of Customer	M/S. MUNDRA PETROCHEM LIMITED Survey No. 180, South of APL Road, Near Adani Power Plant, APSEZ, Tunda Village, Mundra, Kachchh, Gujarat, 370421		
Dates of Sampling	25/03/2023	Date of Testing	27/03/2023
Sampling Procedure	UERL/AIR/SOP/07		
Location of Sampling / Monitoring	Village - Zarpara		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/04	Respirable Dust Sampler	1714-DTE-2010 2681-DTC-2005	22/07/2022	21/07/2023
UERL/AIR/FPS/07	Fine Particulate Sampler	271-DTE-2010	22/07/2022	21/07/2023

➤ **General Sampling / Monitoring Observation**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.19
3.	Volume of Air Sampled for PM ₁₀	m ³	1714
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

DISCIPLINE - CHEMICAL			NAME OF GROUP - ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQS)	Test Method
1.	Particulate Matter as PM ₁₀	µg/M ³	60.25	100	IS - 5182, Part - 23
2.	Particulate Matter as PM _{2.5}	µg/M ³	22.10	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide as SO ₂	µg/M ³	6.54	80	IS - 5182, Part - 2
4.	Nitrogen Dioxide as NO ₂	µg/M ³	15.21	80	IS - 5182, Part - 6
5.	Carbon Monoxide as CO	mg/m ³	<0.01	4.0	IS - 5182, Part - 10
6.	Ozone as O ₃	µg/M ³	7.25	180	IS - 5182, Part - 9
7.	Ammonia as NH ₃	µg/m ³	<5.0	400	UERL/AIR/SOP/05
8.	Lead as Pb	µg/m ³	<0.50	1.0	IS - 5182, Part - 22
9.	Nickel as Ni	ng/m ³	<1.0	20	IS - 5182, Part - 22
10.	Arsenic as As	ng/m ³	<1.0	6.0	IS - 5182, Part - 22
11.	Benzene as C ₆ H ₆	µg/m ³	<1.0	5.0	IS - 5182, Part - 11
12.	Benzo (a) Pyrene (BaP)	ng/m ³	<0.1	1.0	IS - 5182, Part - 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:
Opinion & Interpretation (if required):

***** End of Report *****

Checked By:



Nikunj D. Patel
(Chemist)

Page No.: 1 of 1

Authorized By:



Jaivik S. Tandel
(Manager - Operations)
UERL/AIR/F-05/06

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**TEST REPORT
(AMBIENT AIR MONITORING)**

Test Report No.:	URA/23/03/A-MP002	Report Issue Date	04/04/2023
Sample ID No.:	URA/ID/A-23/03/002		
Name & Add. of Customer	M/S. MUNDRA PETROCHEM LIMITED Survey No. 180, South of APL Road, Near Adani Power Plant, APSEZ, Tunda Village, Mundra, Kachchh, Gujarat, 370421		
Dates of Sampling	24/03/2023	Date of Testing	26/03/2023
Sampling Procedure	UERL/AIR/SOP/07		
Location of Sampling / Monitoring	Village - Navinal		

➤ **Details of Master Instrument Used for Monitoring**

Instrument Id No.	Instrument Name	Serial Number	Cali. Date	Next Cali. Date
UERL/AIR/RDS/34	Respirable Dust Sampler	1768-DTB-2013 1147-DTB-2013	02/08/2022	01/08/2023
UERL/AIR/FPS/21	Fine Particulate Sampler	20-DTC-2012	02/08/2022	01/08/2023

➤ **General Sampling / Monitoring Observation**

Sr. No.	Description	Unit of measurement	Observation
1.	Monitoring Duration	h	24
2.	Flow Rate of PM ₁₀	m ³ /min	1.25
3.	Volume of Air Sampled for PM ₁₀	m ³	1800
4.	Volume of Air Sampled for PM _{2.5}	m ³	24.04
5.	Flow Rate for Gas	L/min	0.2
6.	Volume of Air Sample for Gas	L	288

➤ **Environmental Conditions during testing:** Temp.: 25 ± 5 °C, Relative Humidity: 40 to 50%

➤ **Test Parameter Results**

DISCIPLINE - CHEMICAL			NAME OF GROUP - ATMOSPHERIC POLLUTION		
Sr. No.	Test Parameter	Unit	Result	Permissible Limit (As per NAAQS)	Test Method
1.	Particulate Matter as PM ₁₀	µg/m ³	56.18	100	IS – 5182, Part - 23
2.	Particulate Matter as PM _{2.5}	µg/m ³	23.20	60	UERL/AIR/SOP/11
3.	Sulphur Dioxide as SO ₂	µg/m ³	8.54	80	IS – 5182, Part – 2
4.	Nitrogen Dioxide as NO ₂	µg/m ³	16.20	80	IS – 5182, Part - 6
5.	Carbon Monoxide as CO	mg/m ³	<0.01	4.0	IS – 5182, Part – 10
6.	Ozone as O ₃	µg/M ³	8.50	180	IS – 5182, Part – 9
7.	Ammonia as NH ₃	µg/m ³	<5.0	400	UERL/AIR/SOP/05
8.	Lead as Pb	µg/m ³	<0.50	1.0	IS – 5182, Part – 22
9.	Nickel as Ni	ng/m ³	<1.0	20	IS – 5182, Part – 22
10.	Arsenic as As	ng/m ³	<1.0	6.0	IS – 5182, Part – 22
11.	Benzene as C ₆ H ₆	µg/m ³	<1.0	5.0	IS – 5182, Part – 11
12.	Benzo (a) Pyrene (BaP)	ng/m ³	<0.1	1.0	IS – 5182, Part – 12

Note: NAAQMS: National Ambient Air Quality Monitoring Standard.

BDL: Below Detection Limit: 1) Hg: 0.001 µg/M³, 2) Ozone: 5.0 µg/M³

Remarks:
Opinion & Interpretation (if required):

***** End of Report *****

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Page No.: 1 of 1

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UERL/AIR/F-05/06

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Annexure – V

Activities of Corporate Environmental Responsibility

In line with the proposed Corporate Environment Responsibility (CER) plan as per EIA study and Environment Clearance (EC), Mundra Petrochem Limited has planned phase wise implementation of the various community & eco-development activities in all 15 villages surroundings to the project activity as part of extended Environment Management Plan (EMP).

Presently, Coal to PVC project is under development of basic & detail design and engineering stage. Action plan proposed to address the issues raised during public hearing and socioeconomic issues in the study area shall be implemented as project progress at site.

Accordingly, MPL has already initiated CER activities in all villages surrounding project area and total CER expenditure incurred in various community welfare & eco-development activities during the period from November 2022 to March 2023 was approx. **INR 4.4 Cr** aligned with CAPEX incurred till date as project is still in detail engineering & design stage.

Also, in order to know the present socio-economic status and needs of the local community, a "Baseline & Need Assessment Study" is also carried out through third party professional agency i.e. M/s Saline Area Vitalisation Enterprise Pvt. Ltd., involving various stakeholders- local villagers, administration etc. and the recommendation of the study is further included in the CER plan for implementation in phased manner.

Further, following activities have been completed for the period from November 2022 to March, 2023.

Sr. No.	Details / Descriptions	Budget Utilized (INR)
A	Education Initiatives	21,52,440
B	Monitoring and Reporting.	18,02,599
C	Sustainable Livelihood and women Empowerment	5,187,580
D	Community Rural Infrastructure Development	3,51,80,541
E	Biodiversity	1,21,465
	Total (INR)	44,444,625

A. Education Initiatives:

Adani Foundation set out an innovative intervention through project “**Utthan**” to improve students' learning capabilities, provide facilities to schools to improve environment and achieve better learning outcomes at the grassroots level with the help of “**Utthan sahayak**”. Mundra Petrochem limited have supported schools for their infrastructure development.



Fisherfolk Livelihood & Skill Development

Mundra Petrochem limited has organized Placement cum Training awareness camp at Moti Bhujpur village in coordination with Adani Foundation for identification of Technical manpower suitable for MPL Project. More than 52 Youth were participated among them, 18 were selected for technical training.

As part of skill development, training on stitching were also arranged for Fisherfolk communities of Zarpara and Navinal village through Adani Skill Development Center. More than 15 women are benefitted with 7 stitching machines which helps them for self-employment through bag stitching and sales.



Photo: Fisherfolk Livelihood & Skill Development activities

Natural Farming

Mundra Petrochem Limited & Adani foundation in collaboration with Govt Agri. Dept organized district level workshop at Mundra as a part of the “Bharat Ka Amrut Mahotsav”. The workshop was aimed to bringing all together to promote, implement and ensure convergence of natural farming to village level by involving “Gram Sevak” of kutch region. MPL has also organized training program on “Jivamrut preparation”. More than 150 Gram Sevak across Kutch had participated and made aware about systematic and scientific way for effective Natural farming practices and ensure to incorporate it to Farm.

Regular awareness sessions related to “Natural Farming” are being organized for the farming communities aiming for an increase in agricultural productivity and to improve the quality of soil by adopting natural farming practices, reducing the Soil/ air pollution and improve the health condition of the users and their families with the help of Jivamrut, Vormi compost bed, Nimastra Agnistra Dasparni ark, Gaukrupa Amrutam bacteria and Biogas etc. It ensures

a healthy life due to cow based natural products is used instead of chemical fertilizers and pesticides.

Total 505 villagers from five villages of Mundra taluka were participated for the training.



Photo: Training programs for farming communities on Natural Farming

Wetland Day Celebration:

Mundra Petrochem Limited (MPL) has organized celebration of "World Wetland Day" on 2nd February 2023. Various awareness program on wetland restoration and coastal biodiversity was organized involving students. On this occasion, representative from Gujarat Pollution Control Board and Gujarat Institute of Desert Ecology (GUIDE) were present and addressed.



Photo: Wetland Day Celebration

Plastic Free Village Awareness

Awareness program for "Ban on Single use plastic" has been conducted at 6 Government Schools and 3 Self Help Groups of nearby villages as per The Plastic Waste Management Rules 2016, inter-alia, mandated banning of identified Single Use Plastic (SUP) items with effect from 01/07/2022. Awareness Program has covers CPCB Notification Dated 12/08/2021, prohibited plastic items, problems of plastic waste, awareness of plastic waste, plastic recycling numbers and its meaning.



Photo: Awareness Program on “Ban on Single Use Plastic”

B. Monitoring and Reporting:

In order to better understand the felt needs of the local people in a continuously changing socio-economic environment and enhance the impact of its efforts, Mundra Petrochem Limited engaged M/s SAVE Pvt. Ltd. and involving various stakeholders- local villagers, administration etc. to develop a baseline survey of 18 villages of Mundra (11 villages) & Mandvi taluka (07 villages) of Kutch District. The recommendation of the study is further included in the CER plan for implementation in phased manner.

SAVE Pvt. Ltd. SAVE – Saline Area Vitalization Enterprise Pvt. Limited, established in 1995, is a technical service organization (TSO). The organization is designed to provide technical services in natural resource management, livelihood & enterprise development and market linkage services to various stakeholders (Community based organizations, NGOs, Government, Industries and donor agencies) engaged in development process in coastal regions of Gujarat.





Photo: Stakeholder consultation process by SAVE Pvt. Ltd. as part of "Baseline and need assessment study".

C. Sustainable Livelihood and Women empowerment:

Women empowerment

Through Adani Foundation, Mundra Petrochem Limited has initiated various initiatives for empowerment of women through Self Help Group (SHG) for self-employment and also engaged women farmers in various trainings programs i.e. operations of farming equipment's, Government Schemes/various Subsidies on

agriculture/horticulture/cattle's etc., awareness on home biogas, cattle feed or NB21 promotion etc.

On theme of "Annadata sukhi bhava" means 'those who are providing me with this food, let them be happy'. Honored 150 women farmers who proved her selves as a farmer entrepreneur from Mundra and Mandvi Taluka. Also, awarded 12 women farmers for their outstanding contribution as a farmer in society. Mineral mixture kit was given to each woman farmer. Information's provided on various schemes/initiatives by Government and other organizations. Technical solutions provided on various problem faced by farming communities.



Photo: Event organized on "Women Farmer's Day Celebration" on 23rd December 2022

Fodder support:

As part of "Corporate Environment Responsibility (CER)", Mundra Petrochem Limited supported local communities by providing green fodder for feeding the milch animals in surrounding villages of the project activity. Green fodder plays major role in feed of milch & other animals, thereby providing required nutrients for milk production and health of animals specially the milch animals – Cow. MPL has supported of approx.. 1200 tonnes of green fodder which helps in feeding more than 2500 cattle's in the villages.



Photo: MPL support for fodder supply in surrounding villages

Home Biogas: Mundra Petrochem Limited (MPL) in association with the Adani Foundation engaged various farming communities in villages surrounding to Coal to PVC project activity to spread awareness about the use of biogas generated from the cattle dung from Bio-gas plant which provide farmer's a sustainable solution for energy security for cooking and compost generated form the biogas plan will be used as organic fertilizer for natural farming.

MPL has already Identified 225 Farmers on need basis for Home biogas support.





Photo: Awareness & demonstration of Home Bio-gas system to farming communities.

Rooftop Rain Water Harvesting System (RRWHS):

As part of "Corporate Environment Responsibility (CER)", Mundra Petrochem Limited through Adani Foundation has planned to construct Rooftop Rainwater harvesting system to collect, convey and store rain for later use from relatively clean surfaces such as a roof. Rainwater Harvesting is a simple method of collecting rainwater and deploying the same for further usage, a step towards water conservation aiming towards fulfillment of Corporate Environment Responsibility.

For implementation of RRWHS, MPL has conducted number of awareness meetings with the household owners (Vadi Vistar area) in the villages through Adani Foundation to make them aware on water conservation and safe drinking water. Three villages namely Navinal, Bhujpur and Nani Khakhar agreed to cover



100 Vadi Vistar area under Rooftop Rainwater harvesting system. The initiative will also help in reducing the women's drudgery & save time for productive work.



Photo: Awareness meetings Vadi Vistar area on Rooftop Rainwater harvesting

D. Community Rural Infrastructure Development:

Mundra Petrochem Limited has supported local communities by developing various infrastructure facilities in the villages surrounding to the project activity-

CER Work

Kabadi mat Support - Zarpara

School Repairing Work Tunda

Benches support Pond Beatification

Storeroom , Kandagra

E. Bio-Diversity:



Coastal Biodiversity :

Mundra Petrochem Limited is in a process of multi species Mangrove Biodiversity Park with collaboration of Gujarat Institute of Desert Ecology (Bhuj, Kachchh Total 20 hector area have been developed with multi species Mangrove plantation at Luni coast, Mundra Avicenna Marina, Rhizophora Mucronata Ceriops Tagal, Ceripos decandra are the spices of Biodiversity Park Due to this massive costal plantation, different birds, crabs, fishes and other insects will be attracted towards coast.

Terrestrial Biodiversity:

In 16 villages with coordination of Village Development Committee, in 2 acre land biodiversity park will be developed which will be divided in 4 compartments i e fruit bearing trees, medicinal trees, oxygen trees and native spices which will be connected by paver pathways Terrestrial habitats are ones that are found on land, like forests, grasslands, deserts, shorelines, and wetlands Terrestrial habitats also include man made habitats, like farms, towns, and cities, and habitats that are under the earth, like caves and mines Discussion with village development committee regrading provision of land This initiative will attract various flora and fauna.



Mundra Petrochem Limited has planted 76000 nos. of Mangrove saplings as part of Afforestation program (~1.1 Ha) at creek area near MPL Project through participation of local fisherman community. Mangrove Afforestation has carbon sequestration potential of 600 to 700 tCO₂ eq per hectare over 40 years period.

Other community and eco-developmental activities in villages by Adani Group

In addition to above, Adani Foundation has carried out various socio-economic & eco developmental activities at villages of Taluka: Mundra and Mandavi. Adani Foundation helping community by facilitating quality education, enabling the youth with income-generating skills, promoting a healthy society and supporting infrastructure development. With an aim to contribute to the holistic development of communities, the Adani Foundation is contributing to the global agenda of meeting Sustainable Development Goals (SDGs).

Few activities are listed as:

1. 400577 numbers of participants beneficated under Project Udaan with vision "To Create a Pool of inspired young mind" and mission for "To motivate young students to dream big".
2. Pashudhan & Preventive Health care management.
3. Grass Land Development and Individual Fodder Cultivation.
4. Total 17299 cattle of 19 Villages had benefitted With different kind of medicines and vaccines.
5. Lumpy Disease Vaccination Drive.
6. Prakrutik Sahkari Mandli.
7. Biogas support program
8. Water Conservation Project
9. Adani Skill Development Centre (ASDC), Mundra has signed MoU with Kachchh District Education Office. ASDC has provided training of Digital

Literacy and Basic Functional English in Kachchh District Schools. As per MOU Kachchh District Education Office has provided 4000 candidates to us for training (Adani Skill Development Centre).

10. Adani Skill Development Centre (ASDC), Mundra has organized various skill development trainings on various useful courses i.e. Pedicurist and Manicurist, Beauty Therapist, Electrician, mason, digital literacy, data entry operator etc. and benefitted more than 4,500 participants.
11. Various Community Infrastructure Development (CID) program for improving infrastructure facilities of rural and urban area were also implemented for upliftment of health care, education, agriculture, water and sanitation and other basic facilities for sustainable rural development:
 - a. 40 numbers of Roof Rain water Harvesting System constructed at nearby villages.
 - b. 2 numbers of Pond deepening work at nearby villages along with Pond Beatification bund strengthening work completed at Bhujpur.
 - c. 2 percolations Bore recharge work.
 - d. School repairing and renovation work at Tunda Village.
 - e. Construction of house for needy fisherman
 - f. Renovation of Approach Road
 - g. and Many more
12. Community Health Programs: Adani Foundation is relentlessly working to Provide access of quality health facilities at Doorstep level to create health Society for healthy nation development through various kind of health Projects Adani Foundation is relentlessly working to Provide access of quality health facilities at Doorstep level to create health Society for healthy nation development through various kind of health projects-



Cattle Health Camp& Lumpy Disease Vaccination Drive



Biogas Support to 100 Farmers by Linkages through DRDA



Promotion of Natural Farming



Medical Support and Health Check – up at Nearby villages

Water conservation and Management

Process Flow for Rooftop Rain Water Harvesting System



- Portable water at door step
- Cost saving for portable water
- Improved water quality with
- Creates water conservation awareness in rural community
- Improves standard of living of rural community

Total RRWS :- 145
 RRWS Constructed in 2022-23 :- 40
 Population Impacted :- 500+
 Savings per household :- 10000+

TDS difference between Ground water and RRWS water



Providing Rooftop Rain Water Harvesting System at nearby villages.



Pond renovation for water harvesting and ground water recharge



Photo: Training programs by Adani Skill Development Centre



Photo: Community Health Care activities



ENVIRONMENT, HEALTH & SAFETY POLICY

We at Adani, strive to make our businesses sustainable, that benefits our customers, our employees, our shareholders and society in general. We believe that in addition to integrated infrastructure business, there is a bottom line in performing our operations according to prescribed standards, specifications and regulations on governance, which are safe in working and environmental friendly for the well-being of the working community.

As a responsible corporate, we at ADANI have a firm conviction that the industrial injuries, occupational hazards as well as safety and environmental incidents are preventable. We recognize and trust people as our most important asset and have commitment to provide safe and healthy work environment impacting not only those, who are working in our industry but also community, which is living in the vicinity.

To achieve this objective, we shall

- a. Develop, implement, maintain and sustain EHS Management System across the Group to set up new benchmarks for the respective sector of operations, which superimpose the regulatory and statutory requirements.
- b. Verify, audit and periodically review EHS performance and set new targets to revise these benchmarks.
- c. Formulate EHS objectives and targets for continual improvement and to have a periodic review for ensuring that these are in conjunction with the individual business and corporate levels.
- d. Conduct all our operational activities in such a manner as to avoid harm to employees, contractors, stakeholders and community at large.
- e. Inculcate safety & health as a personal value through behavioral intervention and recognize it across levels with continuous correction of unsafe behavior.
- f. Provide adequate training and resources so as to bring awareness and ability to carry out work safely.
- g. Emphasize responsibility and accountability to all employees and contractor workforce for safe performance on the job and encourage safe behavior off the job.
- h. Evolve ways to reduce or eliminate the use or release of toxic and hazardous material and prevent pollution by conserving natural resources, recovering and recycling the raw materials for safe, healthy and clean environment.

A handwritten signature in black ink, appearing to read "Gautam S Adani", is written over a horizontal line. Below the line, the name "GAUTAM S ADANI" is printed in a bold, uppercase, sans-serif font.

GAUTAM S ADANI

Date: 01.01.2016



અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

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

જાહેર નોટિસ

મેં. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ, APSEZ ઔદ્યોગિક જમીન, વાંટ ઇ ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત ખાતે પ્રસ્તાવિત "એક્ટીવીટી જેવીકે સેમી કોક -૨૦૩૦ કે.ટી.પી.એ.; કેલ્સિયમ કાબહિડ - ૨૯૦૦ કે.ટી.પી.એ; સિમેન્ટ - ૬ એમ.ટી.પી.એ; ક્લિનકર - ૪ એમ.ટી.પી.એ. (જે સૂચિત કોલ ટુ પોલી-વિનાયલ (પી.વી.સી.) પ્રોજેક્ટ ના ભાગ રૂપે મેં. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ દ્વારા પ્રસ્તાવિત, APSEZ ઔદ્યોગિક જમીન, વાંટ ઇ ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત, જેમાં ઇન્ડસ્ટ્રી-૧ પ્રોજેક્ટ-સેમી કોક-૨૦૩૦ કે.ટી.પી.એ.; સિમેન્ટ-૬ એમ.ટી.પી.એ; ક્લિનકર-૪ એમ.ટી.પી.એ; 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 કેલ્સિયમ કાબહિડ-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. - EC22A009GJ154137, File No. - IA-J-11011/423/2021-IA-II(IND-I) dated 26/09/2022 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 એન્વિરોમેન્ટ ક્લીયરન્સ ની કોપી કંપનનીની વેબસાઈટ <https://www.adanienterprises.com/-/media/4BAE7363F8C84388B659F4AC21587F8A.ashx> પણ જોઈ શકાશે.

sd-

પ્રોદ્યુત માજી (પ્રોજેક્ટ હેડ)

મેં. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

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

જાહેર નોટિસ

મેં. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ, APSEZ ઔદ્યોગિક જમીન, વાંટ ઇ ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત ખાતે પ્રસ્તાવિત "એકટીવીટી જેવીકે સેમી કોક -૨૦૩૦ કે.ટી.પી.એ.; કેલ્ચિયમ કાર્બાઇડ - ૨૯૦૦ કે.ટી.પી.એ.; સિમેન્ટ - ૬ એમ.ટી.પી.એ.; ક્લિનકર - ૪ એમ.ટી.પી.એ. (જે સૂચિત કોલ ટુ પોલી-વિનાયલ (પી.વી.સી.) પ્રોજેક્ટ ના ભાગ રૂપે મેં. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ દ્વારા પ્રસ્તાવિત, APSEZ ઔદ્યોગિક જમીન, વાંટ ઇ ટૂંડા ગામ નજીક, તા: મુન્દ્રા, જી: કચ્છ, ગુજરાત, જેમાં ઇન્ડસ્ટ્રી-૧ પ્રોજેક્ટ-સેમી કોક-૨૦૩૦ કે.ટી.પી.એ.; સિમેન્ટ-૬ એમ.ટી.પી.એ.; ક્લિનકર-૪ એમ.ટી.પી.એ.; ઇન્ડસ્ટ્રી-૨ પ્રોજેક્ટ-વી.સી.એમ-૨૦૦૨ કે.ટી.પી.એ., પી.વી.સી.-૨૦૦૦ કે.ટી.પી.એ., ઈથીલીન 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 કેલ્ચિયમ 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. - EC22A009GJ154137, File No. - IA-J-11011/423/2021-IA-II(IND-I) dated 26/09/2022 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 જોઈ શકાશે. તદ્ ઉપરાંત એન્વિરોમેન્ટ ક્લીયરન્સ ની કોપી કંપનીની વેબસાઇટ <https://www.adanienterprises.com/-/media/4BAE7363F8C843B8B659F4AC21587F8A.ashx> પણ જોઈ શકાશે.

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પ્રોદ્યુત માજી (પ્રોજેક્ટ હેડ)

મેં. અદાણી એન્ટરપ્રાઇઝીસ લિમિટેડ

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 **"Semi Coke-2030 KTPA, Calcium Carbide-2900 KTPA, Cement-6 MTPA; Clinker-4 MTPA** (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. - EC22A009GJ154137, File No. - IA-J-11011/423/2021-IA-II(IND-I) dated 26/09/2022.** 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/4BAE7363F8CB4388B659F4AC21587F8A.ashx>

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Prodyut Maji (Project Head)
M/s Adani Enterprises Limited

**News Paper: The Times of India, Page no:13, Date:30/09/2022,
Language: English**

Annexure - VIII



Ref: AEL/MPL/ENV/MoEF&CC/2022 – September/11

Date: 30/09/2022

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

Subject: Environmental Clearance (EC) for proposed project activities "**Semi Coke-2030 KTPA, Calcium Carbide-2900 KTPA, Cement-6 MTPA; Clinker-4 MTPA near village Vandh & Tunda, Taluka Mundra, District Kachchh, Gujarat** by M/s Adani Enterprises Ltd.

Reference: EC Identification no EC22A009GJ154137, File no. IA-J-11011/423/2021-IA-II(IND-I) Dated 26/09/2022

Respected Sir,

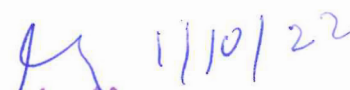
With reference to above subject, this is to inform that Ministry of Environment Forest and Climate Change has granted Environment Clearance for our project "Semi Coke-2030 KTPA, Calcium Carbide-2900 KTPA, Cement-6 MTPA; Clinker-4 MTPA (as a part of Proposed Coal to Poly-Vinyl Chloride (PVC) Project of AEL in land notified as Industrial area of APSEZ, Ta-Mundra, Dist-Kutch, 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 Any EIA Notification) by M/s Adani Enterprises Ltd" vide EC Identification no EC22A009GJ154137, File no. IA-J-11011/423/2021-IA-II(IND-I) Dated 26/09/2022.

Accordingly, in compliance of Miscellaneous condition no. (i) & (ii) of Environmental clearance, we are submitting herewith copy of environmental clearance as **Annexure - A** along with copies of newspaper publications (**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://www.adanienterprises.com/-/media/4BAE7363F8C843B8B659F4AC21587F8A.ashx>" for your reference and record 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


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 अरण्या भवन
Room No.407 & 409, A wing Aranya Bhavan
गान्धिनगर (गुजरात) / Gandhinagar(Gujarat)



The details of the newspaper publication are given below:

Sr. no.	Name of News Paper	Language	Date of Publication
1	Kutch Mitra	Gujarati	30/09/2022
2	Gujarat Samachar	Gujarati	30/09/2022
3	The Times of India	English	30/09/2022

Thanking You,
Yours Faithfully,

Authorized Signatory for Adani Enterprises Ltd,

Prodyut Maji (Project - Head)

Encl: As Above

Copy to:

1). **The Member Secretary,**
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,
Deendayal Port Trust, Sector – 08,
Gandhidham – Kuchchh, 370 201

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