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Power

Ref: APL/Kawai/EMD/EC/MoEFCC/224/11/24
Date: 24/11/2024

To,

Additional Principal Chief Conservator of Forest
Ministry of Environment, Forest and Climate Change
Integrated Regional Office, Jaipur
Aranya Bhawan, Mahatma Gandhi Road, Jhalana Institutional Area.
Jaipur – 302004, Rajasthan

Sub: Six Monthly Compliance Status of Environment Clearances for Kawai Thermal Power Plant along with Environmental Monitoring reports- reg.

Ref: Environmental Clearance letter no. **J-13012/154/2008-IA.II (T)** Dated- **04.05.2011** & Amendment on 13/03/2014.

Dear Sir,

With reference to the above subject, please find enclosed herewith Six-Monthly Environment Clearances (EC) compliance status report along with Environmental monitoring reports as Ambient Air Quality, Water Quality, Noise level & Soil quality, CAAQM data, Met. data, Greenbelt development details, Fly ash & CSR Progress Report etc. for the period of **April'2024 to September'2024** in soft (**e-mail**).

This is for your kind information & record please.

Thanking You,
Yours faithfully,
for **Adani Power Limited, Kawai**

(R N Shukla)
Authorized Signatory

Encl: as above

CC:

Member Secretary
Central Pollution control Board
Parivesh Bhavan, East Arjun Nagar
Kendriya Paryavaran Bhawan
New Delhi- 110 032.

Member Secretary,
Rajasthan State Pollution Control Board
4, Institutional Area, Jhalana Doongri
Jaipur - 302 004

The Regional Officer,
Rajasthan State Pollution Control Board
Jhalawad, Rajasthan

Adani Power Ltd
Adani Corporate House
Shantigram, S G Highway
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CIN: L40100GJ1996PLC030533

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SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE (EC)

1320 (2x660) MW
KAWAI THERMAL POWER PLANT

At

VILLAGE- KAWAI, TEHSIL–ATRU DISTRICT- BARAN, RAJASTHAN

Submitted to:

Integrated Regional Office, Jaipur
Ministry of Environment, Forest & Climate Change
Central Pollution Control Board, New Delhi
Rajasthan State Pollution Control Board, Jaipur

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Submitted By:

Environment Management Department

Adani Power Limited

Village Kawai, Tehsil Atru,
District- Baran, Rajasthan

Period: April'2024 to September'2024

CONTENTS

Introduction

Adani Power Limited, Kawai has established 1320 (2x660) MW Coal based Supercritical Thermal Power Plant at Village-Kawai, Tehsil Atru, District Baran in Rajasthan. The power plant is based on supercritical, energy efficient & environment friendly technology.

APL has obtained Environmental Clearance from Ministry of Environment, Forest & Climate Change (MoEFCC) dated 04.05.2011 subsequent amendment in EC dated 13.03.2014 and transferred EC from Adani Power Rajasthan Limited to Adani Power Limited was granted on dated 24.04.2023 and has also obtained Consent to Establish (CRE) as well as Consent to Operate (CTO) from Rajasthan State Pollution Control Board. The plant is fully operational since December '2013. As the part of the compliance of statutory requirement environmental quality monitoring is being done inside the premises and in nearby villages.

Ambient Air Quality Monitoring Stations has been established in consultation with Rajasthan State Pollution Control Board, three locations within the plant premises & three locations outside plant in different village based on meteorology of the site and consultation with Rajasthan State Pollution Control Board, Presently Environmental monitoring & analysis is being carried out by M/s IRCLASS System and Solutions Pvt. Ltd., Jaipur, (Rajasthan).

Point wise compliance status of Environmental Clearance for 1320 (2x660) MW Coal based Supercritical Kawai Thermal Power Plant is furnished herewith.

APL, Kawai has also proposed the expansion by addition of 4x800 MW USCTPP under **Phase- II, Terms of Reference (ToR) has been granted by MoEFCC vide file no. File No: J-13012/154/2008-IA.II (T) dated: 29.07.2024.**

COMPLIANCE STATUS ON ENVIRONMENTAL CLEARANCE
1320 (2×660) MW Coal Based Kawai Thermal Power Plant
Vide letter No. J-13012/154/2008-IA.II (T) dated 04.05.2011
Subsequent amendment dated 13.03.2014.
Transfer of EC from Adani Power Rajasthan Limited to Adani Power Limited dated 24.04.2023.

A	Specific Condition	Compliance Status
(i)	Vision document specifying prospective plan for the site shall be formulated and submitted to the Ministry within six months.	Complied. Vision document had already been submitted along with first EC Compliance report.
(ii)	In case source of fuel supply is to be changed at a later stage (now proposed on imported coal from South Africa) the project proponent shall intimate the Ministry well in advance along with necessary requisite documents for its concurrence for allowing the change. In such a case the necessity for re-conducting public hearing may be decided by the ministry in consultation with the Expert Appraisal Committee.	Complied MoEFCC has amended the Environmental Clearance vide letter No. J-13012/154/ 2008/IA. II (T) dated 13.03.2014 for Indigenous/Domestic Coal from Subsidiary companies of Coal India Limited in place of Imported Coal with some additional conditions. The compliance of the additional conditions is included in this compliance report. MoEFCC has granted Transfer of EC from Adani Power Rajasthan Limited to Adani Power Limited vide letter No. J-13012/154/2008 IA.II(T) dated 24.04.2023.
(iii)	Wildlife conservation plan shall be prepared in consultation with the office of the Chief Wildlife Warden concerned for implementation. Status of implementation shall be submitted to the regional office of the ministry periodically.	A detail study of Wildlife conservation plan has already done (Document no. EES/AG/001/259-Biological study) by consultant in consultation with forest department & conservation plan already submitted to the Chief Wildlife Warden, Jaipur for approval. The Report also submitted to the DFO Baran. A copy of the conservation plan was submitted to your office along with Six monthly compliance report
(iv)	Possibility for harnessing solar power within the premises of the plant particularly at available roof tops shall be examined and status of implementation shall be submitted.	Complied 80 no. Solar light are installed near hostel/residential area in first phase of solar harnessing program. Solar panels are installed for streetlights of residential complex. 10KW capacity Solar Panel is installed at rooftop of Administrative Building to harness solar energy for its consumption.
(v)	An equal area of grazing land proposed to be acquired for the project shall be identified and developed in consultation with the village	Complied Development of waste land to grazing land in village Kunjed of Atru Tehsil is completed as per "Mukhyamantri Jal Swavlamban Abhiyan"

	Panchayat and the district administration before final acquisition of the said land.	(MJSA) as suggested by District Collector, Baran.
(vi)	Coal transportation to plant site shall be by rail. The project proponent shall take up the matter with the Railways and shall submit action taken and implementation status to the ministry from time to time.	Being complied. Coal is being transported to power plant through Rail only.
(vii)	Existing de-generated water bodies (if any) in the study area shall be regenerated at the project proponent's expenses in consultation with the state govt.	Complied Development of existing degenerated water body in village Antana of Atru tehsil is completed as proposal approved by District Collector, Baran under "Mukhyamantri Jal Swavlamban Abhiyan" (MJSA) vide letter no. 2016/280-85 dated 09.02.2016. Existing seasonal water bodies within the study area is identified for regeneration under company's CSR programme by Adani Foundation and has been implemented in phased manner.
(viii)	Hydrogeology of the area shall be reviewed annually from an institute / organization of repute to assess impact of surface water and ground regime (especially around ash dyke). In case and deterioration is observed specific mitigation measures shall be undertaken and reports / data of water quality monitored regularly and maintained shall be submitted to the Regional Office of the Ministry.	Complied. Hydrogeology of the area is being reviewed regularly. Last hydrogeology reviewed done in Year 2024 by third party to assess the surface & ground regime. (Especially around ash dyke). Regular water quality monitoring is also being carried out by MoEF&CC/NABL accredited Laboratory. The water quality monitoring results is being submitted regularly along with Six Monthly Compliance reports.
(ix)	Source of water for meeting the requirement during lean season shall be specified and submitted to the Regional Office of the Ministry within three months	Water allocation from Parvan River for 34 MCM. This quantity is adequate to meet the plant's requirement, including lean season.
(x)	No ground water shall be extracted for use in operation of the power plant even in lean season.	Compiled. There is no ground water extraction for use in operation of the power plant even in lean season.
(xi)	No water bodies (including natural drainage system) in the area shall be disturbed due to activities associated with the setting up / operation of the power plant.	Complied No water body was disturbed while setting up power plant.
(xii)	Minimum required water flow suggested by the Competent Authority of the State Govt. shall be maintained in the Channel / Rivers (as applicable) even in lean season.	Complied APL, Kawai has no role in the distribution of water from Parvan irrigation Project. Water Resource Department, Govt. of Rajasthan will maintain the minimum required water flow during lean season.

(xiii)	Water requirement shall be restricted as per CEA norms and COC of 5.0 shall be adopted.	Complied It has been incorporated in the plant design and being maintained.
(xiv)	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline so as to ensure that the ground water quality is not adversely affected due to the project.	Being Complied Regular monitoring of ground water quality including heavy metals is being carried out in and around the plant area by MoEF&CC accredited agency and NABL accredited Environment laboratory of APL. Monitoring report enclosed as **Annexure-I.** Three Piezometric wells are established around the ash pond. Record are being maintained and attached as **Annexure-II.**
(xv)	Monitoring surface water quality shall also be regularly conducted and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall be undertaken.	Being Complied. Regular monitoring for surface and ground water quality is being carried out including heavy metals in & around the ash pond and nearby villagers, Monitoring report enclosed herewith. Please refer **Annexure I.**
(xvi)	A well-designed rainwater harvesting shall be put in place before commissioning of the plant. Central Ground Water Authority / Board shall be consulted for finalization of appropriate rainwater harvesting technology / design within a period of three months from the date of this clearance and detail shall be furnished. The design of rainwater harvesting shall comprise of rainwater collection from the built up and open area in the plant premises. Action plan and road map for implementation shall be submitted to the Ministry within six months.	Complied Design for rainwater harvesting scheme is prepared by Hydro-geo Survey Consultant-Jaipur and the same is submitted to Regional Office of CGWB. Jaipur, MoEF&CC regional office, Lucknow and MoEF&CC New Delhi. Rainwater harvesting pond already constructed within the plant to store and reuses more than 120000 m3 of water.
(xvii)	Additional soil for levelling of proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	Complied The entire plant area was almost flat and having stony outcrop. There are no streams within the plant premises.
(xviii)	Provision for installation of FGD shall be provided for future use.	Space was provided for FGD in the plant layout for further requirement. Kawai TPP is in process to install FGD and revised ICB has been issued to install FGD as per implementation schedule of CPCB as well as CEA. As per MoEFCC Notification dated 5th Sep 2022, Kawai TPP falls under Category "C" Non-retiring TPPs and the timelines of

		installation of FGD in compliance of SO2 emission is up to December'2026.
(xix)	The project proponent shall undertake measures and ensure that no fugitive fly ash emission take place at any point of time.	Being complied. Pneumatic ash handling system with bag filters provided for ash handling. The crusher houses for coal are provided with Dust Extraction System & Bag Filter. Dust Suppression System (DSS) and Water Sprinkling System are provided in coal stock yard and ash dyke.
(xx)	Stack of 275 m height shall be installed and provided with continuous online monitoring equipments for SOx, NOx and PM2.5 & PM10. Exit velocity of flue gases shall not be less than 22 m/s. Mercury emissions from stack may also monitored on periodic basis.	Twin flue stack of 275 meter constructed. Continuous Emission Monitoring System installed in both flues for SO_2, NOx, and PM. The flue gas velocity is more than 22 m/sec. Hg monitoring in stack is being carried out by third party on quarterly basis. CEMS results attached as **Annexure IA.**
(xxi)	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm3.	Complied A high Efficiency Electrostatic Precipitators has been provided to each boiler (ESPs) to meet particulate emission less than 50mg/Nm3, ESP efficiency is being observed by our operation department. Details of monitoring results as carried out by NABL accredited environmental lab for Unit-1 and 2 & also same is being submitted to Statutory body on regular basis. All stack monitoring results are well within the prescribed limit which is showing efficiency of ESP. Monitoring results are attached as **Annexure I.**
(xxii)	Adequate dust extraction system such as cyclones / bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Complied. Dust extraction system with bag filter in coal crusher house has been provided. Pneumatic ash handling system with bag filters provided for ash handling. Water sprinkling system provided in coal yard.
(xxiii)	Utilization of 100% Fly Ash generated shall be made from 4th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Being Complied Ash utilization / implementation report being submitted to MoEFCC, CPCB, RSPCB as well as CEA. Implementation status of fly ash utilization is enclosed herewith. Please refer **Annexure-III.**
(xxiv)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb, etc.) will	Being Complied APL has signed MoUs for ash utilization with Mangalam Cement Ltd., J.K.Cement Ltd., Mangrol & Nimbahera, Birla Corporation Ltd, Nuvoco Vistas Corp. Ltd., Shriram Cement Ltd,

	be monitored in the bottom ash as also in the effluents emanating in the existing ash pond. No ash shall be disposed off in low lying area.	Wonder Cement Ltd apart that above parties we are also providing to ACC Ltd. Ambuja Cement, Birla Corporation Ltd., Nirma Ltd., India cement ltd., Heidelberg cement India ltd, India Cements Ltd, Heidelberg cement India Ltd., TSG Ashtech Movers Pvt. Ltd., etc. Heavy metal analysis is being carried out for As, Pb, Hg, Cr Fe, Cu, Zn, Cd, and Ni in fly ash. Analysis report of the same is attached as **Annexure-I.**
(xxv)	Ash pond (if any) shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Complied Well design ash pond with LDPE lining has been established as per guidelines of MOEF/CEA/CPCB. Safety measure such as bund with toe wall and lining of side slope is done to prevent any leachate.
(xxvi)	Sulphur and ash contents in the imported coal to be used in the project shall not exceed 0.6 % and 34 % respectively at any given time. In case of variation of coal quality at any point of time fresh reference shall be made to Ministry for suitable amendments to environmental clearance condition wherever necessary.	Complied EC amended on dated 13.03.2014 through vide letter No. J-13012/154/2008/IA. II (T) for change in the fuel quality & source.
(xxvii)	Green Belt consisting of 3 tiers of plantations of native species around the plant of atleast 75 m width shall be raised (except in areas not feasible). The density of trees shall not be less than 2500 per Ha and rate of survival atleast 80%.	Green belt / plantation is being developed. Our efforts are to develop more greenery in and around the plant premises. Full-fledged horticulture department is established under the guidance of the experienced horticulturist in consultation with the local forest department for the development of green belt / plantation has been established. About 1,63,750 tree saplings have been planted and achieved 90% survival rate. Enclosed as **Annexure-IV**
(xxviii)	Over and above the green belt, as carbon sink, social forestry shall be carried out in close consultation with the Forests Department. The project proponent shall accordingly identify blocks of land / degraded forests and shall undertake regeneration of degraded forests at a large scale. In pursuance to this the project proponent shall formulate time bound action plan along with financial allocation and shall submit status of implementation to the Ministry within six months.	Complied Social forestry with active participation of the villagers and school children are being carried out in close consultation with Forest Department, Action plan regarding social forestry and regeneration of degraded forest is under implementation. Planted 1200 Saplings along with the NH-90 in association with forest department. About 500 trees are also planted in school campus & villages.
(xxix)	Atleast three nearest village shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre,	Complied Baldevpura, Kawai, Salpura, Khedli Gaddiyan and Nimoda are adopted for development of

	primary school etc. shall be developed in co-ordination with the district administration.	basic amenities in co-ordination with the district administration. Beside 41 Schools, 2 PHC, 1 CHC of surrounding Gram Panchayats are adopted in association with district administration of Govt. of Rajasthan.
(xxx)	The project proponent shall also adequately contribute in the development of the neighboring villages. Special package with implementation schedule for providing free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.	Complied. Need based assessment study report have been already submitted to MoEFCC. Recommendation made in the report are being implemented by Adani Foundation. Please refer **Annexure V.**
(xxxi)	CSR schemes shall be undertaken based on need assessment in and around the villages within 5 km of the site and in constant consultation with the village Panchayat and the District Administration. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken.	Being Followed Based on the need-based assessment report under the CSR, recommendations made in the CSR report are being implemented by Adani Foundation. Please refer **Annexure V.** Main Focus has been given on Education, Health, Alternative Livelihood and Rural Infrastructure. CSR progress report is enclosed as **Annexure V.**
(xxxii)	It shall be ensured that an in-built monitoring mechanism for the CSR schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation of the scheme from time to time. The achievements should be put on company's website.	The implementation of CSR activities carried out by Adani Foundation. Implementation / achievement of CSR activities are being submitted along with EC compliance on regular basis. CSR progress report is enclosed as **Annexure V.**
(xxxiii)	An amount of Rs 28.0 Crores shall be earmarked as one time capital cost for CSR programme as committed by the project proponent. Subsequently a recurring expenditure of Rs 5.6 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within six month along with road map for implementation.	Being Complied Separate budget has been earmarked for CSR activities. CSR activities are being carried out by Adani Foundation. CSR report and expenditures is attached as **Annexure V & VIII** respectively.
(xxxiv)	It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The project proponent shall also submit the status of implementation.	Complied. Social audit report is prepared by Indian Institute of Social Welfare and Business Management of University of Kolkata. Audit report is submitted along with six monthly compliance report.

Additional Specific Conditions		
(xxxv)	The Coal transportation by road shall be through tarpaulin covered trucks for a maximum period of two years and hence forth shall be only through mechanically covered trucks.	Being Complied Coal is being transported by Rail up to Plant premises.
(xxxvi)	Avenue plantation of 2/3 rows all along the road shall be carried out by project proponent at its own expenses.	Complied 2 Tier greenbelt as avenue plantation has been developed up to 3KM distance along both side of nearest NH-90.
(xxxvii)	Periodic maintenance of the road shall be done by the project proponent at its own expenses and shall also facilitate the traffic control on the road.	Complied We have maintained the approach road from plant main gate to the nearest highway (NH-90) and linked road to plant.
(xxxviii)	Sulphur and ash contents in the domestic coal to be used in the project shall not exceed 0.4% and 33% at any given time. In case of variation of coal quality at any point of time, fresh reference shall be made to the ministry for suitable amendments to environmental clearance condition wherever necessary.	Being Complied Half yearly & annual reports of Ash Utilization & ash content in coal being submitted to MoEFCC, CPCB and Central Electricity Authority (CEA) since plant operation. Please refer enclosed **Annexure-III.**
(xxxix)	A long-term study of radio activity and heavy metals contents on coal to be used shall be carried out through a reputed institute. Thereafter, mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Being Complied Test results of coal samples for radio activity and heavy metal report submitted along with previous compliance report.
(xl)	Harnessing solar power within the premises of the plant particularly at available roof tops shall be undertaken and status of implementation shall be submitted periodically to the Regional Office of the Ministry.	Solar streetlight near administrative building and along approach road has been installed to harness solar power.
(xli)	Fugitive emissions shall be controlled to prevent impact on agriculture or non-agriculture land.	Being Complied. Adequate air pollution control measures such as Dust Extraction System (DES), Dust Suppression System, Wind Shield, water sprinkling & Fog canon system have been provided to meet particulate matter emission within the norms.
(xlii)	Fly ash shall not be used for agriculture purpose. No mine void filling will be undertaken as an option for ash utilization without adequate lining of mine with suitable media such that no leachate shall take place at any point of time. In case, the option of mine void filling is to be adopted, prior detailed study of soil characteristics of the mine area shall be	The generated fly ash is being utilized as per 'Fly Ash Notification'. Copy of annual data on fly ash generation & utilization is being submitted to MoEFCC, CPCB, and SPCB & Central Electricity Authority (CEA).

<table>
<tr><td></td><td>undertaken from an institute of reputed and adequate clay lining shall be ascertained by the State Pollution Control Board and implementation done in close co-ordination with the State Pollution Control Board.</td><td>Fly Ash generation & utilization is attached as Annexure III.</td></tr>
<tr><td>(xliii)</td><td>Three tier green belt shall be developed all around Ash Pond over and above the Green Belt around the plant boundary and grassing shall be done on the ash mound.</td><td>Complied
Plantation all along ash dyke is taken up by seed broadcasting of species like Subabol, Jatropha and Desi Babool. Slope of ash dyke is covered with grass to avoid soil erosion.</td></tr>
<tr><td>(xliv)</td><td>An Environmental Cell be created at the project site itself and shall be headed by an officer of the company of appropriate seniority and qualification. It shall be ensure that the head of the Cell directly report to the Head of the Organization. The Environmental Cell shall be responsible and accountable for implementation of all the conditions given in the EC including in the amendment letter.</td><td>Complied
We have already established an Environmental Management Cell headed by Sr. Manager & supported by Env. Engineer, Officer, Chemist & Horticulturist. We have NABL accredited Laboratory. Certificate Number- TC-12493 valid up to 28/03/2025.
Please refer attached NABL certificate attached as Annexure-VII.</td></tr>
<tr><td>(xlv)</td><td>The project proponent shall formulated a well laid Corporate Environmental Policy and identify and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with the conditions stipulated in this clearance letter and other applicable environmental laws and regulations.</td><td>Complied
Corporate level Environmental Policy has been developed to implement EMS (Environmental Management System) as per ISO 14001-2015.
Environmental Management System as per EMS ISO 14001 implemented Integrated Management System (IMS) is also Implemented.</td></tr>
<tr><td>B</td><td colspan="2">General Conditions:</td></tr>
<tr><td>(i)</td><td>The treated effluents confirming to the prescribed standards only shall be re-circulated and reused within the plant. Arrangements shall be made that effluents and storm water do not get mixed.</td><td>Complied
ETP has been established (Capacity- 226 m3/hr. based on primary treatment) to treat effluents and treated water reuses within the premises. The concept of “Zero Liquid Discharge (ZLD) Condition” is implemented except during non-monsoon period. Separate drainage network is established for storm water.</td></tr>
<tr><td>(ii)</td><td>A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt / plantation.</td><td>Complied
Sewage Treatment Plant has been established inside the plant & treated domestic water is suitably reused within the plant premises in plantation / green belt development.
<table>
<tr><th>Particular</th><th>Capacity</th><th>Total Capacity</th><th>Technology</th></tr>
<tr><td>STP</td><td>120 KLD (10 x 2 KLD)</td><td>140</td><td>Mikie Bioreactor</td></tr>
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</td></tr>
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(iii)	Adequate safety measures shall be provided in the plant area to check / minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	Complied Adequate safety team has been established in plant site to take preventive control measures. Fire hydrant system for firefighting is provided in plant layout. Fire & Safety department made available with 3 no. of firefighting tanker equipped with all necessary control system.
(iv)	Storage facilities for auxiliary liquid fuel such as LDO and / HFO / LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Complied The fuel LDO and HFO are properly stored in minimum risk area and as per the norms fixed by the Chief Controller of Explosives. A disaster management plan is prepared covering all the eventualities due to storage of oil. It is ensured that sulphur content is less than 0.5% in liquid fuel. Please refer explosive licence/ certificate is attached as **Annexure-IX.**
(v)	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Complied First Aid as well as OHC established with well-equipped Ambulance and qualified Doctor. Housekeeping and sanitation facilities are available for the drivers and contractual workers during construction.
(vi)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 85 dB(A) from source. For people working in the high noise area, requisite personal protective equipment like earplugs / ear muffs etc. shall be provided. Workers engaged in noisy area such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy / less noisy area.	Complied Necessary action has been taken care to maintain noise levels in work zone area within 85 dB(A) from source during the plant operation. The personal protective equipment (PPE) is provided to workers & employees working in noisy areas. Noise level monitoring is carried out regularly. Periodic audiometric check-up is carried out. Occupational Health & Safety Management System as per ISO 45001 as implemented.
(vii)	Regular monitoring of ambient air ground level concentration of SO2, NOx, PM2.5 & PM10 and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional	Being Complied Regular Environmental monitoring of SO2, NOx, $PM_{2.5}$ & PM_{10} and Hg is being carried out by third party Env. Lab. The Ambient Air Quality Monitoring locations are established in consultation with RPCB. Full fledge Environmental Lab for Air & Water has been established. Monitoring reports attached as **Annexure I.**

	Office of this Ministry. The data shall also be put on the website of the company.	
(viii)	Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche, etc. The housing may be in the form of temporary structure to be removed after the completion of the project.	Complied During construction, provision was made for common facilities to labours as toilets, safe drinking water, medical health care etc. who were engaged for construction.
(ix)	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board / Committee and may also be seen at website of the Ministry of Environment and Forest at http://envfor.nic.in	Complied Advertised in local daily News Paper 'Dainik Bhaskar and Rajasthan Patrika' on 10th May 2011 in Hindi.
(x)	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad / Municipal Corporation, urban local Body and the Local NGO, if any, from whom suggestions / representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	Complied Copy of clearance letter has been submitted to Kawai Village Panchayat and Zila Parishad, Baran.
(xi)	An Environmental Cell comprising of at least one expert in environmental science / engineering, occupational health and social scientist, shall be created at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the head of the Cell shall directly report to the head of the organization and he shall be held responsible for implementation of environmental regulations and social impact improvement / mitigation measures.	Complied. We have already established an Environmental Management Cell headed by Manger & supported by Env. Engineer Officer, Chemist & Horticulturist. Full fledge Environment Lab (Air & Water) has been established. Environmental Management System as per EMS ISO: 14001:2015 implemented.
(xii)	The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office	Being Complied Six Monthly Environmental Clearance compliance status report is regularly submitted to MoEFCC, CPCB and SPCB. The same is sent by email also.

	of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM2.5 & PM10), SO2, NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.	Compliance status updated on company's website www.adanipower.com
(xiii)	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	Complied Environment Statement has been submitted with vide letter no APL-Kawai/PK/GOVT/RSPCB/00684, dated-26.09.2024.
(xiv)	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forest, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environmental of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forest.	Being Complied Six monthly compliances on the Environmental Clearance is being submitted to MoEFCC, CPCB & RSPCB regularly. Compliance status updated on company's website. Compliance report for the period of **October'2023 to March'2024** has been submitted to your good office vide letter no.: APL/Kawai/EMD/EC/MoEFCC/283/05/24 dated 23.05.2024.
(xv)	Regional Office of the Ministry of Environment & Forest will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environmental Management Plan along with additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.	Noted Compliance assured.
(xvi)	Separate funds shall be allocated for implementation of environmental protection	Being Followed.

	measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Separate fund has already been allocated and being utilize for Environmental Protection. Environment protection measures (EMP & CER) Expenditure is attached as **Annexure-VIII.**
(xvii)	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Complied
(xviii)	Full cooperation shall be extended to the Scientists / Officers from the Ministry / Regional Office of the Ministry at Rajasthan / CPCB / SPCB who would be monitoring the compliance of environmental status.	Noted, Full Co-operation shall be extended.

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SIX MONTHLY ENVIRONMENTAL MONITORING REPORT

as

AMBIENT AIR QUALITY,

WATER QUALITY, SOIL QUALITY AND NOISE LEVEL

for

Adani Power Limited

(2x660 MW- SUPERCRITICAL THERMAL POWER STATION)

Village - Kawai, Tehsil - Atru, District -Baran, Rajasthan

PREPARED BY:

IRCLASS SYSTEMS AND SOLUTIONS PVT LTD
B-11G CEG TOWER,1ST AND 2ND FLOOR.
INDUSTRIAL AREA, MALVIYA NAGAR
JAIPUR, RAJASTHAN-302017

Approved by Ministry of Environment & Forest (Govt. of India)
And Rajasthan State Pollution Control Board
Accredited by National Accreditation Board for Testing & Calibration Laboratories
Certified by ISO 9001: 2008

PERIOD: April'2024 to September'2024

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Adani Power Ltd., Kawai is operating 2 units of 660 MW Supercritical Thermal Power Plnat at Village- Kawai, Tehsil- Atru, District- Baran, Rajasthan.. The site is located Near Salpura Railway Station in district Baran, Rajasthan. The plant is well connected by Road and Rail network with different part of Rajasthan and adjoining states, at present both units are in operation.

M/s Adani Power Rajasthan Limited has awarded environmental monitoring job work to **M/s IRCLASS Systems and Solutions Pvt. Ltd.** vide Service Order No 5700323105 dated 29/03/2023 for Sampling/Monitoring and Testing of Environmental parameters on quarterly basis for the period 01/04/2023 to 31/03/2025.

The samples for determination of quality of Ambient Air analysis, Ground Water, Soil, Source Emission, Noise, etc. are collected from Site and analyzed at IRCLASS Systems and Solutions Pvt. Ltd., Jaipur.

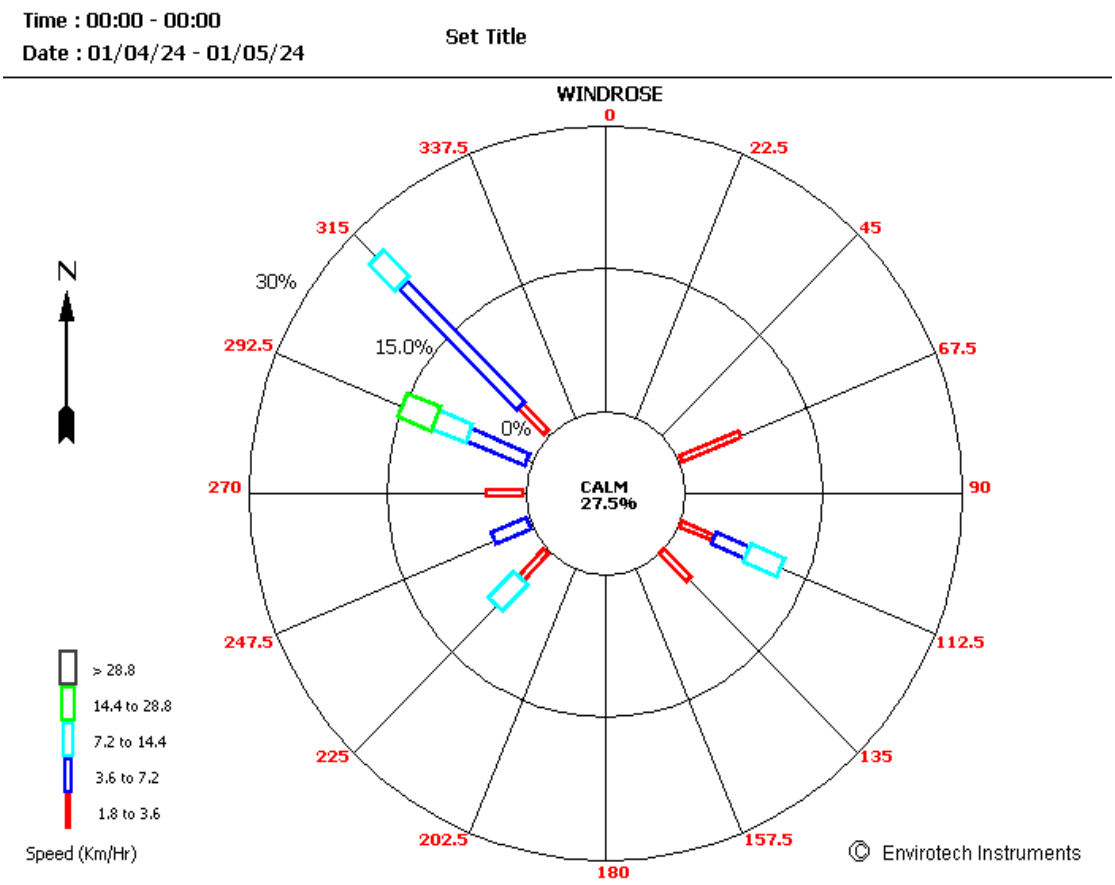
The overall results for the third and fourth quarters are found to be satisfactory. The plant was performing well during the monitoring and environmental parameters in each segment like Ambient air, source emission, soil, Water, wastewater, and noise are found to be within the permissible limits.

METEROLOGICAL DATA

AVERAGE DAILY METEROLOGICAL DATA OF APRIL-2024

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
2024-04-01	23.0	38.3	16.0	33.0	0
2024-04-02	25.1	38.3	17.0	36.6	0
2024-04-03	24.6	39.5	15.1	38.2	0
2024-04-04	18.2	33.2	23.1	50.3	0
2024-04-05	14.0	37.0	24.0	70.4	0
2024-04-06	25.2	37.5	19.3	43.6	0
2024-04-07	26.0	38.4	17.0	35.5	0
2024-04-08	23.1	40.2	11.0	49.0	0
2024-04-09	25.2	40.2	15.1	49.5	0
2024-04-10	27.0	37.5	22.0	55.1	0
2024-04-11	14.0	39.0	2.1	57.0	0
2024-04-12	24.0	36.0	29.3	71.5	1.5
2024-04-13	23.3	37.4	30.1	78.2	5.5
2024-04-14	23.0	38.4	27.5	87.3	0.5
2024-04-15	27.0	40.4	23.5	61.4	0
2024-04-16	28.2	39.4	21.0	44.5	0
2024-04-17	27.0	39.5	18.2	40.5	0
2024-04-18	26.1	41.6	15.2	39.1	0
2024-04-19	27.1	41.5	17.5	38.2	0
2024-04-20	29.1	40.5	13.0	35.3	0
2024-04-21	25.0	39.3	18.1	32.2	0
2024-04-22	28.5	39.6	17.3	42.3	0
2024-04-23	28.0	40.1	16.0	36.2	0
2024-04-24	26.3	41.2	13.2	32.6	0
2024-04-25	26.0	42.5	13.0	30.0	0
2024-04-26	26.1	36.5	22.5	66.5	0
2024-04-27	25.0	40.0	18.5	66.2	0
2024-04-28	28.0	41.0	14.0	32.3	0
2024-04-29	29.5	41.4	13.3	25.4	0
2024-04-30	27.1	39.5	14.4	30.3	0
Min	**14.0**	**33.2**	**2.1**	**25.4**	**7.5**

Max	**29.5**	**42.5**	**30.1**	**87.3**	



AVERAGE DAILY METEROLOGICAL DATA OF MAY-2024

Date	Temp		Relative Humidity		Rainfall
	Min	Max	Min	Max	Total
2024-05-01	25.0	38.0	9.2	31.2	0
2024-05-02	25.0	38.3	11.0	24.1	0
2024-05-03	23.3	41.0	10.0	28.1	0
2024-05-04	26.1	41.0	10.2	24.2	0
2024-05-05	31.0	40.2	16.2	33.5	0
2024-05-06	30.0	42.5	14.0	37.2	0
2024-05-07	29.1	44.3	13.1	34.5	0
2024-05-08	23.3	36.1	18.5	46.4	0
2024-05-09	18.0	44.0	12.0	61.3	0
2024-05-10	30.2	44.6	15.0	35.3	0
2024-05-11	31.0	41.4	19.1	42.0	0
2024-05-12	27.3	42.2	20.0	61.0	0.5
2024-05-13	31.1	42.6	16.1	44.2	0
2024-05-14	30.0	41.4	20.6	48.0	0
2024-05-15	27.1	43.0	16.0	47.4	0
2024-05-16	32.0	43.6	13.4	42.5	0
2024-05-17	32.0	45.0	12.0	38.1	0
2024-05-18	31.0	45.5	11.1	35.6	0
2024-05-19	32.1	47.0	11.0	31.2	0
2024-05-20	33.0	45.1	14.0	31.5	0
2024-05-21	33.2	46.2	13.3	35.2	0
2024-05-22	33.1	45.5	15.0	32.2	0
2024-05-23	35.2	47.2	12.0	38.2	0
2024-05-24	34.2	45.4	16.1	43.5	0
2024-05-25	33.0	44.2	8.7	41.2	0
2024-05-26	33.2	47.5	14.1	31.1	0
2024-05-27	35.3	48.2	9.3	39.1	0
2024-05-28	35.0	46.5	11.2	48.1	0
2024-05-29	33.0	45.5	13.3	56.3	0
2024-05-30	33.2	45.0	17.4	60.0	0
2024-05-31	34.1	44.1	22.1	52.5	0
Min	**18.0**	**36.1**	**8.7**	**24.1**	**0.5**
Max	**35.3**	**48.2**	**22.1**	**61.3**	

Time : 00:00 - 00:00
Date : 01/05/24 - 01/06/24

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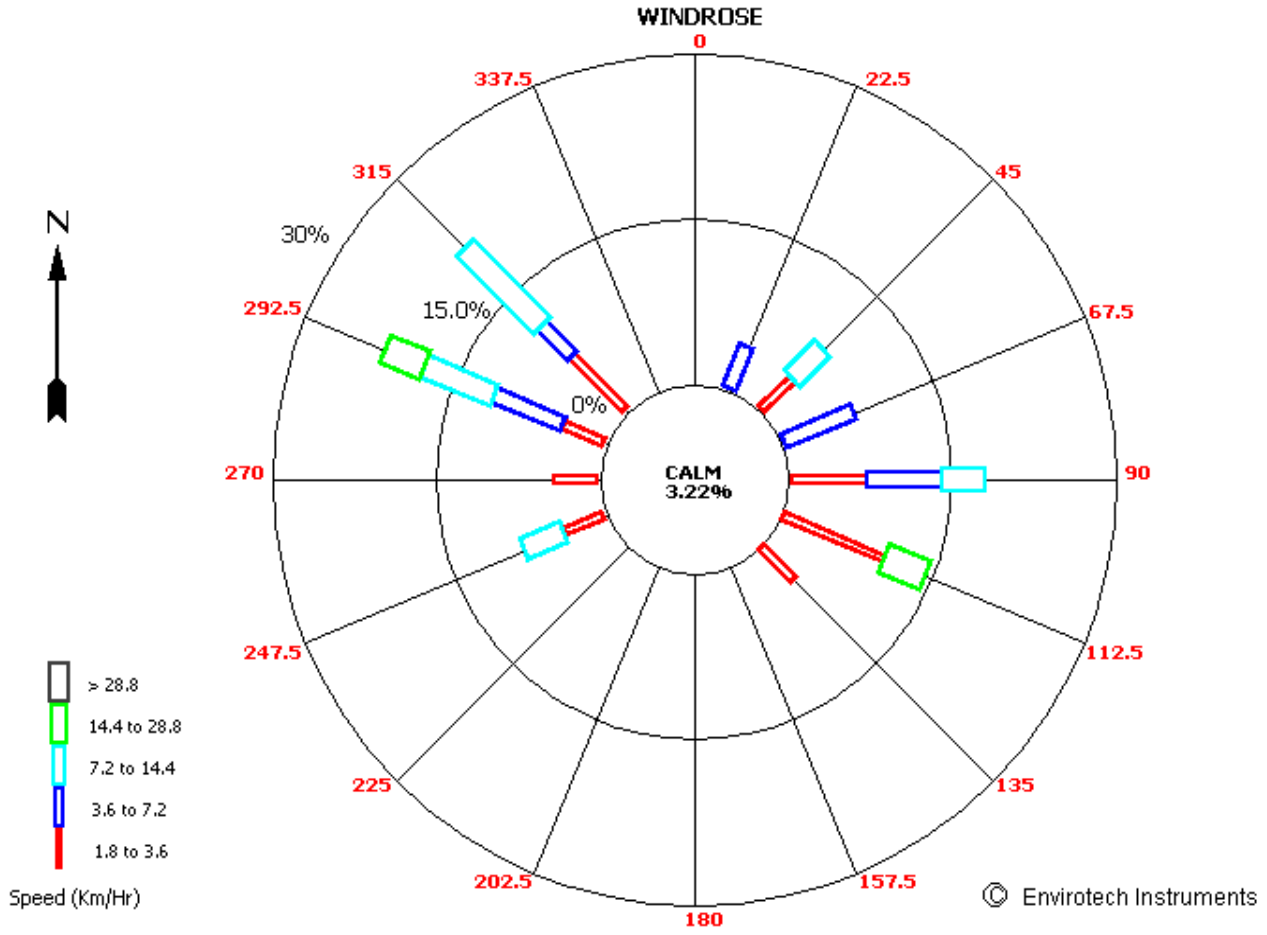

AVERAGE DAILY METEROLOGICAL DATA OF JUNE -2024

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
2024-06-01	33.5	44.1	19.0	47.0	0
2024-06-02	32.2	43.6	17.1	42.1	0
2024-06-03	34.0	43.6	17.5	33.5	0
2024-06-04	35.0	44.5	21.0	42.0	0
2024-06-05	28.1	43.0	23.2	69.1	8.8
2024-06-06	33.1	43.2	23.1	40.3	0
2024-06-07	33.0	44.4	19.1	36.2	0
2024-06-08	33.2	40.2	25.3	40.3	0
2024-06-09	32.2	43.0	21.1	41.2	0
2024-06-10	33.1	38.2	25.5	47.2	0
2024-06-11	32.1	42.6	20.6	45.1	0
2024-06-12	31.0	41.5	26.3	56.3	0
2024-06-13	30.0	40.5	29.5	60.5	0
2024-06-14	32.0	41.5	25.0	49.5	0
2024-06-15	33.8	42.7	28.1	49.4	0
2024-06-16	32.1	43.7	29.0	54.0	0
2024-06-17	30.0	43.2	28.0	61.2	0
2024-06-18	27.2	43.0	29.6	89.5	15.5
2024-06-19	25.0	40.6	36.3	91.5	16.5
2024-06-20	27.2	40.0	36.6	89.4	9.5
2024-06-21	25.1	30.3	77.0	91.1	2
2024-06-22	27.0	39.4	34.1	88.5	0
2024-06-23	30.0	40.1	37.2	72.4	0
2024-06-24	28.0	39.4	40.5	84.0	3
2024-06-25	27.0	36.2	57.0	97.0	52.5
2024-06-26	28.1	39.1	42.1	91.3	8.5
2024-06-27	28.0	37.3	50.1	95.0	6.5
2024-06-28	28.1	36.4	55.0	96.0	0
2024-06-29	28.0	34.2	59.0	88.4	2
2024-06-30	28.0	35.3	58.4	89.3	0
Min.	**25.0**	**30.3**	**17.1**	**33.5**	**124.8**
Max.	**35.0**	**44.5**	**77.0**	**97.0**	

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Date : 17/06/24 - 01/07/24

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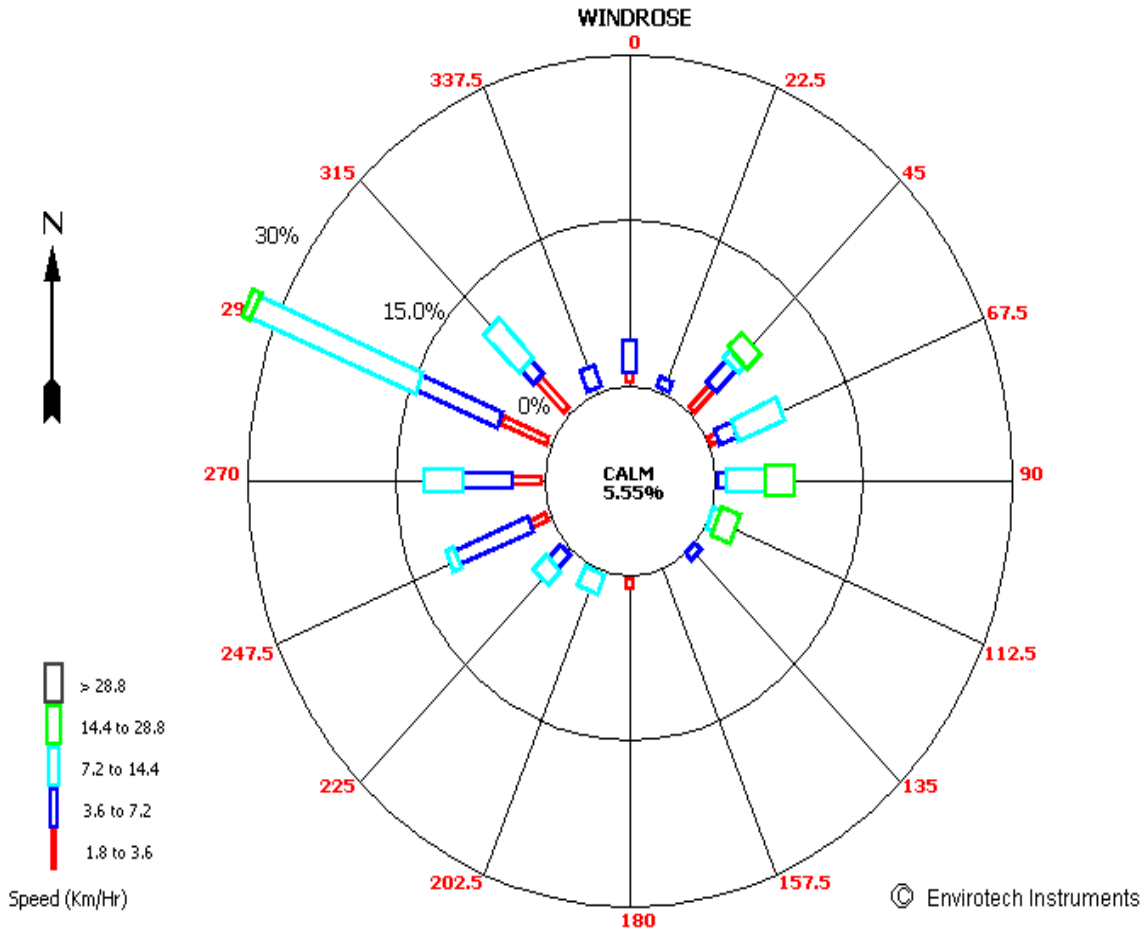
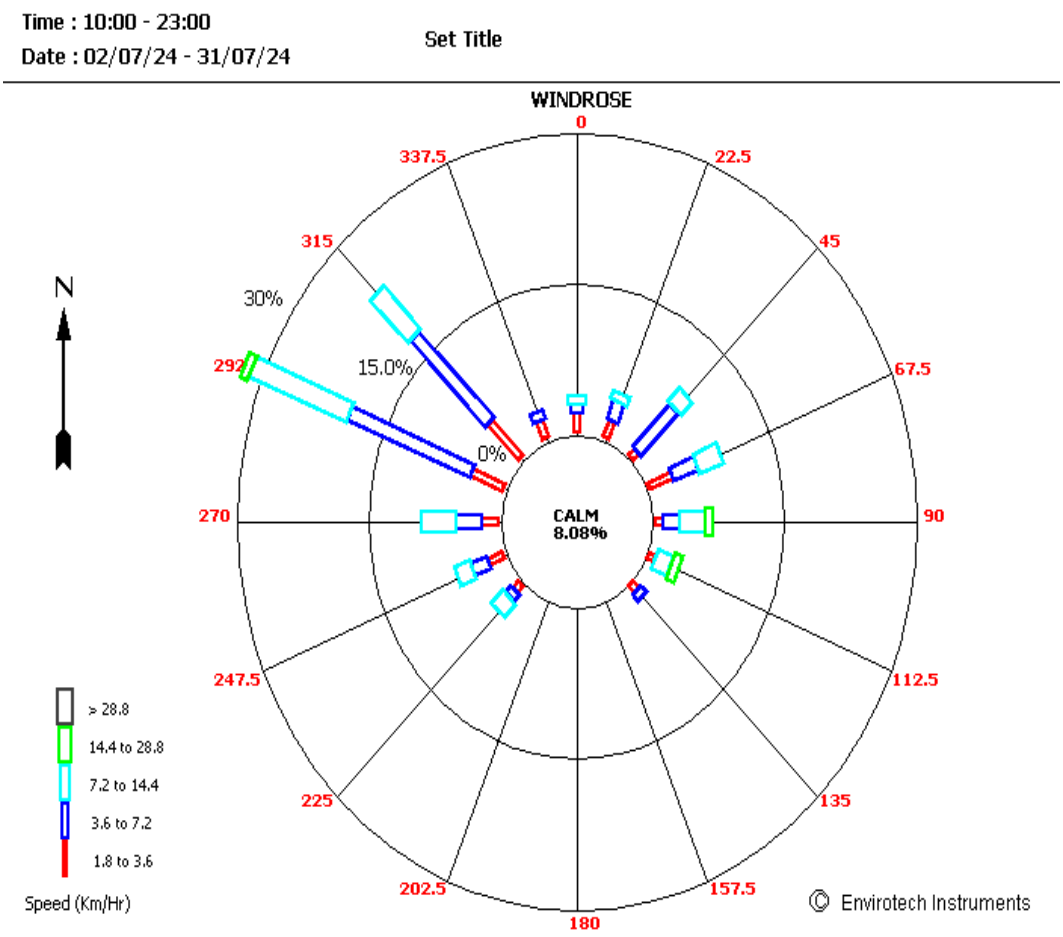


AVERAGE DAILY METEROLOGICAL DATA OF JULY-2024

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
2024-07-01	27.2	36.4	58.6	87.3	0
2024-07-02	27.0	32.5	65.2	89.3	0
2024-07-03	27.2	36.6	50.2	93.3	5
2024-07-04	28.0	33.0	71.3	95.4	6
2024-07-05	27.0	29.4	87.0	97.6	53.5
2024-07-06	26.0	32.3	75.5	98.3	25
2024-07-07	28.1	35.6	58.0	91.0	1
2024-07-08	28.1	35.0	61.4	93.1	0
2024-07-09	28.2	37.6	53.0	94.4	0
2024-07-10	29.1	39.2	45.2	88.2	20.5
2024-07-11	27.5	36.0	58.5	92.0	10
2024-07-12	28.0	35.4	61.2	90.4	0
2024-07-13	27.0	34.4	60.5	92.2	6
2024-07-14	27.0	36.3	54.2	93.3	0
2024-07-15	27.3	36.0	57.1	93.1	3.5
2024-07-16	27.0	36.5	57.0	96.2	18.5
2024-07-17	28.0	37.5	54.3	88.1	8
2024-07-18	27.1	35.3	64.2	95.0	8.8
2024-07-19	27.2	35.0	65.0	97.3	0
2024-07-20	27.0	37.6	56.4	98.6	47.5
2024-07-21	28.1	35.5	66.3	97.5	15
2024-07-22	28.1	34.5	68.0	95.4	0
2024-07-23	27.0	31.6	81.1	96.0	17.5
2024-07-24	27.1	29.5	89.1	95.6	2.8
2024-07-25	27.1	29.5	89.1	95.6	1.6
2024-07-26	27.0	31.0	87.2	95.3	7.5
2024-07-27	27.0	30.0	90.0	98.5	16
2024-07-28	27.1	33.0	76.1	98.6	9
2024-07-29	28.0	35.1	63.3	93.2	0
2024-07-30	27.0	32.0	76.0	95.4	0
2024-07-31	28.0	33.5	73.1	94.6	0
Min.	**26.0**	**29.4**	**45.2**	**87.3**	**282.7**

Max.	**29.1**	**39.2**	**89.1**	**98.6**	

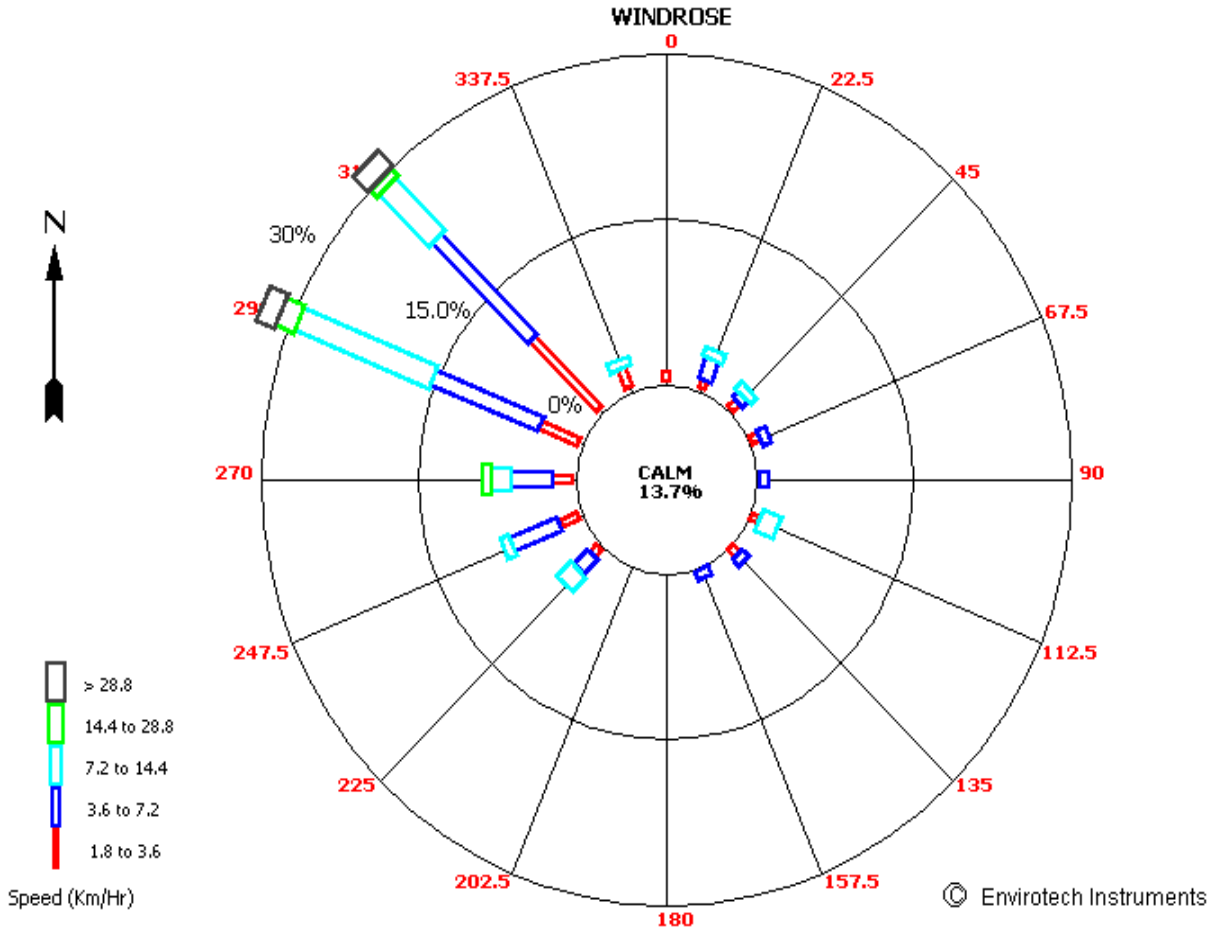


AVERAGE DAILY METEROLOGICAL DATA OF AUGUST- 2024

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
2024-08-01	25.1	29.3	84.1	98.3	66.5
2024-08-02	26.0	29.4	83.4	98.2	10
2024-08-03	26.0	32.3	74.0	98.4	4.5
2024-08-04	26.2	31.3	77.5	98.4	112.5
2024-08-05	26.1	32.2	71.2	98.3	3.5
2024-08-06	26.1	32.6	66.4	94.0	0
2024-08-07	26.1	32.0	67.2	92.2	0
2024-08-08	26.0	28.5	88.1	97.1	0
2024-08-09	27.0	33.5	66.1	94.6	0
2024-08-10	26.0	31.3	76.4	98.3	31
2024-08-11	26.1	31.1	79.5	98.4	6
2024-08-12	26.0	30.6	79.2	97.0	0.5
2024-08-13	26.2	31.1	77.2	95.1	6
2024-08-14	27.0	28.6	91.1	96.4	11.5
2024-08-15	26.0	28.0	94.0	98.5	133
2024-08-16	26.0	32.2	73.1	98.5	3
2024-08-17	26.0	34.1	61.4	95.2	0
2024-08-18	27.2	34.2	63.1	93.2	0
2024-08-19	28.0	34.2	66.1	90.2	0
2024-08-20	26.2	32.2	74.0	95.2	5.9
2024-08-21	26.0	33.6	68.4	98.1	0
2024-08-22	24.3	34.1	63.0	97.3	2.5
2024-08-23	26.2	32.5	73.1	98.3	1
2024-08-24	26.0	32.5	78.1	98.1	19
2024-08-25	26.0	29.5	87.2	98.3	13
2024-08-26	26.0	30.4	80.3	96.1	5.5
2024-08-27	25.2	32.6	63.1	95.1	0
2024-08-28	24.3	33.4	56.0	94.4	0
2024-08-29	26.0	32.4	63.1	91.3	0
2024-08-30	26.3	33.5	62.0	96.1	11.5
2024-08-31	26.1	33.2	66.2	96.5	5.5
Min.	**24.3**	**28.0**	**56.0**	**90.2**	**451.9**
Max.	**28.0**	**34.2**	**94.0**	**98.5**	

Time : 11:00 - 23:00
Date : 01/08/24 - 31/08/24

Set Title



AVERAGE DAILY METEROLOGICAL DATA OF SEPTEMBER- 2024

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
2024-09-01	26.1	34.6	66.4	96.1	6.5
2024-09-02	27.0	34.2	62.2	94.1	2
2024-09-03	27.1	35.1	60.2	95.4	0
2024-09-04	26.2	34.5	64.1	94.1	0
2024-09-05	26.1	31.5	69.0	94.2	0
2024-09-06	26.0	32.5	71.0	94.3	0.5
2024-09-07	26.0	30.4	80.0	97.4	3.5
2024-09-08	26.3	30.6	81.0	96.4	3.5
2024-09-09	26.1	32.3	74.1	98.3	49.5
2024-09-10	26.0	35.0	62.4	98.4	11.5
2024-09-11	26.0	28.5	87.0	98.4	46.5
2024-09-12	26.0	30.1	84.3	98.3	6
2024-09-13	26.1	31.6	66.0	93.1	0
2024-09-14	25.1	31.0	64.1	93.5	0.5
2024-09-15	24.0	33.1	59.2	94.6	0
2024-09-16	25.2	33.4	51.0	96.0	0
2024-09-17	25.0	33.4	60.0	94.2	3.5
2024-09-18	24.0	30.2	64.3	98.2	0
2024-09-19	23.2	33.3	56.3	96.4	0
2024-09-20	25.1	35.0	53.1	94.3	0
2024-09-21	26.2	36.2	51.3	94.0	0
2024-09-22	27.6	36.3	49.2	92.1	0
2024-09-23	28.2	36.5	48.1	91.2	0
2024-09-24	28.1	36.2	50.6	90.3	0
2024-09-25	28.1	36.5	49.0	86.5	0
2024-09-26	27.1	34.3	59.2	91.4	0
2024-09-27	27.0	34.0	61.1	93.6	0
2024-09-28	26.0	30.2	78.1	95.3	19
2024-09-29	26.1	28.2	86.1	98.3	3
2024-09-30	25.1	35.2	51.0	98.3	0
Min.	**23.2**	**28.2**	**48.1**	**86.5**	**155.5**
Max.	**28.2**	**36.5**	**87.0**	**98.4**	

Time : 11:00 - 23:00
Date : 02/09/24 - 30/09/24

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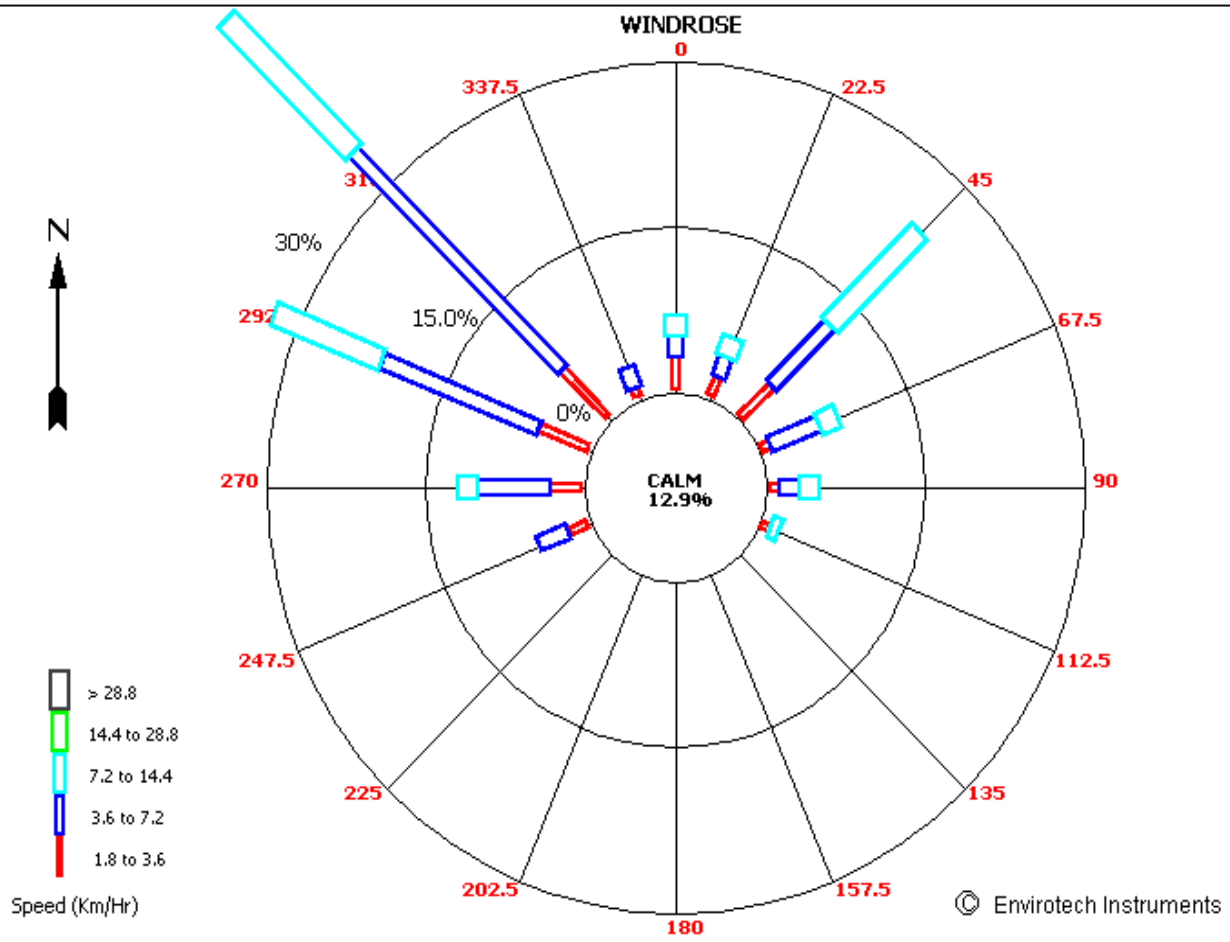

4 AMBIENT AIR QUALITY

Air quality monitoring is carried out to assess the extent of pollution, ensure compliance with national legislation, evaluate control options, and provide data for air quality modeling. There are a number of different methods to measure any given pollutant, varying in complexity, reliability, and detail of data.

The locations for monitoring stations depend on the purpose of the monitoring. Most monitoring networks are designed with human health objectives in mind, and monitoring stations are therefore established in population center.

The measurements were conducted during the period of **April-2024 to September-2024**

The air samples were analyzed as per the standard methods specified by Central Pollution Control Board (CPCB) and IS: 5182. The techniques used for ambient air quality monitoring are given in table as below:

TABLE 4.1 TECHNICAL PROTOCOLS USED FOR AMBIENT AIR QUALITY MONITORING.

S. No.	Parameter	Protocol Followed
1	Particulate Matter, $PM_{10,}$ µg/m^3	IS: 5182 (P-23)
2	Particulate Matter, $PM_{2.5,}$ µg/m^3	CPCB Guidelines (Gravimetric Method)
3	Nitrogen Dioxide (NO_2), µg/m^3	IS: 5182 (P-6)
4	Sulphur Dioxide (SO_2), µg/m^3	IS: 5182 (P-2)
5	Carbon Monoxide, µg/m^3	IS: 5182 (P-10)
6	Ammonia, µg/m^3	CPCB Guidelines
7	Ozone, µg/m^3	APHA 1977, Part819
8	Lead, µg/m^3	IS: 5182 (P-22)
9	Arsenic, ng/m^3	IS: 5182 (P-22)
10	Nickel, ng/m^3	IS: 5182 (P-22)
11	Benzene, µg/m^3	IS: 5182 (P-11)
12	Benzo-alfa-pyrene, ng/m^3	CPCB Guidelines
13	Mercury (Hg), ng/m^3	APHA 2012: 3112 B

4.1 AMBIENT AIR QUALITY RESULTS

The detailed on-site monitoring results of ambient air quality are presented in table as given below:

TABLE 4.2: AMBIENT AIR QUALITY MONITORING RESULTS

Quarter-I (April- 2024 to June-2024)								
S. No.	**Parameter**	**West of Stack (Near Coal Handling Plant)**	**Southeast of Stack (Near CT 2)**	**Northeast of Stack (Near Reservior)**	**Sidni (Near Labour Colony)**	**Kawai Village**	**Mukhandpura**	**NAAQ Standard**
1	Particulate Matter, PM_{10}, µg/m^3	80.39	67.94	77.87	70.39	71.68	72.69	100
2	Particulate Matter, $PM_{2.5}$, µg/m^3	36.91	40.20	42.45	41.24	35.16	38.24	60
3	Nitrogen Dioxide (NO_2), µg/m^3	22.33	23.07	19.94	20.27	24.33	19.24	80
4	Sulphur Dioxide (SO_2), µg/m^3	7.03	7.72	6.68	6.35	7.30	7.71	80
5	Carbon Monoxide, mg/m^3	0.8	0.9	0.4	0.9	0.5	0.6	4
6	Ammonia, µg/m^3	4.92	2.58	4.06	3.38	2.84	3.89	400
7	Ozone, µg/m^3	4.33	4.49	2.78	5.04	5.17	3.39	100
8	Lead, µg/m^3	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	1.0
9	Arsenic, ng/m^3	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	6.0
10	Nickel, ng/m^3	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	20
11	Benzene, µg/m^3	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	5.0
12	Benzo-alfa-pyrene, ng/m^3	BLQ (LOQ 0.5)	BLQ (LOQ0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	1.0
13	Mercury (Hg), ng/m^3	BLQ (LOQ:0.5)	BLQ (LOQ0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	BLQ (LOQ:0.5)	-

Quarter-II (July -2024 to September- 2024)								
S. No.	**Parameter**	**West of Stack (Near Coal Handling Plant)**	**South East of Stack (Near CT 2)**	**North East of Stack (Near Reservoir)**	**Sidni (Near Labour Colony)**	**Kawai Village**	**Mukundpura**	**NAAQ Standard**
1	Particulate Matter, $PM_{10,}$ $\mu g/m^3$	79.3	70.4	76.3	72.1	73.5	75.6	100
2	Particulate Matter, $PM_{2.5,}$ $\mu g/m^3$	38.2	42.2	40.6	43.2	39.4	44.3	60
3	Nitrogen Dioxide (NO_2), $\mu g/m^3$	9.62	9.94	10.3	10.2	7.60	8.15	80
4	Sulphur Dioxide (SO_2), $\mu g/m^3$	3.08	2.87	2.97	3.27	3.05	3.07	80
5	Carbon Monoxide, $\mu g/m^3$	0.50	0.38	0.75	0.63	0.75	0.88	4
6	Ammonia, $\mu g/m^3$	3.64	3.74	4.04	4.15	4.32	4.80	400
7	Ozone, $\mu g/m^3$	3.45	3.61	3.84	4.12	3.55	3.51	180
8	Lead, $\mu g/m^3$	BLQ (LOQ 0.0005)	BLQ (LOQ 0.0005)	BLQ (LOQ0.0005)	BLQ (LOQ 0.0005)	BLQ (LOQ0.0005)	BLQ (LOQ 0.0005)	1.0
9	Arsenic, ng/m^3	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	6.0
10	Nickel, ng/m^3	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	20
11	Benzene, $\mu g/m^3$	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	5.0
12	Benzo-alfa-pyrene, ng/m^3	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	1.0
13	Mercury (Hg), ng/m^3	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	BLQ (LOQ 0.5)	-

5 AMBIENT NOISE LEVEL

The measurements are done using the sound level meter. The results of the same are provided below. [Note: (i) The value is the Leq of ten readings taken in Day time and Nighttime.]

1. Day time shall mean from 6:00 am to 10:00 pm
2. Nighttime shall mean from 10:00 pm to 6:00 am.

TABLE 5.1: NOISE MONITORING RESULTS [INDUSTRIAL AREA]

Quarter-I (April-2024 to June-2024)		
Location	**Day Time Leq in dB(A)**	**Night-Time Leq in dB(A)**
West of Stack (Near Coal Handling Plant)	61.6	47.5
Southeast of Stack (Near CT 2)	58.3	43.2
Northeast of Stack (Near Reservoir)	67.9	56.3

Quarter-II(July-2024 to September- 2024)		
Location	**Day Time Leq in dB(A)**	**Nighttime Leq in dB(A)**
West of Stack (Near Coal Handling Plant)	60.5	48.3
Southeast of Stack (Near CT 2)	59.4	44.4
Northeast of Stack (Near Reservoir)	68.2	57.1

TABLE 5.2: NOISE MONITORING RESULTS [RESIDENTIAL AREA]

Quarter-I (April-2024 to June-2024)		
Location	**Day Time Leq in dB(A)**	**Night-time Leq in dB(A)**
Sidni (Near Labour Colony)	53.2	44.3
Kawai Village	52.9	43.4
Mukhandpura	53.7	42.3

Quarter-II (July -2024 to September- 2024)		
Location	**Day Time Leq in dB(A)**	**Night-time Leq in dB(A)**
Sidni (Near Labour Colony)	52.4	43.2
Kawai Village	52.6	42.3
Mukhandpura	54.2	42.6

TABLE 5.3: NOISE MONITORING RESULTS [DG Set]

Quarter-II (July-2024 to September- 2024)			
Parameter	DG Set-I	DG Set-II	DG Set-III
Noise level 1 meter away from the acoustic enclosure surface (North)-5 minutes (dB(A).	70.1	71.4	71.6
Noise level 1 meter away from the acoustic enclosure surface (East)-5 minutes (dB(A).	71.8	72.2	72.9
Noise level 1 meter away from the acoustic enclosure surface (South)-5 minutes (dB(A).	72.9	72.8	73.4
Noise level 1 meter away from the acoustic enclosure surface (West)-5 minutes (dB(A).	73.2	73.8	73.5
Noise level 1 meter away from the acoustic enclosure surface (Top)-5 minutes (dB(A).	73.8	73.6	73.2

6 STACK

Emission measurements are required to identify and quantify a wide range of pollutants in Stack Emissions. The measurements were conducted during the period of April 2024 to September 2024.

The parameters covered in the monitoring are depict below:

TABLE 6.1 TECHNICAL PROTOCOLS USED FOR STACK EMISSION MONITORING

S. No	Parameter	Units	Method of Test
1	Particulate Matter (PM)	mg/ Nm^3	IS 11255 (P-1)
2	Sulphur dioxide (SO_2)	mg/ Nm^3	IS 11255 (P-2)
3	Oxide of nitrogen (NO_x),	mg/ Nm^3	IS:11255 (P-7)
4	Carbon monoxide (CO)	%	IS:13270-1992
5	Mercury as particulate (Hgp)	$\mu g/m^3$	USEPA-29

TABLE 6.2: STACK MONITORING RESULTS

S. No	Parameter	Unit	Quarter-I (April-2024 to June-2024)	
			Unit-I	Unit-II
1	Exit Gas Velocity	m/sec	26.20	26.40
2	Flow Rate	Nm^3/hr	33877	33460
3	Particulate Matter (PM)	mg/Nm^3	35.86	32.16
4	Sulphur dioxide (SO_2)	mg/Nm^3	732	741
5	Oxide of nitrogen (as NO_x) at 15 % O_2	mg/Nm^3	256	245
6	Mercury as particulate (Hgp)	mg/Nm3	BLQ (LOQ 0.001)	BLQ (LOQ 0.001)

S. No	Parameter	Unit	Quarter-II (July- 2024 to September-2024)	
			Unit-I	Unit-II
1	Exit Gas Velocity	m/sec	26.4	26.6
2	Flow Rate	Nm^3/hr	34.0	34
3	Particulate Matter (PM)	mg/Nm^3	36.3	38.2
4	Sulphur dioxide (SO_2)	mg/Nm^3	646	662
5	Oxide of nitrogen (as NO_x) at 15 % O_2	mg/Nm^3	284	279
6	Mercury as particulate (Hgp)	mg/Nm3	BLQ (LOQ 0.001)	BLQ (LOQ 0.001)

TABLE 6.3: DG STACK MONITORING RESULTS

Parameter	Unit	Quarter- I & II (July 2024 to September- 2024)		
		DG Set-I	DG Set-I	DG Set-II
Particulate Matter (PM)	mg/Nm³	20.0	19.0	18..0
Oxide of Nitrogen (NOx) at15% O_2	ppmv	16.2	14.1	14.7
Carbon monoxide (CO)	mg/Nm³	41.0	49.0	51.0
NMHC as C at 15% O_2	mg/Nm³	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)	BLQ(LOQ 2.0)

7 WATER QUALITY RESUTS [GROUND/ SURFACE]

A number of parameters have been monitored in ground water and surface water at nearby villages of plant site.

The measurements were conducted during the period of April-2024 to September-2024 The parameters covered in the monitoring are depict below:

TABLE 7.1.1: RESULTS OF GROUND WATER MONITORING

Quarter- I (April-2024 to June- 2024)									
S. No.	**Parameter**	**Near Labour Colony SE (Piezometer)**	**Salpura Village**	**Kawai Village**	**Phoolbaroda Village**	**Nimoda Village**	**Sidni Village**	**Baldevpura Village**	**Nimoda Railway crossing (Piezometer)**
1	pH (at 25 °C)	6.59	7.37	7.31	7.45	6.52	7.21	6.52	7.39
2	Colour, Hazen	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
3	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5	Total Dissolved Solids, mg/l	166	401	451	379	134	159	228	422
6	Total Hardness (as $CaCO_3$), mg/l	107	180	180	161	115	165	119	76.8
7	Calcium (as Ca), mg/l	30.8	49.3	56.9	44.6	32.3	52.3	35.4	16.9
8	Magnesium (as Mg), mg/l	17.5	14.03	9.35	12.1	8.42	8.42	7.48	8.4
9	Chlorides (as Cl^-), mg/l	27.2	199	142	96.7	16.3	184	20.4	25.9
10	Fluorides (as F) mg/l	BLQ (<0.2)	BLQ (<0.2)	BLQ (<0.2)	BLQ (<0.2)	BLQ (<0.2)	BLQ (<0.2)	BLQ (<0.2)	BLQ (<0.2)
11	Sulphate (as SO_4), mg/l	27.0	10.25	12.9	3.62	4.49	8.02	15.2	21.6
12	Free Residual Chlorine mg/l	BLQ (LOQ:0.05)	BLQ (LOQ:0.05)	BLQ (LOQ:0.05)	BLQ (LOQ:0.05)	BLQ (LOQ:0.05)	BLQ (LOQ:0.05)	BLQ (LOQ 0.05)	BLQ (LOQ:0.05)

13	Iron (as Fe), mg/l	BLQ (LOQ:0.1)	BLQ (LOQ:0.1)	BLQ (LOQ:0.1)	BLQ (LOQ:0.1)	BLQ (LOQ:0.1)	BLQ (LOQ:0.1)	BLQ (LOQ:0.1)	BLQ (LOQ:0.1)
14	Total Chromium (as Cr), mg/l	BLQ (<0.005)	BLQ (<0.005)	BLQ (<0.005)	BLQ (<0.005)	BLQ (<0.005)	BLQ (<0.005)	BLQ (<0.005)	BLQ (<0.005)
15	Arsenic (as As), mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
16	Lead (as Pb), mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
17	Cyanide (as CN) mg/l	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)
18	Mercury, mg/l	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)
19	Copper mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
20	Manganese (as Mn) mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
21	Nitrate (as NO_3) mg/l	BLQ (LOQ:0.5)	2.16	1.24	5.41	6.34	BLQ (LOQ:0.5)	3.41	5.42
22	Zinc (as Zn) mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
23	Cadmium (as Cd)	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)
24	E coli MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
25	Total coliform, MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

Quarter-II (July-2024 to September-2024)									
S. No.	**Parameter**	**Near Labour Colony SE (Piezometer)**	**Salpura Village**	**Kawai Village**	**Phoolbaroda Village**	**Nimoda Village**	**Sidni Village**	**Baldevpura Village**	**NW of Ash Dyke near Nimoda Railway station (Piezometer)**
1	pH (at 25 °C)	6.84	7..26	7.35	7.52	6.67	7.32	6.82	7.56
2	Colour, Hazen	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)
3	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)
5	Total Dissolved Solids, mg/l	170	410	455	383	140	162	234	425
6	Total Hardness (as $CaCO_3$), mg/l	112	184	184	168	120	172	128	80
7	Calcium (as Ca), mg/l	28.9	52.9	57.7	48.1	32.1	54.5	32.1	19.2
8	Magnesium (as Mg), mg/l	9.74	12.7	9.74	11.7	9.74	8.77	11.7	7.79
9	Chlorides (as Cl^-), mg/l	28.6	204	143	98.0	17.7	61.3	23.1	27.2
10	Fluorides (as F) mg/l	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)
11	Sulphate (as SO_4), mg/l	26.2	10.0	11.7	3.02	4.41	8.28	15.7	20.3
12	Free Residual Chlorine mg/l	BLQ (LOQ 0.05)	BLQ (LOQ 0.05)	BLQ (LOQ0.05)	BLQ (LOQ 0.05)	BLQ (LOQ0.05)	BLQ (LOQ0.05)	BLQ (LOQ 0.05)	BLQ (LOQ 0.05)

13	Iron (as Fe), mg/l	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)
14	Total Chromium (as Cr), mg/l	BLQ (LOQ 0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
15	Arsenic (as As), mg/l	BLQ (LOQ 0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
16	Lead (as Pb), mg/l	BLQ (LOQ 0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
17	Cyanide (as CN) mg/l	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)
18	Mercury, mg/l	BLQ (LOQ0.0005)	BLQ (LOQ0.0005)	BLQ (LOQ0.0005)	BLQ (LOQ0.0005)	BLQ (LOQ0.0005)	BLQ (LOQ0.0005	BLQ (LOQ0.0005)	BLQ (LOQ0.0005)
19	Copper mg/l	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)
20	Manganese (as Mn) mg/l	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)
21	Nitrate (as NO_3) mg/l	BLQ (LOQ 0.5)	2.14	1.24	5.34	6.32	BLQ (LOQ 0.5)	3.32	5.23
22	Zinc (as Zn) mg/l	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)
23	Cadmium (as Cd)	BLQ (LOQ0.001)	BLQ (LOQ0.001)	BLQ (LOQ0.001)	BLQ (LOQ0.001)	BLQ (LOQ0.001)	BLQ (LOQ0.001)	BLQ (LOQ0.001)	BLQ (LOQ0.001)
24	E coli MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
25	Total coliform, MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent

7.2 SURFACE WATER:

TABLE 7.2.1: RESULTS OF SURFACE WATER MONITORING

Quarter-I (April-2024 to June-2024)				
S. No.	**Parameter**	**Barlan Pond**	**Kawai Pond**	**Parvan River**
1	pH (at 25 °C)	7.26	7.10	7.73
2	Odour	Agreeable	Agreeable	Agreeable
3	Colour, Hazen	BLQ (LOQ:1.0)	BLQ (LOQ:1.0)	BLQ (LOQ:1.0)
4	Turbidity, NTU	BLQ (LOQ:1.0)	BLQ (LOQ:1.0)	BLQ(LOQ:1.0)
5	Total Dissolved Solids, mg/l	350	319	441
6	Calcium (as Ca), mg/l	42.3	46.2	44.6
7	Chlorides (as Cl^-), mg/l	191	133	23.1
8	Fluorides (as F) mg/l	BLQ (LOQ:0.2)	BLQ (LOQ:0.2)	BLQ (LOQ:0.2)
9	Free Residual Chlorine mg/l	BLQ (LOQ:0.05)	BLQ (LOQ:0.05)	BLQ (LOQ:0.05)
10	Iron (as Fe), mg/l	BLQ (LOQ:0.1)	BLQ(LOQ:0.1)	BLQ(LOQ:0.1)
11	Magnesium (as Mg), mg/l	11.7	10.3	16.8
12	Sulphate (as SO_4), mg/l	3.31	8.17	47.01
13	Total Hardness (as $CaCO_3$), mg/l	154	157	180
14	Cyanide (as CN) mg/l	BLQ (LOQ 0.02)	BLQ (LOQ:0.02)	BLQ (LOQ:0.02)
15	Copper (as Cu) mg/l	BLQ (LOQ:0.005)	BLQ LOQ:0.005)	BLQ(LOQ:0.005)
16	Nitrate (as NO_3) mg/l	4.87	1.07	7.89
17	Zinc (as Zn) mg/l	BLQ (LOQ:0.005)	BLQ(LOQ:0.005)	BLQ (LOQ:0.005)
18	Cadmium (as Cd) mg/l	BLQ (LOQ:0.001)	BLQ(LOQ:0.001)	BLQ(LOQ:0.001)
19	Lead (as Pb), mg/l	BLQ (LOQ0.005)	BLQ (LOQ0.005)	BLQ (LOQ0.005)

20	Mercury, mg/l	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)
21	Arsenic (as As), mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
22	Total Chromium (as Cr) mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
23	E coli MPN/100ml	Absent	Absent	Absent
24	Total coliform, MPN/100ml	Absent	Absent	Absent

Quarter-II (July-2024 to September-2024)				
S. No.	**Parameter**	**Barlan Pond**	**Kawai Pond**	**Parvan River**
1	pH (at 25 °C)	7.32	7.18	7.68
2	Odour	Agreeable	Agreeable	Agreeable
3	Colour, Hazen	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)
4	Turbidity, NTU	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)
5	Total Dissolved Solids, mg/l	348	325	446
6	Calcium (as Ca), mg/l	46.5	44.9	46.5
7	Chlorides (as Cl^-), mg/l	194	136	24.5
8	Fluorides (as F) mg/l	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)	BLQ (LOQ 0.2)
9	Free Residual Chlorine mg/l	BLQ (LOQ 0.05)	BLQ (LOQ 0.05)	BLQ (LOQ 0.05)
10	Iron (as Fe), mg/l	BLQ (LOQ 0.1)	BLQ (LOQ 0.1)	BDL (LOQ 0.1)
11	Magnesium (as Mg), mg/l	10.7	12.7	17.5
12	Sulphate (as SO_4), mg/l	3.14	8.31	47.9
13	Total Hardness (as $CaCO_3$), mg/l	160	164	188
14	Cyanide (as CN) mg/l	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)	BLQ (LOQ 0.02)
15	Copper (as Cu) mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ LOQ 0.005)
17	Manganese (as Mn) mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
17	Nitrate (as NO_3) mg/l	4.87	1.02	7.88

18	Zinc (as Zn) mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
19	Cadmium (as Cd) mg/l	BLQ (LOQ 0.001)	BLQ LOQ 0.001)	BLQ LOQ 0.001)
20	Lead (as Pb), mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
21	Mercury, mg/l	BLQ (LOQ 0.0005)	BLQ (LOQ 0.0005)	BLQ (LOQ 0.0005)
22	Arsenic (as As), mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
23	Total Chromium (as Cr) mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
24	E coli MPN/100ml	Absent	Absent	Absent
25	Total coliform, MPN/100ml	Absent	Absent	Absent

8 STP WATER

The measurements were conducted during the period of April-2024 to September-2024. The parameters covered in the monitoring are depict below:

TABLE 8.1: RESULTS OF STP WATER

Quarter-I (April-2024 to June-2024)											
S. No.	**Parameter**	**45 KLD Adani Vidhayala New**	**10 KLD STP Near Service Building)**	**10 KLD STP Plant Canteen**	**45 KLD STP near Adani Vidhayala (Old)**	**120 KLD STP in Plant Premises**	**60 KLD Township New**	**10 KLD SN III Guest House**	**10KLD 3 BHK**	**60KLD STP in Township (Old)**	**10KLD Health centre**
1	pH (at 25°C)	7.42	7.45	7.60	8.29	7.58	7.43	7.40	7.11	7.43	7.19
2	Total Suspended Solid (TSS) mg/l	44.0	17.1	14.3	47.6	16.0	32.8	34.0	<5.0	29.0	34.0
3	Nitrate Nitrogen mg/l	5.56	6.36	3.21	5.25	5.45	6.40	3.10	6.20	6.78	6.40
4	Ammonical Nitrogen (as NH_3-N) mg/l	12.2	4.52	3.09	13.2	4.30	12.3	10.9	8.32	8.20	13.6
5	Biochemical Oxygen Demand (BOD) mg/l	9.2	9.1	6.62	14.8	7.4	10.3	8.5	6.0	6.24	8.0
6	Chemical Oxygen Demand (COD) mg/l	44.2	49.4	22.7	52.4	20.0	43.1	57.8	23.1	18.7	22.4
7	Sulphide (as S) mg/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
8	Total Kjeldahl Nitrogen mg/l	16.8	14.2	15.2	13.4	15.3	17.2	16.3	15.4	10.16	15.4
9	Oil & Grease mg/l	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
10	Free Available Chlorine mg/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11	Bioassay Test	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent
Quarter-II (July'2024 to September'2024)											

S. No.	Parameter	45 KLD Adani Vidhayala New	10 KLD STP Near Service Building)	10 KLD STP Plant Canteen	45 KLD STP near Adani Vidhayala (Old)	120 KLD STP in Plant Premises	60 KLD Township New	10 KLD SN III Guest House	10KLD 3 BHK	60KLD STP in Township (Old)	10KLD Health centre
1	pH (at 25°C)	7.46	7.56	7.45	8.20	7.62	7.40	7.45	7.20	7.45	7.30
2	Total Suspended Solid (TSS) mg/l	18.5	18.2	16.9	17.8	16.8	17.9	18.3	17.4	17.9	18.6
3	Nitrate Nitrogen mg/l	3.30	4.80	3.20	4.51	5.40	4.59	3.41	4.37	4.82	4.50
4	Ammonical Nitrogen (as NH_3-N) mg/l	3.98	4.20	4.12	3.99	4.13	4.11	4.11	4.34	3.98	4.23
5	Biochemical Oxygen Demand (BOD) mg/l	8.98	9.4	9.1	8.7	7.9	8.7	8.90	7.0	7.80	8.80
6	Chemical Oxygen Demand (COD) mg/l	46.2	48.2	47.3	48.4	22.0	44.6	45.7	24.6	35.9	23.3
7	Sulphide (as S) mg/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
8	Total Kjeldahl Nitrogen mg/l	7.9	8.42	7.86	8.6	7.7	8.1	7.95	8.3	7.8	7.65
9	Oil & Grease mg/l	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
10	Free Available Chlorine mg/l	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11	Bioassay Test	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% dilution	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent

9 ETP WATER

The measurements were conducted during the period of April'2024 to September'2024. The parameters covered in the monitoring are depict below:

TABLE 9.1: RESULTS OF ETP OUTLET

Quarter-I & II				
S. No.	**Parameter**	**Unit**	**Result April'2024 to June 2024**	**Result July 2024 to Sept 2024**
1	pH	-	7.81	7.75
2	Total Suspended Solids (TSS)	mg/l	29.0	30.2
3	Temperature	ºC	25.4	25.8
4	Chemical Oxygen Demand (COD), mg/l	mg/l	55.4	56.4
5	Copper (as Cu), mg/l	mg/l	BLQ(LOQ:0.005)	BLQ (LOQ 0.05)
6	Iron (as Fe) mg/l	mg/l	BLQ (LOQ:0.1)	BLQ (LOQ 0.1)
7	Zinc (as Zn) mg/l	mg/l	BLQ (LOQ:0.005)	BLQ (LOQ 0.05)
8	Phosphate (as P), mg/l	mg/l	BLQ(LOQ:0.1)	BLQ (LOQ 0.1)
9	Oil & Grease, mg/l	mg/l	BLQ(LOQ:4.0)	BLQ (LOQ 4.0)
10	Sulphide (as H_2S)	mg/l	BLQ(LOQ;1.0)	BLQ (LOQ 1.0)
11	Free Available Chlorine	mg/l	BLQ(LOQ:1.0)	BLQ (LOQ 1.0)

10 ASH RECOVERY WATER

The measurements were conducted during the period of April'2024 to September'2024. The parameters covered in the monitoring are depict below:

TABLE 10.1: RESULTS OF ASH RECOVERY WATER SAMPLE

S. No.	Parameter	Units	Quarter I (April-2024 to June-2024)	
			Ash Recovery Pump House 1	Ash Recovery Pump House 2
1	Lead (as Pb)	mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
2	Arsenic (as As)	mg/l	BLQ (LOQ:0.005)	BLQ (LOQ :0.005)
3	Total Chromium (as Cr)	mg/l	BLQ (LOQ:0.005)	BLQ (LOQ:0.005)
4	Cadmium (as Cd)	mg/l	BLQ (LOQ:0.001)	BLQ (LOQ:0.001)
5	Mercury (as Hg)	mg/l	BLQ (LOQ:0.0005)	BLQ (LOQ:0.0005)

S. No.	Parameter	Units	Quarter II (July '2024 to September'2024)	
			Ash Recovery Pump House 1	Ash Recovery Pump House 2
1	Lead (as Pb)	mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
2	Arsenic (as As)	mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
3	Total Chromium (as Cr)	mg/l	BLQ (LOQ 0.005)	BLQ (LOQ 0.005)
4	Cadmium (as Cd)	mg/l	BLQ (LOQ 0.001)	BLQ (LOQ 0.001)
5	Mercury (as Hg)	mg/l	BLQ (LOQ 0.0005)	BLQ (LOQ 0.0005)

11 FLY ASH [SILO]

The measurements were conducted during the period of April'2024 to September'2024. The parameters covered in the monitoring are depict below:

TABLE 11.1: RESULTS OF FLY ASH SAMPLE

Quarter I (April 2024-June 2024)				
S. No.	**Parameter**	**Unit**	**Unit-I**	**Unit-II**
1	Arsenic (As)	mg/kg	6.22	6.69
2	Mercury (Hg)	mg/kg	BLQ (LOQ:1.0)	BLQ (LOQ:1.0)
3	Lead as Pb	mg/kg	3.12	3.22
4	Total Chromium as Cr	mg/kg	3.64	3.17

TABLE 11.2: RESULTS OF FLY ASH SAMPLE

Quarter II (July 2024 to September-2024)				
S. No.	**Parameter**	**Unit**	**Unit-I**	**Unit-II**
1	Arsenic (As)	mg/kg	2.81	5.07
2	Mercury (Hg)	mg/kg	BLQ (LOQ 1.0)	BLQ (LOQ 1.0)
3	Lead as Pb	mg/kg	2.73	2.61
4	Total Chromium as Cr	mg/kg	BLQ (LOQ 5.0)	BLQ (LOQ 5.0)

12 SOILS

The measurements were conducted during the period of April-2024 to September-2024. The parameters covered in the monitoring are depict below:

TABLE 12.1: RESULTS OF SOIL MONITORING

S. No.	Parameter	Quarter I (April-2024 to June-2024)		
		Nimoda Village	Kawai Village	Phulbaroda Village
1	Ammonical Nitrogen (as N)	446 mg/kg	327 mg/kg	306 mg/kg
2	Iron as Fe	4753.89 mg/kg	4718.02 mg/kg	5866.04 mg/kg
3	Manganese as Mn	204.16 mg/kg	201.69 mg/kg	246.89 mg/kg
4	Boron (as B) mg/kg	BLQ (LOQ 5.0) mg/kg	BLQ (LOQ 5.0) mg/kg	BLQ (LOQ 5.0) mg/kg
5	Calcium (as Ca)	1165.14 mg/kg	1162.88 mg/kg	1146.38 mg/kg
6	Magnesium (as Mg)	1089.92 mg/kg	621.92 mg/kg	1056.47 mg/kg
7	Potassium (as K)	556.27 mg/kg	196.28 mg/kg	398.91 mg/kg
8	Phosphorus	23.19 kg/ha	34.20 kg/ha	27.88 kg/ha

S. No.	Parameter	Quarter II (July-2024 to September -2024)		
		Nimoda Village	Kawai Village	Phulbaroda Village
1	Ammonical Nitrogen (as N)	444 mg/kg	329 mg/kg	305 mg/kg
2	Iron as Fe	10159.29 mg/kg	8734.63 mg/kg	12673.03 mg/kg
3	Manganese as Mn	231.50 mg/kg	300.28 mg/kg	323.63 mg/kg
4	Boron (as B)	935.74 mg/kg	795.57 mg/kg	811.56 mg/kg
5	Calcium (as Ca)	28753.16 mg/kg	4256.75 mg/kg	10735.92 mg/kg
6	Magnesium (as Mg)	1516.79 mg/kg	1218.13 mg/kg	4229.62 mg/kg
7	Potassium (as K)	795.14 mg/kg	848.56 mg/kg	1422.16 mg/kg
8	Phosphorus	23.7 kg/ha	35.3 kg/ha	29.6 kg/ha

Annexure – II

ADANI POWER LIMITED, KAWAI

GROUND WATER LEVEL MONITORING RESULTS

LOCATION: Piezometric Wells Along with Ash Pond

S. No.	Month & Year	Ground Water Table (BGL)		
		Location: 1	Location: 2	Location: 3
1.	April-2024	24.5 Meter	25.0 Meter	31.0 Meter
2.	May-2024	26.0 Meter	27.5 Meter	33.5 Meter
3.	June-2024	27.5 Meter	31.0 Meter	38.5 Meter
4.	July-2024	12.0 Meter	14.5 Meter	21.5 Meter
5.	August-2024	11.0 Meter	12.0 Meter	18.5 Meter
6.	September-2024	10.5 Meter	11.2 Meter	17.5 Meter

Location 1: South of Ash Pond (Nr. Labor Colony)

Location 2: East of Ash Pond (Nr. Ash Recovery Pump House)

Location 3: West of Ash Pond (Nr. Nimoda Railway Crossing)

ADANI POWER LIMITED, KAWAI
2 x 660 MW KAWAI THERMAL POWER PLANT

Annexure-III

FLY ASH GENERATION AND UTILIZATION DETAILS FY 2024-25
(April'2024 to September'2024)

Month	Total Ash Generation	Total Ash utilized	ASH Utilization	For Cement manufacturing	for Brick Manufacturers / Internal usage	Pond Ash For Brick Manufacturers	Pond Ash for Inside plant/Low Lying Areas
	MT	MT	%	MT	MT	MT	MT
April-24	106678	113141	106.06	60987	50	46944	5160
May-24	131275	118318	90.13	72591	50	40677	5000
June-24	128053	663343	51.81	59467	75	4001	300
July-24	126216	96060	76.11	74288	50	1723	0
Aug-24	119043	81797	68.71	66094	50	1654	0
Sept-24	128352	77223	60.16	62330	50	643	1200
Total	739616	552882	74.75	395756	325	956441	11660

Adani Power Limited, Kawai

Annexure: IV

Greenbelt Details:

Area (ha)	No. of Trees Planted	No. of Shrubs Planted
122.0	1,63,750	1,77,000

PLANTED SPECIES IN AND AROUND PLANT PREMISES

Sr. No.	Scientific Name	Common Name
Tress		
1.	Azadirachta indica	Neem
2.	Bauhinia blakeana	Kachnar
3.	Callistemon viminalis	Pink Bottle brush
4.	Casuarina equisetifolia	Saru/Casuarina
5.	Delonix regia	Gulmohar
6.	Phoenix dactylifera	Date Palm
7.	Punica granatum	Pomegranate
8.	Emblica officinalis	Aamla
9.	Eucalyptus hybrid	Eucalyptus
10.	Mangifera indica	Aam/ Mango
11.	Polyalthia longifolia	Ashok/ False Ashok
12.	Psidium guajava	Guava
13.	Syzygium cumini	Jamun
14.	Washingtonia filifera	Washingtonia Palm
15.	Wodyetia bifurcata	Palm
16.	Cassia seamia	Cassia
17.	Albizzia leebeck	Siris
18.	Pongamia pinnata	Karanj
19.	Cordia longifolia	Lasoora
20.	Aegle Marmelos	Bel
21.	Dalbergia sissoo	Shisham
22.	Ficus religiosa	Peepal
23.	Cassia renigera	Cassia
24.	Parkinsonia sp.	Parkinsonia
25.	Cassia pinnata	Amaltas
26.	Alstonia scholaris	Satparni
27.	Citrus nobilis	kinnow
28.	Tectona grandis	Teak
29.	Olea europaea	Olive
Shrubs		
30.	Allamanda	Yellow Bell
31.	Bougainvillea spectabilis	Bougainvillea/ Booganbel
32.	Clerodendrum inerme	Wild Jasmine
33.	Cycas circinalis	Cycas
34.	Euphorbia milii	Christ Thorn
35.	Ficus panda	Fig Tree
36.	Hymenocallis caroliniana	Spider Lily
37.	Ixora hybrida	Ixora
38.	Jasminum molle	Jui
39.	Jatropha curcas	Ratanjyot,
40.	Nerium indicum	Kaner
41.	Nerium odoratum	Kaner
42.	Plumeria alba	Champa
43.	Tecoma	Yellow Trumpetbush
44.	Ziziphus mauritiana	Ber/Bor/Indian plum

Annexure V

adani

Foundation

Corporate Social Responsibility

Adani Power Limited, Kawai

Six-month Report (April 2024- Sept 2024)

Overview of Kawai Site

At present we are working in 28 villages, 14 Gram Panchayats, 2 Block of district Baran.

8,475 household, 42,834 population , 32 Schools, 45 Aanganwadi's, 1 District Hospital, 2 CHC, and 2 PHC.

Cluster details: All 28-village divided in to 4 clusters.

Cluster One (Core Zone)	Cluster Two (Pipe Line Zone)	Cluster Three (Anicut Area)	Cluster Four (Buffer Zone)
• Chatrapura • Baldevpura • Dhara • Nimoda • Khedligaddiyan • Salpura • Kawai • Mukundpura	• Sodalehri • Kharkhada Ramlothan • Dadwara • Bamori • Chothya • Mytha • Hatidilod • Phoollbaroda • Zarkhand	• Atru • Aton • Baldevpura (anicut) • Kunjer	• Aamapura • Bamapura • Lolahedi • Sindhani • Haniheda • Barla • Khedli bansla

Education

- Community Health
- **Education**
- Sustainable Livelihoods
- Community Infrastructure
- Stakeholder engagement

Support to Rural Sports:

- Adani Foundation supported for organizing state level football tournament at Baran. **52 teams** participated, **930 beneficiaries**.
- At district level with support of Adani Foundation, Kabaddi & Volleyball tournament organized in **3** schools. **73 teams** participated with **790** beneficiaries.
- Adani Foundation supported **26 students** from **4** schools for state level tournament.

JNV Coaching:

- **2** centers started in Kharkara R. and Kawai for JNV coaching with total of **80** students.

Celebration of **Swacchta Hi Seva 2024 campaign** in various schools by conducting various activity like Awareness sessions, rally, cleanliness drive, oath etc.

Glimpse of educational activities

Coaching center for JNV selection test.

Support to district tournament.

Swachta Hi Seva campaign 2024

Adani Vidyalaya, Kawai

- The school reopens after summer vacation and a welcome activity was conducted with the student in which they had to look at the other, think and write something.
- Days with great significance around the globe was celebrated including Doctor's Day, International Plastic Bag Free Day, Malala Day & Kargil Vijay Diwas, Independence Day, Janmashtami, Raksha Bandhan were celebrated with students' participation and engagement. National Sports Day was celebrated on 30/08/24. Children played different games.
- AVK celebrated International Yoga Day with students participating in yoga.
- A fireless cooking competition has been organized in which students along with their parents participated. Also, Lemon and salad making competition was organized this month
- An electric safety awareness program has been conducted by the APL-Kawai team in which the students were made aware off and demonstrated the electric safety ways.
- Internal training of Art of questioning & phonics session was conducted.
- Extra class for Priya students- To enhance academic performance of the weak students. (13).
- For enhancement of teacher's performance, micro teaching session and weekly staff meeting organized.
- **Tree Plantation**: Students have actively participated in plantation activity conducted on 10-08-24. This activity fosters a sense of responsibility and connection to nature among students.
- Microteaching helps teachers become more effective educators by allowing them to practice, reflect, and improve their teaching methods in a supportive environment.
- Students of AVK participated in the district-level Chess and Skating Competition held in Baran District on 17-09-24 and qualified for State level competition (Skating).

Glimpse of activities carried out in AVK in 6 months.

Community Health

- **Community Health**
- Education
- Sustainable Livelihoods
- Community Infrastructure
- Climate Action

- Total **OPD** in **MHCU** is **20,375** patients (10625 Male & 9750 Female) against the half yearly target of **16820**.
- **50** Special health camp (on Saturday) organized in multiple location. **2123** patients benefited (**991** Male & **1132** Female). **25** school health camp.
- **52** Home visit done by MHCU team at CSR villages for bedridden patients.
- **45** Awareness sessions by MHCU doctor and team, **816** participants.
- Sugar test - **210** and BP test- **420**. **7 patients** are referred to government hospitals for further treatment.
- Blood donation camp organized on **24 June 2024**. 7 blood bank came and total **579** people donated blood. It included employees, their family members, agency, contractor, local communities and other.
- "**Swachhta Hi Seva Campaign 2024**" was celebrated by doing various activities at the school and community level by doing activities like: Swachhta shapath, cleanliness drive and rally, health camp etc.

Glimpse of health-related activities & blood donation camp.

COMMUNITY HEALTH : Case Study (1)

Name	Lalchand S/O Panna Lal Gujar
Age	85 years (male)
Village	Kharkhara Ramlothan
Health Issue	Chronic non healing ulcer; Immobilize Elderly Patient pus Mugg foul smelling
Intervention	Tests, medicine, proper guidelines for diet & timely follow-ups

Family Background: - Lalchand resides in Kharkhada Ramlothan, Baran District Rajasthan. By profession was a private teacher. He has two son and all stay in a joint family. The son takes care of their father however having limited source of income, affording medical expenses had become a burden for them.

Medical History: Lalchand has been a chronic smoker of Bidi all his life. His addiction had led him to consume two bundle along with tobacco & chuna. With time he developed ulcer that too recurring in nature. There was no significant medical issue in his past but this has affected him at his worst. As patient was smoker and with poor life style and advance age he developed narrowing of peripheral vassals due to above patient land up in high grade fever with elevated WBC counts elevated patient was immobilized and his left calf was boggy and pustular foul smelling and mugs was crawling.

Investigation:- RBS , BT, PT , APTT, CBC, Urine Microscopy , Culture, LFT, ESR CRP, Pus culture, angiography, 2D echo .

CBC result: - WBC 21000, RBC 3*10, HGB 7gm, PLT 75000

LFT result: - ALT 19, Subtilisin: - 1.3, SGOT; - 9, SGPT: - 12,

ESR result: - 45, CRP: - 34

Main Clinical Diagnosis; - Peripheral artery diseases (artery ulcer on medial aspect), Treatment: - Tab linezolid 600mg BD for 7 days, Amoxicillin and potassium clavulanate 625 TDS 7 days and BD 7 days, B complex tablet, Multivitamin tablet, Zinc + Vitamin C tablets for 6 week and cleaning and dressing. continue. Advise: - Doctor advise her to change position every three hour and take a proper well recommended daily allowance diet, keep proper hygiene and maintain a proper ventilation.Follow Up: - Doctor kept her on same treatments for three more week and reviewed every weekly.

COMMUNITY HEALTH: CASE STUDY (2)

Name	Kanya Bai W/o Mangi Lal Meena
Age	70 years
Village	**Barla**
Medical Condition	**Chronic Diarrhea**

Family Background: Kanya Bai, 70-year-old widow women lives with her son Ramesh Meena in Barla Village, Baran, Rajasthan. It has been 5 years since her husband passed away. She belongs to a tribal community. By profession her son is a marginalized farmer and his income quite low making it hard to meet their daily needs. In such situation, it is a great burden on his shoulder to bear the medical expenses of his mother as she completely depends on him for everything.

Medical Condition: Kanya Bhai has been blind for an extended period now and recently developed persistent diarrhea. She is suffering from Diarrhea and abdominal pain since last one and a half month. Her condition required immediate medical attention due to the risks associated with dehydration and complications from untreated diarrhea.

3.Treatment and Care: Kanya Bai has been a regular visitor in the MHCU and is getting benefited of service since last 6-7 years for different issues, The treatment plan included: Diagnosis and Assessment, Fluid and Electrolyte Management, Medication, the doctor gave her Lactic Acid Bacillus Tab 2-tab 3 times a day, Norfloxacin (400) + Tinidazole (600) 2 times in a day and ORS one and half month. Administration of appropriate medications to treat the diarrhea, considering her age and any other existing health conditions. Further nutritional Support was provided and monitoring and supportive care.

Outcome: Under the care of MHCU, Kanya Bai responded well to the treatment. Her diarrhea was effectively managed, and she showed signs of improvement in her overall health. Close monitoring helped prevent complications, and instructions for follow-up care to ensure continued recovery and management of her conditions. The case of Kanya Bai underscores the importance of timely medical intervention and comprehensive care, particularly for elderly patients with multiple health challenges. Adani Health Care Unit's holistic approach of treatment and supportive care played a crucial role in restoring her health and quality of life despite her age and blindness. She is very happy and satisfied with MHCU treatment. She is thankful to the Adani Foundation for providing quality treatment at village level with consistency over several years and shows her gratitude wholeheartedly.

adani Foundation

Sustainable Livelihoods

- Community Health
- Education
- **Sustainable Livelihoods**
- Community Infrastructure
- Stakeholder engagement

❖ Kamdhenu Project details:

Artificial Insemination	**474**
Pregnant Cattle	**285**
Calf Born	**266**
Animal Health camp (4 villages)	**600** beneficiary

❖ From **47** milk collection center, the total milk collection **481839** liter with the total revenue of INR **2.56** Cr.

❖ Total household benefitted- **674**. With an average monthly income per family of **INR 12611 (sept'24- milk value 85 lakh).**

❖ The FPO shareholder count has reached to **572**.

❖ Krishi Mart- Intervention in agriculture activities.

❖ Capacity building sessions with FPO shareholders; **113** participated.

Glimpse of Sustainable Livelihood development activities.

F1 cattle

Kamdhenu Project

FORM III

JOINT DIRECTOR AGRICULTURE (EXTENSION) ZILA PARISHAD BARAN

LICENCE TO SELL, STOCK OR EXHIBIT FOR SALE OR DISTRIBUTE INSECTICIDES

[See sub-rules (4) of rule 10]

Licence No. : **SL/Baran/DD/2024-25/334** Issue Date : **14/05/2024**

1. License to sell, stock or exhibit for sale or distribute insecticide(s) in the premises situated at :-
Shramik Colony, Adani Power Limited Kawai, Kawai, Baran, Rajasthan is granted to **HADOTI PRAGATISHEEL PRODUCER COMPANY LIMITED** ,
as specified hereunder:- As per Annexure

2. The insecticide(s) shall be sell, stock or exhibit for sale or distribute insecticide(s) under the direction and supervision of the following staff:
a) **PRATIKSHA SHARMA ,B.Sc. Agriculture** .

3. The License is subject to such conditions as may be specified in the rules for the time being in force under the Insecticides Act, 1968 as well as the conditions on the certificate of registration and others as stated below.

Signature of the Licensing Officer Seal

Scan to verify this licence

Licenses @Krishi Mart

Dairy Development

Milk Collection Center

SLD: Impact story 1

My cattle: The Companions to my sustainable livelihood journey.

Malkhan singh meena from Village- Kharkhara Ramlothan shares his story of how he was able to continue his livelihood because of the Kamdhenu Program, Lets hear his story in his own words:

"My family is dependent on agriculture and animal husbandry. In the last one-decade climate change a big challenge in agriculture due to low and heavy rainfall in area has affected us adversely. Now farmers are thinking about rearing improved breed cattle and diverting for second way of income generation.

Adani foundation started Kamdhenu project in 2017 for providing doorstep artificial insemination service for their cattle and animal health care services.

In my village more than 100 farmers benefited from Kamdhenu project like - cattle Artificial insemination service, vaccination, deworming, feed supplementary and green fodder etc.

First time I met to Mr. Ganesh center incharge of Kamdhenu center Bamori and he motivated me for adopt artificial insemination service in cattle and I take AI service on 28. 09. 2019 for breeding of my ND cow.

After 278 days of AI a healthy female calf delivered at my home who is improved breed calf. After 32 month my female calf is comes in heat and I called to Mr. Ganesh for AI service and after 09 month again we got a calf in family and milk production started from first female.

First time milk production of female is high than her mother and my family income increased around 20,000 from these interventions.

I am very happy and giving thanks to Adani foundation for introducing Kamdhenu project and providing better opportunities to farmers."

Story of Shehnaz Bano: A step towards empowerment

Shahnaz bano hails from Khedali village near to Adani power plant in Atru tehsil of Baran district Rajasthan. She became a part of the livelihood enhancement camps set up by Adani Foundation in her area. That was where she learnt more about the different ways in which they are planning to empower women primarily in the dairy business because there was no milk collection center in the village.

Even people didn't know what to do with the excess milk production by their cattle because of which animal husbandry was not looked at as a profitable business by people. That is when Hadoti Pragatisheel Producer Company Limited - FPO was formed by the Adani foundation and since she had keen interest in the field, she was made a board member of FPO. Hailing from a Muslim minority community, women didn't really go out of their homes for work, but she brought about a change and 50 women of the community to become a part of FPO.

In August 2022, she and her team started a Milk Collection Centre in her village and slowly more and more women became a part of this movement and the business is scaling new heights.

"*Today, I can proudly say that everyday 200 liters of milk is being collected from my village which has resulted in an earning of Rs 2.0 lakh every month. Today, more than 40 new animals purchased by villager in this tenure. I am a leading example of how as a female I have not only changed my life but also the lives of many women of my community,*"- Shahnaz Bano.

At present Shahnaz and her villagers are giving thanks to Adani foundation for provide platform for selling of surplus milk at village and increase the livelihood of farmers.

SLD: IMPACT STORY 3

Meet Raghuveer Meena, a resident of Dadwada village, Baran district, Rajasthan. By profession he is a farmer and is leading a satisfied life today. With his earning at present, he can fulfill his family needs and carry out his responsibility well. However, when he looks 4-5 years back, he recalls that the picture was not the same. He has seen hardships to save the income and meet his family's end need for a long time.. In his search for a stable livelihood & lifestyle way which will also be sustainable in nature, he crossed ways with Adani Foundation, Kawai. To enhance the knowledge & motivate, SLD team organized exposure visits of KVK, Kota, and conducted awareness sessions for farmers including Raghuveer.

Adani foundation was not only a helping hand but also gave a ray of hope to him. He trusted the process and let them come with their main intervention. Under the SLD program, he was provided biogas. In earlier days 1 gas cylinder use to be consumed within a month giving him financial crunch. After the biogas installation the issue has been resolved. Alongside, plant of lemon and orange was also made available from the SLD team of AF-Kawai with continuous monitoring. Today, the plants have started giving fruits and by selling them his income has increased by INR 8000-10,000. Today not just his financial status has been stabilized but he is also able to enjoy life and stay happy with his family without having much tension of future as he is also saving simultaneously.

Not just the words he spoke but also his eyes depict the gratitude he has for Adani Foundation and presented his sincerely thanks the team for intervening and making his life better in many ways.

Community Development

Construction work of crematorium at Nimoda Village (Core Village 663 HH) work in progress.

Climate Action

- Community Health
- Education
- Sustainable Livelihoods
- Community Infrastructure
- Climate Action

Mass Plantation:

- Total no of sapling under mass plantation is **79066** against target of 12400**.**
- At Kunjed, under mass plantation drive **7400** forestry plantation has been done.
- With support of AF **66666** mass plantation has been done in **150** schools in collaboration with education department.

Wadi Development:

- AF has developed **80** wadis, fruiting & income generation started in **30** wadis. **5000** orchard plantation in FY.
- Training to the farmers on wadi development: **100** beneficiaries.

Plantation: *Harit Paryavaran ki Ek Pahal*

Mass tree plantation.

Hariyalo Baran, school level mass plantation.

Wadi development project.

Media Coverage (Total media coverage till sept'24 is 252)

अदाणी फाउंडेशन की पहल से राजस्थान के ग्रामीण इलाकों में पानी की आपूर्ति बढ़ी

नई दिल्ली (एजेंसी)। अदाणी फाउंडेशन ने अदाणी ग्रीन एनर्जी लिमिटेड के सहयोग से पश्चिमी राजस्थान के सूखाग्रस्त जिलों, जैसलमेर और बाड़मेर में जल संरक्षण के लिए बड़े कदम उठाए हैं। पिछले तीन सालों से, फाउंडेशन इस क्षेत्र में पानी जमा करने की क्षमता को बढ़ाने के लिए लगातार काम कर रहा है, जहां पानी की कमी एक बड़ी समस्या है। साल 2024-25 में, अदाणी फाउंडेशन ने बाड़मेर जिले के पुसड, फतेहपुरा, मोगेराय, हड़वा और जूनजो की ढाणी गांवों के साथ-साथ जैसलमेर जिले के सांवा, लावां, पुरोहित और भीमसर गांवों में 10 तालाबों की खुदाई की है। इन प्रयासों से तालाबों की पानी जमा करने की क्षमता में 67,000 घन मीटर से भी ज्यादा का इजाफा हुआ है। अब तक, फाउंडेशन की जल संरक्षण गतिविधियों से इस क्षेत्र के कुल 38 तालाबों की खुदाई द्वारा 2.66 लाख घन मीटर से ज्यादा संचयन क्षमता बढ़ चुकी है, जिससे गांव वालों और उनके पशुओं के लिए पानी की उपलब्धता बेहतर हुई है। इन कामों की सराहना करते हुए, हाल ही में देगराय मंदिर ओरण संस्थान ने अदाणी फाउंडेशन और अदाणी ग्रीन एनर्जी लिमिटेड को उनके बेहतरीन जल संरक्षण कार्य के लिए सम्मानित किया। अदाणी ग्रीन एनर्जी लिमिटेड के उपाध्यक्ष आलोक चतुर्वेदी ने बताया कि कंपनी क्षेत्र के पानी की समस्या को लेकर गंभीर है, और इसीलिए जल संरक्षण को उन्होंने अपनी सामाजिक जिम्मेदारी का हिस्सा बनाया है। राजस्थान के सी एस आर प्रमुख गोपाल सिंह देवड़ा ने कहा कि फाउंडेशन के जल संरक्षण प्रयासों का मकसद इस क्षेत्र का पर्यावरण सुधारना और यहां की वनस्पति और जीवों को बढ़ावा देना है, जिससे यहां के लोग खुशहाल हों और क्षेत्र में समृद्धि आए।

अदानी फाउंडेशन द्वारा अटरू में स्वास्थ्य जाँच शिविर आयोजित

अटरू। आज दिनांक 21/9/24- को अदानी फाउंडेशन कवाई द्वारा बरसात के बाद हो रहे मौसम परिवर्तन एवं मौसमी बीमारियों को देखते हुये अटरू के महात्मा गाँधी राजकीय विद्यालय एवं पीएम श्री राजकीय उच्च माध्यमिक विद्यालय में अदानी के स्वास्थ्य परियोजना अधिकारी एवं MHCU प्रभारी दीपक मालवीय के नेतृत्व में अदानी चल चिकित्सा इकाई के माध्यम से स्वास्थ्य जाँच शिविर आयोजित किया।
महात्मा गांधी राजकीय विद्यालय के रूपेश गुप्ता ने बताया कि शिविर के दौरान सभी छात्र/ छात्राओं का वजन, लम्बाई एवं स्वास्थ्य जाँच कर आवश्यक दवाइयां वितरित की साथ ही चिकित्सा टीम के डॉ घिसवन्त द्वारा बच्चो को मौसमी बीमारियों एवं उनसे बचाव आदि के बारे में जागरूकता भी प्रदान की गयी।दोनो विद्यालयो में शिविर के माध्यम से लगभग महात्मा गांधी विद्यालय में 130 छात्राओं एवं पीएम श्री उच्च माध्यमिक में 140 छात्र, छात्राओं का स्वास्थ्य परीक्षण किया गया।शिविर के दौरान अदानी फाउंडेशन से विवेक शर्मा, रवि शर्मा, अरविंद मीना एवं महात्मा गांधी विद्यालय से ओम प्रकाश नागर, जितेंद्र सिंह, मनीष नागर, चेतन्या कुमारी तथा राजकीय उच्च माध्यमिक विद्यालय अटरु से शिवप्रसाद नागर, चंद्र सिंह चौधरी, मुकेश गुर्जर आदि ने सहयोग प्रदान किया।पीएम श्री विद्यालय प्राचार्य श्री चंद्रमोहन मीना एवं महात्मा गाँधी विद्यालय प्राचार्य हरिश कुमारी द्वारा समय समय पर अदानी फाउंडेशन द्वारा स्वास्थ्य जाँच शिविर आयोजन एवं अन्य सहयोग हेतु विद्यालय ... प्रकट किया।

अदाणी फाउंडेशन के 28वें स्थापना दिवस पर वृक्षारोपण अभियान का शुभारंभ इस वर्ष राजस्थान में 103900 का लक्ष्य

जयपुर (उदय टुडे)। अदाणी समूह प्रमुख गौतम अदाणी द्वारा वर्तमान समय ने विश्व स्तर पर पर्यावरण असन्तुलन की गंभीर स्थिति को देखते हुए पर्यावरण संतुलन में अहम् भूमिका निभाई है। उन्होंने वर्ष 2030 तक 100 मिलियन वृक्षारोपण का लक्ष्य रखा है।अभी के समय मे पर्यावरण संतुलन बिगड़ा हुआ है, जिससे समस्त विश्व के लिये दिन-प्रतिदिन नई-नई समस्याएँ बढ़ती जा रही हैं। इसका प्रभाव सभी घटकों पर देखा जा सकता है, जिससे सम्पूर्ण विश्व चिंतित है। राज्य सरकारें, केंद्र सरकारें एवं विश्व स्तर पर यह एक चुनौती बना हुआ है, जिसमें सभी का योगदान अपरिहार्य है। सरकारों के साथ-साथ आमजन की भी भागीदारी इसमें आवश्यक है। राष्ट्र निर्माण में भागीदारी एवं सामाजिक सरोकार के उद्देश्य से गौतम अदाणी द्वारा इस वैश्विक समस्या में अपना योगदान देते हुए अदाणी की विभिन्न इकाइयों एवं संगठनों के माध्यम से इस वर्ष से वृक्षारोपण अभियान का आगाज किया है। अदाणी फाउंडेशन की अध्यक्षा श्रीमती डॉ. प्रीति अदाणी द्वारा अदाणी फाउंडेशन के सामाजिक सरोकार के कार्यों के माध्यम से इस लक्ष्य को सभी के साथ एवं सभी के सहयोग से पूर्ण करने का बीड़ा उठाया है। इसी लक्ष्य के अंतर्गत श्रीमती प्रीति अदाणी के मार्गदर्शन में अदाणी फाउंडेशन के सामाजिक सरोकार के कार्यों के सफलतापूर्वक 28वीं वर्षगाँठ के अवसर पर आज से वृक्षारोपण अभियान का शुभारंभ ग्राम पंचायत कुंजेड से ग्रामीणों, नरेगा महिला श्रमिकों एवं अन्य पंचायत कार्मिकों एवं राजकीय कर्मचारियों की मौजूदगी में किया है, जिसमें आज लगभग 100 पौधों का रोपण किया है। इस अवसर पर कुंजेड सरपंच श्रीमती राजेश पाटनी, गोपाल सिंह देवड़ा (अदाणी फाउंडेशन, राजस्थान हेड) पूर्व सरपंच एवं समाजसेवी प्रशान्त पाटनी, विनोद लसोड़ (अदाणी फाउंडेशन, अहमदाबाद), दीपक मालवीय, रामनरश चौधरी, वसीम मौजूद रहे। गोपाल सिंह देवड़ा ने बताया कि 2030 तक 100 मिलियन वृक्षारोपण लक्ष्य अंतर्गत इस वर्ष के लिए राजस्थान के कवाई एवं जैसलमेर क्षेत्र में अदाणी फाउंडेशन द्वारा इस वर्ष सर्वजन के हित के लिए कार्य हेतु सामाजिक सरोकार के कार्यों के माध्यम से कवाई क्षेत्र में शिक्षा विभाग के साथ मिलकर अटरू क्षेत्र के राजकीय विद्यालयों में विद्यालय परिवार, बच्चों एवं ग्रामीणों के समन्वय से लगभग 66000 वृक्षारोपण, आजीविका विकास कार्यक्रम अंतर्गत बागवानी विकास कार्यक्रम में लगभग 5000 पौधों का ग्रामीणों को वितरण, अदाणी पॉवर लिमिटेड परिसर में कर्मचारियों द्वारा लगभग 20000 वृक्षारोपण, अदाणी दुग्ध संकलन केंद्र पर 600 वृक्षारोपण, ग्रामीण विकास कार्यक्रम अंतर्गत ग्राम पंचायत कुंजेड में ग्राम पंचायत एवं ग्रामीणों के सहयोग से लगभग 7300 पौधरोपण किए गए।

हरे चारे की किल्लत के बीच गोवंश के लिए संजीवनी है सुपर नेपियर घासः अदाणी फाउंडेशन

हाड़ौती

अडानी फाउंडेशन द्वारा विश्व दूध दिवस का आयोजन

adani

Foundation

THANK YOU

adani
Power

Ref: APL-Kawai/PK/GOVT/RSPCB/00684

Date: 26.09.2024

To,
The Member Secretary
Rajasthan State Pollution Control Board,
4, Institutional Area, Jhalana Doongri,
Jaipur – 302004

Subject: **Environmental Statement for the Financial Year 2023 – 24**
Ref: Consent to Operate Order No. 2023-2024/Power/6 dated 20.02.2024

Dear Sir,

With reference to the above subject, kindly find enclosed herewith the Environmental Statement for financial year 2023-24, along with Form–V prescribed under Rule 14 of the Environment (Protection) Rules 1986, in respect of Kawai Thermal Power Station.

This is for your kind information and record please.

Thanking You,

Yours Sincerely,
For Adani Power Limited, Kawai

26.09.24.
(Authorized Signatory)

Encl-As above

Cc: The Regional Officer
Rajasthan State Pollution Control Board
Room No. 345, to 347 Mini Secretariate
Jhalawar – (Rajasthan)

Adani Power Limited
NH 90, Atru Road
Village Kawai, Tehsil Atru
Baran 325 219
Rajasthan, India
CIN: L40100GJ1996PLC030533

Tel +91 744-27-78600
www.adanipower.com

ENVIRONMENT STATEMENT

FOR FINANCIAL YEAR

2023 – 2024

1320 (2×660) MW

KAWAI THERMAL POWER PLANT

Submitted to:

Rajasthan State Pollution Control Board

Submitted By:

adani

Power

ADANI POWER LIMITED, KAWAI

Village: Kawai, Taluka: Atru

Baran, Rajasthan

ENVIRONMENTAL STATEMENT

FORM V
(See Rule 14)

From:
Adani Power Ltd. Kawai
Village: Kawai, Taluka: Atru
District: Baran,
Rajasthan – 325 219

To:
The Member Secretary,
Rajasthan State Pollution Control Board,
4, Institutional Area, Jhalana Doongri,
Jaipur – 302 004

Environmental Statement for the financial year (April 2023 to March 2024)

PART - A

i) Name and address of the owner / occupier of the industry Operation or Process

- Name : Sh. Pramod Saxena (Station Head)
- Address : NH-90, Atru Road, Village Kawai, Tehsil Atru, Distt. Baran 325219 (Rajasthan)

ii) Industry category
- Primary- (STC Code) : 08AAGCA9379P1ZP (Large Scale Industry – Red Category)
- Secondary- (SIC Code) : - NA

iii) Production Capacity-Units : 1320 MW (2 x 660MW) Electricity Generation

iv) Year of establishment :
Unit#1 Commissioned on 28th May 2013
Unit#2 Commissioned on 31st December 2013
(Consent to operate is valid up to 28.02.2029).

v) Date of the last environmental statement submitted: **26.09.2023.**

PART B

Water and Raw Material Consumption:

1. Water consumption **m^3/d**
   a) Process : 764.44
   b) Cooling : 46987.09
   c) Domestic : 612.65

Name of Products	Process water consumption per unit of product output	
	During the previous financial year (2022-23)	During the current financial year (2023-24)
	(1)	(2)
Power	2.41 KL/MWh	2.46 KL/MWh

2. Raw Material Consumption

Name of Raw Materials*	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year (2022-23)	During the current financial year (2023-24)
(1) Coal	Power	566.53 gm/kwh	578.75 gm/kwh
(2) Fuel Oil	Power	0.05 ml/kwh	0.04 ml/kwh

*Industry may use codes if disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw material used.

PART C

Pollution discharged to environment / unit of output:

(Parameter as specified in the consent issued)

Sr. No.	Pollution	Quantity of pollutants discharged (mass/day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a)	Water	Nil	NA	NA
(b)	Air (Particulate Matter in mg/Nm^3)	**Unit#1:** 2.37 TPD **Unit#2:** 2.58 TPD	**Unit#1:** 32.61 **Unit#2:** 34.81	Within Limit specified in CTO

- **Water-** No discharge of wastewater. Plant is designed on Zero Discharge concept.

Note- 100% effluent is treated and recycled back. Hence, there is no discharge of effluent in the environment.

PART - D

Hazardous Wastes:

(As specified under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016).

Sr. No.	Hazardous Wastes	Total Quantity	
		During the previous financial year (2022-23)	During the current financial year (2023-24)
a)	From Process • Used/Spent Oil	• 18.597 KL (Generated) • 19.259 KL (Disposed) • 0.38 KL (Balance)	• 197.436 KL (Generated) • 197.816KL (Disposed) • 0.0 KL (Balance)
	• Discarded Containers	• 96 Nos. (Generated) • 0 Nos. (Sold Out) • 102 Nos. (Balance)	• 0 Nos. (Generated) • 0 Nos. (Sold Out) • 0 Nos. (Balance)
b)	From pollution control facilities	NA	NA

PART – E

Solid Wastes:

Sr. No.	Solid Wastes	Total Quantity (Tons)	
		During the previous financial year (2022-23)	During the current financial year (2023-24)
a)	From Process (Bottom Ash)	2,45,338 (Disposed to Bricks manufacturers)	2,68,106 MT (Disposed to Bricks manufacturers)
b)	From pollution control facilities (Ash from ESP)	10,17,371 MT (Dispose to Cement manufacturer)	9,44,549 MT (Dispose to Cement manufacturer)
c)	Quantity recycled or re-utilized within the unit recycled or re-utilized		
	Disposal in reclamation of low-lying area within Plant premises	1,17,940 (In reclamation of low-lying area within Plant premises)	54,309 MT (In reclamation of low-lying area in Plant premises)

PART – F

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

- Hazardous waste (Used/Spent oil) is being disposed through authorized recyclers. (Please Refer Part - D for Hazardous waste generation and disposal)
- Fly Ash utilized by following Industries.
  - ACC Ltd.
  - Ambuja Cement Ltd.
  - Birla Corporation Ltd.
  - JK Cement Ltd. Mangrol
  - JK Cement Ltd. Nimbahera
  - JK Lakshmi Cement Ltd.
  - Jagdish Jindal & Company
  - Karnee Enterprises
  - Mangal Road lines
  - Nuvoco Vistas Corporation Ltd.
  - Shri Ishwardas Transport
  - Udaipur Cement Works Ltd.
  - Ultratech Cement Ltd.
  - Ultratech Nathdwara Cement Ltd.
  - Wonder Cement Ltd.
  - Dev Agency
  - Kalpataru Enterprise

PART – G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.

- Kawai Thermal Power Station of Adani Power Limited is based on super critical technology of power generation, which is cost effective and reduce the consumption of both natural resourced raw materials, Water & Coal.
- The stack emissions from the plant are controlled by high efficiency Electrostatic Precipitator (ESP).
- Chimney of 275 m height is constructed.
- Other pollution control equipment's like Dust Extraction System & Dust Suppression System are installed at various material transfer points to control fugitive emissions.
- Real time monitoring system for both EQMS & CEMS installed as per the direction of CPCB/RSPCB issued, under Air & Water Act.
- Utilization of rainwater collected during monsoon from rainwater harvesting pond.
- Recycling and reusing of treated water in plant operation.

- Organic waste is being utilized in organic waste converter machine to further manure development.
- Wastepaper is being recycled through paper recycling machine.

PART – H

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

- Installation of Flue Gas Desulphurization (FGD) unit to reduce SO_2 emission as per CPCB direction.

PART - I

Miscellaneous

Any other particulars in respect of Environmental Protection and abatement of pollution.

1. 1,41,240 trees and 1,76,000 shrubs planted up to financial year 2023-24 with 90% survival. Regular plantation is being carried out within plant premises.
2. Ambient air quality monitoring by RDS & Fine Particulate Sampler is carried out at 3 locations within plant premises as per CPCB guidelines.
3. Continuous Ambient Air Quality Monitoring carried out at 3 locations within the plant premises.
4. Continuous Emission Monitoring System is installed and under operation at 80 m height in both the flue cane of 275 m Chimney.
5. Ambient noise levels are being monitored at 10 identified locations within the plant premises.
6. Integrated Management System implemented (QMS as per ISO 9001:2015, EMS as per ISO 14001:2015, OH&S as per ISO 45001:2018, EnMS as per ISO 50001:2018 & WEMS as per 46001:2019) is implemented at Kawai Thermal Power Station and certified by TUV NORD CERT GmbH
7. Good housekeeping is maintained in and around the plant area. 5S initiative is taken up at Kawai Thermal Power Station.
8. Harness of solar energy is introduced by installation of Solar Street Light.
9. CTO compliance report is being submitted to RSPCB on quarterly basis.
10. EC Compliance report is being submitted to RSPCB/MoEF&CC on six monthly.
11. 5S Implementation for waste minimization
12. Single use plastic is banned in plant premises.
13. Environment Monitoring is being carried out by MoEF&CC & RSPCB approved Environment Laboratory on quarterly basis.

26.09.24.

Authorized Signatory
(Adani Power Limited)

Annexure VII

National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

ENVIRONMENTAL LABORATORY, ADANI POWER LIMITED, KAWAI

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

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

for its facilities at

VILLAGE: KAWAI, ATRU, BARAN, RAJASTHAN, INDIA

in the field of

TESTING

Certificate Number: TC-12493

Issue Date: 23/10/2023 **Valid Until:** 28/03/2025

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.
(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Entity: ADANI POWER LIMITED

Signed for and on behalf of NABL

N. Venkateswaran
Chief Executive Officer

Adani Power Limited, Kawai

Annexure-VIII

Expenditure for Environmental Protection & CSR

(Fig. in Rs. Lacs)

Sr. No.	Particular	Expenditure from (April'2024 to September'2024)
1.	Rural Development/CSR Activities (Education, community health, Sustainable Livelihood, community Infrastructure development etc.)	297.60
2.	Green belt Development (Horticulture)	71.61
3.	Third party monitoring, Services and Equipment & Instruments maintenance, Communication cost.	14.25
4.	Cost involved in emission treatment and disposal (AHP, ETP, CHP etc.)	667.42
Total		**1050.88**

Annexure IX

भारत सरकार
Government of India
वाणिज्य और उद्योग मंत्रालय
Ministry of Commerce & Industry
पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)
Petroleum & Explosives Safety Organisation (PESO)
आम्रपाली सर्कल, पावर हाउस के पास, वैशाली नगर
जयपुर- 302021
Amrapali Circle, Near Power House, Vaishali Nagar,
Jaipur - 302021

E-mail : **dyccejaipur@explosives.gov.in**
Phone/Fax No : **0141 - 2356731,2356781**

संख्या /No. : **P/HQ/RJ/15/2337 (P295058)**

दिनांक /Dated : **30/12/2022**

सेवा में
/To,

M/s. M/s Adani Power Rajasthan Limited.,,
Kawai Thermal Power Project Near Salpura Railway S,
Kawai,
Kawai,
Taluka: Atru,
District: BARAN,
State: Rajasthan
PIN: 325219

विषय /Sub : **Plot No, Plot No. 504, Khasara No. 1337, Survey No. 1337,, NA, Village-Kawai, Teh-Atru,, Antah, Taluka: Atru, District: BARAN, State: Rajasthan, PIN: 325219** में स्थित विद्यमान पेट्रोलियम वर्ग **B,C** अधिष्ठापन में अनुज्ञप्ति सं **P/HQ/RJ/15/2337 (P295058)** के नवीकरण के संदर्भ में ।
Existing Petroleum Class **B,C** Installation at **Plot No, Plot No. 504, Khasara No. 1337, Survey No. 1337,, NA, Village-Kawai, Teh-Atru,, Antah, Taluka: Atru, District: BARAN, State: Rajasthan, PIN: 325219** - Licence No. **P/HQ/RJ/15/2337 (P295058)** - **Renewal** regarding.

महोदय
/Sir(s),

कृपया आपके पत्र क्रमांक **OIN1245678** दिनांक **26/12/2022** का अवलोकन करें ।
Please refer to your letter No.: **OIN1245678**, dated **26/12/2022**

अनुज्ञप्ति संख्या **P/HQ/RJ/15/2337 (P295058)** दिनांक **16/04/2019** को दिनांक **31/12/2032** तक नवीनीकृत कर इस पत्र के साथ अग्रषित की जा रही है ।
Licence No. **P/HQ/RJ/15/2337 (P295058)** dated **16/04/2019** is forwarded herewith duly renewed upto **31/12/2032**.

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कडाई से पालन करें । अनुज्ञप्ति के नवीकरण हेतु समस्त दस्तावेजों को अनुज्ञप्ति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व कार्यालय को प्रेषित करें ।
Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence **so as to reach this** office on or before the date on which Licence expires.

कृपया पावती दें।
Please acknowledge the receipt.

भवदीय /Yours faithfully,

((डॉ. जी. के. पाण्डे)
(Dr. G. K. PANDEY))
विस्फोटक नियंत्रक
Controller of Explosives
कृते उप मुख्य विस्फोटक नियंत्रक
For Dy. Chief Controller of Explosives
जयपुर/Jaipur

Note:-This is system generated document does not require signature.
(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : http://peso.gov.in देखें)
(For more information regarding status,fees and other details please visit our website: http://peso.gov.in)

प्ररूप XV
(प्रथम अनुसूची का अनुच्छेद 6 देखिए)
FORM XV
(see Article 6 of the First Schedule)

अधिष्ठापनों में पेट्रोलियम के आयात और भंडारकरण के लिए अनुज्ञप्ति
LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

अनुज्ञप्ति सं. (Licence No.) : **P/HQ/RJ/15/2337(P295058)** फीस रूपए (Fee Rs.) **56250**/- per year

M/s. M/s Adani Power Rajasthan Limited.,, Kawai Thermal Power Project Near Salpura Railway S, Kawai, Kawai, Taluka: Atru, District: BARAN, State: Rajasthan, PIN: 325219 को केवल इसमें यथा विनिर्दिष्टु वर्ग और मात्राओं में पेट्रोलियम **7075.00 KL** आयात करने के लिए और उसका, नीचे वर्णित और अनुमोदित नक्शा संख्या **P/HQ/RJ/15/2337(P295058)** तारीख **07/07/2017** जो कि इससे उपाबद्ध हैं, में दिखाए गए स्थान पर भण्डारकरण के लिए पेट्रोलियम अधिनियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुज्ञप्ति की अतिरिक्त शर्तों के अधीन रहते हुए, यह अनुज्ञप्ति अनुदत्त की जाती हैं ।

Licence is hereby granted to **M/s. M/s Adani Power Rajasthan Limited.,, Kawai Thermal Power Project Near Salpura Railway S, Kawai, Kawai, Taluka: Atru, District: BARAN, State: Rajasthan, PIN: 325219** valid only for the importation and storage of **7075.00 KL** Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No **P/HQ/RJ/15/2337(P295058)** dated **07/07/2017** attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

यह अनुज्ञप्ति 31st day of December **2032** तक प्रवृत रहेगी ।
The Licence shall remain in force till the 31st day of December **2032**

पेट्रोलियम का विवरण /Description of Petroleum	अनुज्ञप्त मात्रा (किलोलीटरों में) /Quantity licenced in KL
वर्ग क प्रपुंज पेट्रोलियम /Petroleum Class A in bulk	**NIL**
वर्ग क प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class A, otherwise than in bulk	**NIL**
वर्ग ख प्रपुंज पेट्रोलियम /Petroleum Class B in bulk	**75.00 KL**
वर्ग ख प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class B, otherwise than in bulk	**NIL**
वर्ग ग प्रपुंज पेट्रोलियम /Petroleum Class C in bulk	**7000.00 KL**
वर्ग ग प्रपुंज पेट्रोलियम से भिन्न /Petroleum Class C,otherwise than in bulk	**NIL**
कुल क्षमता /Total Capacity	**7075.00 KL**

December 4, 2012

Chief Controller of Explosives

1). Amendment dated - 16/04/2019

अनुज्ञप्त परिसरों का विवरण और अवस्थान
DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

अनुज्ञप्त परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टयां संलग्न अनुमोदित नक्शों में दिखाई गई हैं **Plot No: Plot No. 504, Khasara No. 1337, Survey No. 1337,, NA, Village-Kawai, Teh-Atru,, Antah, Taluka: Atru, District: BARAN, State: Rajasthan, PIN: 325219** स्थान पर अवस्थित है तथा उसमें निम्नलिखित **1 Above Ground tank(s) for CLASS B , 4 Above Ground tank(s) for CLASS C** सम्मिलित हैं |

The licensed premises, the layout , boundaries and other particulars of which are shown in the attached approved plan are situated at **Plot No: Plot No. 504, Khasara No. 1337, Survey No. 1337,, NA, Village-Kawai, Teh-Atru,, Antah, Taluka: Atru, District: BARAN, State: Rajasthan, PIN: 325219** and consists of **1 Above Ground tank(s) for CLASS B , 4 Above Ground tank(s) for CLASS C** together with connected facilities.

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अनुज्ञप्ति संख्या-(Licence No.) P/HQ/RJ/15/2337 (P295058)

नवीनीकरण के पृष्ठांकन के लिए स्थान
SPACE FOR ENDORSEMENT OF RENEWALS

पेट्रोलियम अधिनियम, १९३४ के उपबन्धों या उनके अधीन बनाए गए नियमों या इस अनुज्ञप्ति की शर्तों का उल्लंघन न होने की दशा में यह अनुज्ञप्ति फ़िस में बिना किसी छूट के दस वर्ष तक नवीकृत की जा सकेगी। This licence shall be renewable without any concession in fee for ten years in the absence of contravention of any provisions of the Petroleum Act, 1934 or of the rules framed thereunder or of any of the conditions of this licence.	नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry of license	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature and office stamp of the licencing authority.
1).	16/12/2013	31/12/2016	Sd/- Dr. Yogesh khare Jt. Chief Controller of Explosives For Dy. Chief Controller of Explosives Jaipur
2).	22/11/2016	31/12/2019	Sd/- Nitin Goyal Dy. Controller of Explosives For Dy. Chief Controller of Explosives Jaipur
3).	09/01/2020	31/12/2022	Sd/- Dr. G. K. PANDEY Controller of Explosives For Dy. Chief Controller of Explosives Jaipur
4).	30/12/2022	31/12/2032	Dr. G. K. PANDEY Controller of Explosives For Dy. Chief Controller of Explosives Jaipur

यदि अनुज्ञप्ति परिसर इसमें उपाबद्ध विवरण और शर्तों के अनुरुप नहीं पाए जाते है और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति मंजूर की गई है उनमे से किसी का उल्लंघन होने की दशा में यह अनुज्ञप्ति रद्द की जा सकती है और अनुज्ञप्तिधारी प्रथम अपराध के लिए साधारण कारावास से, जो एक मास तक हो सकता है, या जुर्माने से, जो एक हजार रुपये तक हो सकता है, या दोनों से, और प्रत्येक पश्चातवर्ती अपराध के लिए साधारण कारावास से जो तीन मास तक हो सकता है, या जुर्माने से, जो पांच हजार रुपये तक हो सकता है, या दोनों से, दण्डनीय होगा।

This licence is liable to be cancelled if the licensed premises are not found conforming to the description given on the approved plan attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable for the first offence with simple imprisonment which may be extend to one month, or with fine which may extend to one thousand rupees, or with both and for every subsequent offence with simple imprisonment which may extend to three months, or with fine which may extend to five thousand rupees or with both.

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