



Power

Ref: APL/APRL/EMD/EC/MoEF/210/11/22
Date: 26/11/2022

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 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'2022 to September'2022** in soft (e-mail).

This is for your kind information & record please.

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

(Santosh Kumar Singh)
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
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The Regional Officer,
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**SIX MONTHLY COMPLIANCE REPORT OF
ENVIRONMENTAL CLEARANCE**

1320 (2x660) MW 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 Rajasthan Limited**

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

PERIOD: April'2022 to September'2022

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Introduction

Adani Power Rajasthan Ltd. (APRL), a wholly owned company of Adani Power Limited, has established 1320 MW (2 x 660 MW) Coal based Supercritical Thermal Power Plant at Village- Kawai, Tehsil Atru, District Baran in Rajasthan.

Kawai Thermal Power Plant is located near village- Kawai, Tehsil- Atru, District- Baran (Rajasthan). The power plant is based on supercritical, energy efficient & environment friendly technology.

APRL has obtained Environmental Clearances (EC) from Ministry of Environment, Forest & Climate Change (MoEF&CC) and has also obtained Consent to Establish (CTE) as well as Consent to Operate (CTO) from Rajasthan State Pollution Control Board (RSPCB). 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 also 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 Team Institute of Science & Technology, Jaipur, (Rajasthan).

Point wise compliance status of **Environmental Clearance for 1320 MW (2 x 660 MW)** Coal based Supercritical Kawai Thermal Power Plant is furnished herewith.

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**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 and
Its subsequent amendment dated 13.03.2014

A	Specific Condition	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.
(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 Wild life 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 Wild Life 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.	80 no. Solar light are installed near hostel/residential area in first phase of solar harnessing program. Solar panel are installed for street lights 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 Panchayat and the district administration before final acquisition of the said land.	Complied Development of waste land to grazing land in village Kunjed of Atru Tehsil is completed as per "Mukhyamantri Jal Swavlamban Abhiyan" (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	Being complied.

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	with the Railways and shall submit action taken and implementation status to the ministry from time to time.	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.	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- 2020 by third party to assess the surface & ground regime. (Especially around ash dyke). Regular water quality monitoring is also being carried out by NABL accredited Consultant. 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.	Complied. No ground water was extracted during setting up of power plant
(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.	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.	APRL 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	Regular monitoring of ground water quality including heavy metals is being carried out

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	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.	in and around the plant area by MoEFCC accredited agency and NABL accredited Environment laboratory of APRL. Please refer attached Annexure-I . Three Piezometric wells are established around the ash pond. Record are being maintained and enclosed 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 as Annexure I .
(xvi)	A well designed rain water 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 rain water harvesting shall comprise of rain water 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 Rain water 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.	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. APRL 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. However as per MoEFCC Notification dated 5 th Sep 2022, Kawai TPP is falling under Category "C" Non- retiring TPPs and the timelines of installation of FGD in compliance of SO ₂ emission is up to December'2026.

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(xix)	The project proponent shall undertake measures and ensure that no fugitive fly ash emission take place at any point of time.	Being complied. 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 SO _x , NO _x and PM _{2.5} & PM ₁₀ . 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 , NO _x , 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/Nm ³ .	A high Efficiency Electrostatic Precipitators has been provided to each boiler (ESPs) to meet particulate emission less than 50mg/Nm ³ , 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 is enclosed 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.	Being 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.	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 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.	Being Complied APRL 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, 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

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		<p>cement India ltd, India Cements Ltd, Heidelberg cement India Ltd., TSG Ashtech Movers Pvt. Ltd., etc.</p> <p>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 enclosed as Annexure-I.</p>
(xxv)	<p>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.</p>	<p>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.</p>
(xxvi)	<p>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.</p>	<p>Complied</p> <p>EC amended on dated 13.03.2014 vide letter No. J-13012/154/2008/IA. II (T) for change in the fuel quality & source.</p>
(xxvii)	<p>Green Belt consisting of 3 tiers of plantations of native species around the plant of at least 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 at least 80%.</p>	<p>Green belt / plantation is being developed. Our efforts are to develop more greenery in and around the plant premises.</p> <p>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 120754 tree saplings have been planted and achieved 90% survival rate. Please refer Annexure-IV</p>
(xxvii i)	<p>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.</p>	<p>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.</p> <p>Planted 1200 Saplings along with the NH-90 in association with forest department. About 500 trees are also planted in school campus & villages.</p>
(xxix)	<p>Atleast three nearest village shall be adopted and basic amenities like development of roads, drinking water supply, primary health centre,</p>	<p>Baldevpura, Kawai, Salpura, Khedli Gaddiyan and Nimoda are adopted for development of basic amenities in co-ordination with the district administration. Beside 41 Schools, 2</p>

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	primary school etc. shall be developed in co-ordination with the district administration.	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 neighbouring 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.	Being 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 .
(xxxii)	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.	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. Detailed report 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. Detailed report enclosed as Annexure V .
(xxxii)	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.	Separate budget has been earmarked for CSR activities. CSR activities are being carried out by Adani Foundation. CSR report and expenditures for period April-2022 to September-2022 is attached as Annexure V & VIII respectively.
(xxxii)	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.	Being 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	Coal is being transported by Rail up to Plant premises.

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	of two years and hence forth shall be only through mechanically covered trucks.	
(xxxvi)	Avenue plantation of 2/3 rows all along the road shall be carried out by project proponent at its own expenses.	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.	We have maintaining 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 MoEF&CC and Central Electricity Authority (CEA) since plant operation. Please refer attached 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 undertaken from an institute of reputed and adequate clay lining shall be ascertained by the	The generated fly ash is being used by cement industries as per 'Fly Ash Notification'. Copy of annual data on fly ash generation & utilization is being submitted to MoEF&CC, CPCB, and SPCB & Central Electricity Authority (CEA). Fly Ash generation & utilization is attached as Annexure III.

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	State Pollution Control Board and implementation done in close co-ordination with the State Pollution Control Board.									
(xliii)	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.	Plantation all along ash dyke is taken up by seed broadcasting of species like Subabul, Jatropha and Desi Babool. Slope of ash dyke is covered with grass to avoid soil erosion.								
(xliv)	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.	Being Complied We have already established an Environmental Management Cell headed by Manager & supported by Env. Engineer, Officer, Chemist & Horticulturist. We have NABL accredited Laboratory. Certificate Number- TC-5235 issued on dated 28/08/2019. Please refer attached NABL certificate attached as Annexure-VII .								
(xlv)	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.	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.								
B	General Conditions:									
(i)	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.	ETP has been established (Capacity- 226 m ³ /hr. based on primary treatment) to treat effluents and treated water reuses within the premises. The concept of "Zero Discharge Condition" is implemented except during non-monsoon period. Separate drainage network is established for storm water.								
(ii)	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt / plantation.	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 border="1" data-bbox="896 1650 1455 1776"> <thead> <tr> <th>Particular</th> <th>Capacity</th> <th>Total Capacity</th> <th>Technology</th> </tr> </thead> <tbody> <tr> <td>STP</td> <td>120 KLD (10 x 2 KLD)</td> <td>140</td> <td>Mikie Bioreactor</td> </tr> </tbody> </table>	Particular	Capacity	Total Capacity	Technology	STP	120 KLD (10 x 2 KLD)	140	Mikie Bioreactor
Particular	Capacity	Total Capacity	Technology							
STP	120 KLD (10 x 2 KLD)	140	Mikie Bioreactor							
(iii)	Adequate safety measures shall be provided in the plant area to check / minimize spontaneous fires in coal yard, especially during summer	Adequate safety team has been established in plant site to take preventive control measures. Fire hydrant system for fire-								

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	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.	fighting 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.	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.	First Aid as well as OHC established with well-equipped Ambulance and qualified Doctor. Housekeeping and sanitation facilities were 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.	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) are 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 SO ₂ , NO _x , PM _{2.5} & PM ₁₀ 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 Office of this Ministry. The data shall also be put on the website of the company.	Regular Environmental monitoring of SO ₂ , NO _x , 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 . NABL Accreditation certificate of Environmental Laboratory enclosed as Annexure - VII.
(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	During construction, provision was made for common facilities to labours as toilets, safe drinking water, medical health care etc. who were engaged for construction.

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	care, crèche, etc. The housing may be in the form of temporary structure to be removed after the completion of the project.	
(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 10 th 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.	Being 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 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.	Six monthly Environmental Clearance compliance status report is regularly submitted to MoEF&CC, CPCB and SPCB. The same is sent by email also. Compliance status updated on company's website www.adanipower.com

Adani Power Rajasthan Limited

(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.	Environment Statement had been submitted with vide letter no APRL/PK/GOVT/RSPCB/00591, dated- 27.09.2022. Please refer Annexure – VI .
(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.	Six monthly compliance on the Environmental Clearance granted by MoEFCC is being submitted to MoEFCC, CPCB & RSPCB regularly. Compliance status updated on company's website. Compliance report for the period of October 2021 to March 2022 had been submitted to your good office vide letter no.: APL/APRL/EMD/EC/MoEFCC/253/05/22 dated 28.05.2022.
(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 upload 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 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	Being Followed. Separate fund has already been allocated and being utilize for Environmental Protection. Environment protection measures (EMP & CER) Expenditure for April-2022 to

Adani Power Rajasthan Limited

	other purposes and year-wise expenditure should be reported to the Ministry.	September-2022 is enclosed 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.

**SIX MONTHLY COMPLIANCE REPORT ON
ENVIRONMENTAL MONITORING**
as
**AMBIENT AIR QUALITY,
WATER QUALITY, SOIL QUALITY AND NOISE LEVEL**
for



ADANI POWER RAJASTHAN LIMITED
(2x660 MW- SUPERCRITICAL THERMAL POWER STATION)
Near Salpura Railway Station, Tehsil Atru,
District Baran (Rajasthan)

PREPARED BY:



TEAM TEST HOUSE

(A UNIT OF TEAM Institute of Science & Technology Pvt. Ltd.)
G1-584, RIICO INDUSTRIAL AREA, SITAPURA, TONK ROAD,
JAIPUR - 302022, RAJASTHAN

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 2022 to September 2022

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1 EXECUTIVE SUMMARY

ADANI group has constructed 2 units of 660 MW Supercritical Thermal Power Station at Village- Kawai in Tehsil- Atru of District- Baran (Rajasthan). The plant is designed to generate 2x660 MW electricity. 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 Team Institute of Science and Technology (Unit - Team Test House)** vide Service Order No 5700295971 dated 03/04/2021 for Sampling/Monitoring and Testing of Environmental parameters on quarterly basis for the period 01/04/2021 to 31/03/2023.

The samples for determination of quality of Ambient Air analysis, Ground Water, Soil, Source Emission, Noise, etc are collected from Site and analyzed at **Team Test House**, Jaipur.

The overall results for First and Second quarter 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 desired limits.

2 BRIEF DESCRIPTION OF ADANI POWER AND KAWAI THERMAL POWER STATION

2.1 ADANI THERMAL POWER STATION

Adani, a conglomerate with a formidable presence in multiple businesses across the globe, has entered the power sector to harbinge a 'Power Full' India, by generating 20,000 MW of power by 2020. Comprehension of the criticality in meeting the power requirement and its crucial role in ensuring the energy security of India, spurs us to build India's largest and one of the world top 5 single location thermal power plant in Mundra.

Adani Power Limited has commissioned the first supercritical 660 MW unit in the country. Mundra is also the WORLD'S FIRST supercritical technology project to have received 'CLEAN DEVELOPMENT MECHANISM (CDM) Project' certification from United Nations Framework Convention on Climate Change (UNFCCC).

2.2 KAWAI THERMAL POWER STATION

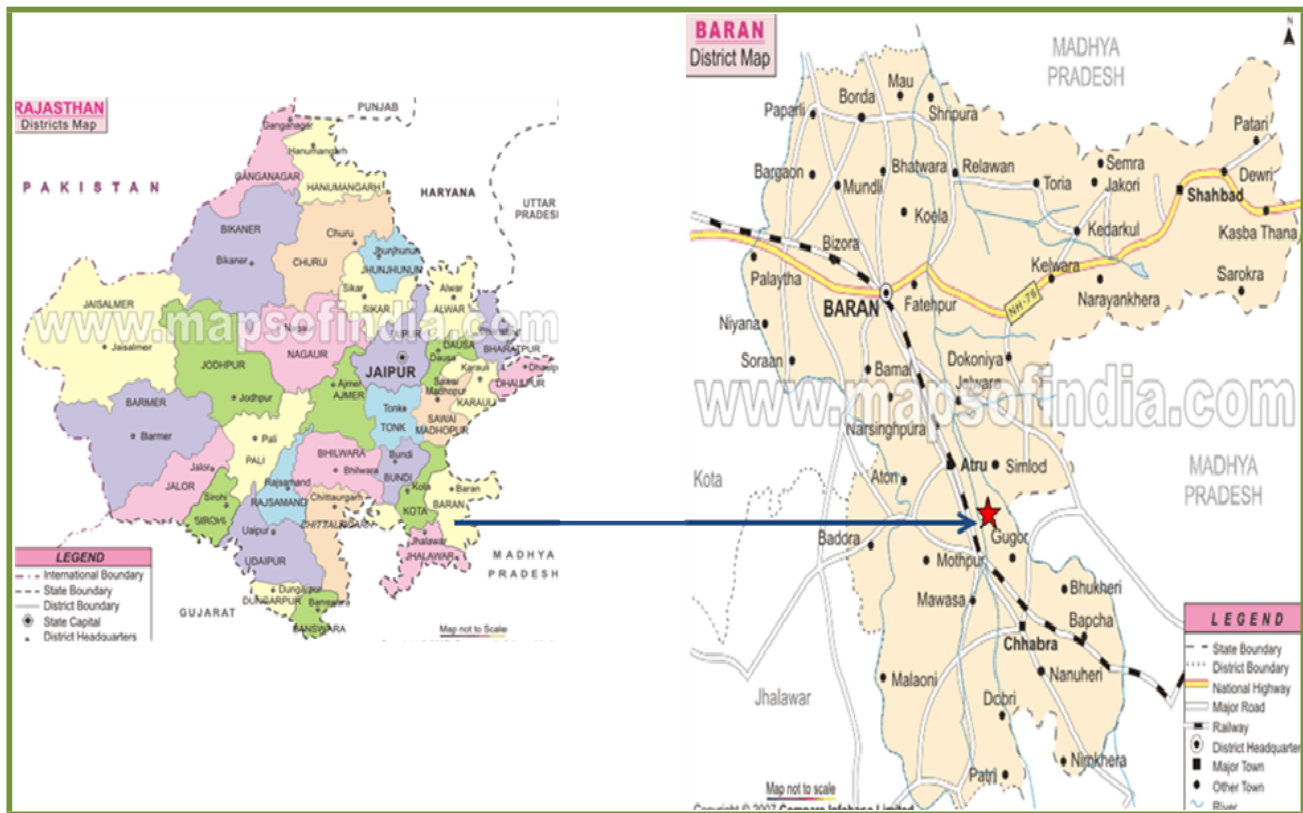
Adani Enterprises Limited (AEL) have signed MoU with Energy Department, Government of Rajasthan on 20th March, 2008 for developing a Thermal Power Project of 1320 MW capacity near Kawai, District Baran, Rajasthan. For this purpose Adani Enterprises Limited (AEL) has registered Adani Power Rajasthan Limited (APRL), as a subsidiary company to Adani Power Limited (APL). The site is approximately 120 km from Kota and 40 Kms from Baran.

The plant is covered in around 350 Ha. area. The possession of 350 Ha has been already given to APRL by Govt. of Rajasthan. The coal and water requirement of the plant is 5.6 MTPA and 34 MCM respectively.

Both imported and domestic coal is being used. Water is drawn through a dedicated pipeline from the PARWAN River located at a distance of about 15 km from plant.

2.3 LOCATIONS OF THE PLANT

State	Rajasthan
District	Baran
Villages	Kawai
Land type	Barren and Stony Waste Land
Geographical Co-ordinates	24° 46' 14.62" N & 76° 44' 28.60" E.



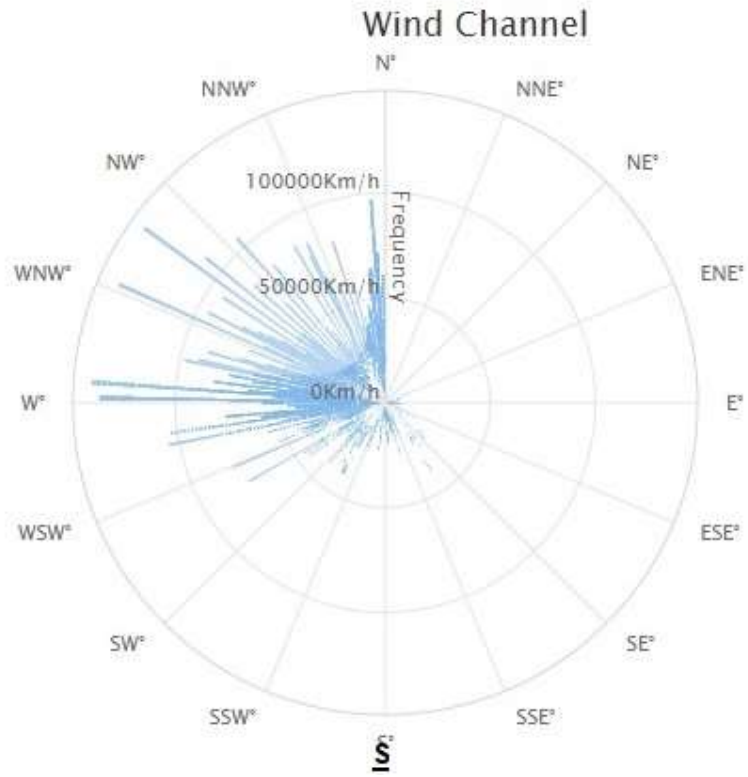
Location Map

METEROLOGICAL DATA
AVERAGE DAILY METEROLOGICAL DATA OF APRIL -2022

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.04.2022	27	41	12	28.3	0
02.04.2022	23.3	42.2	9	39	0
03.04.2022	26.5	42.2	10.5	30.4	0
04.04.2022	24.1	42.3	8.3	35	0
05.04.2022	25	42.4	8	27.2	0
06.04.2022	25.2	43	9.1	28.6	0
07.04.2022	25.1	43.1	8.2	28.2	0
08.04.2022	25.2	44.3	7.1	28.1	0
09.04.2022	26	44.2	9.2	26.6	0
10.04.2022	30.2	44.2	10.1	24.1	0
11.04.2022	29.1	44	11.1	29.3	0
12.04.2022	30.5	42.1	12.1	28	0
13.04.2022	28.2	41.3	10	30.1	0
14.04.2022	28	42.1	13	25.2	0
15.04.2022	28	42.4	10.6	25.4	0
16.04.2022	29	43.3	10	35.2	0
17.04.2022	30.3	43.3	11.1	29.2	0
18.04.2022	31.1	44.2	11.3	26.5	0
19.04.2022	31	42.3	13.3	25.2	0
20.04.2022	31.2	43.4	10.1	22.2	0
21.04.2022	30	37.5	17.6	32.4	0
22.04.2022	25.1	41.4	14.2	44.2	0
23.04.2022	27	42.4	10	30.3	0
24.04.2022	26.2	42.5	10	27.1	0
25.04.2022	27.5	43.5	9	26.3	0
26.04.2022	26.2	45	14.2	44.2	0
27.04.2022	25	47	10	30.3	0
28.04.2022	29	45.5	10.1	28	0
29.04.2022	31.3	45.4	10	21.1	0
30.04.2022	29	43.6	13.2	29.2	0
Max.	31.3	47	17.6	44.2	0
Min.	23.3	37.5	7.1	21.1	

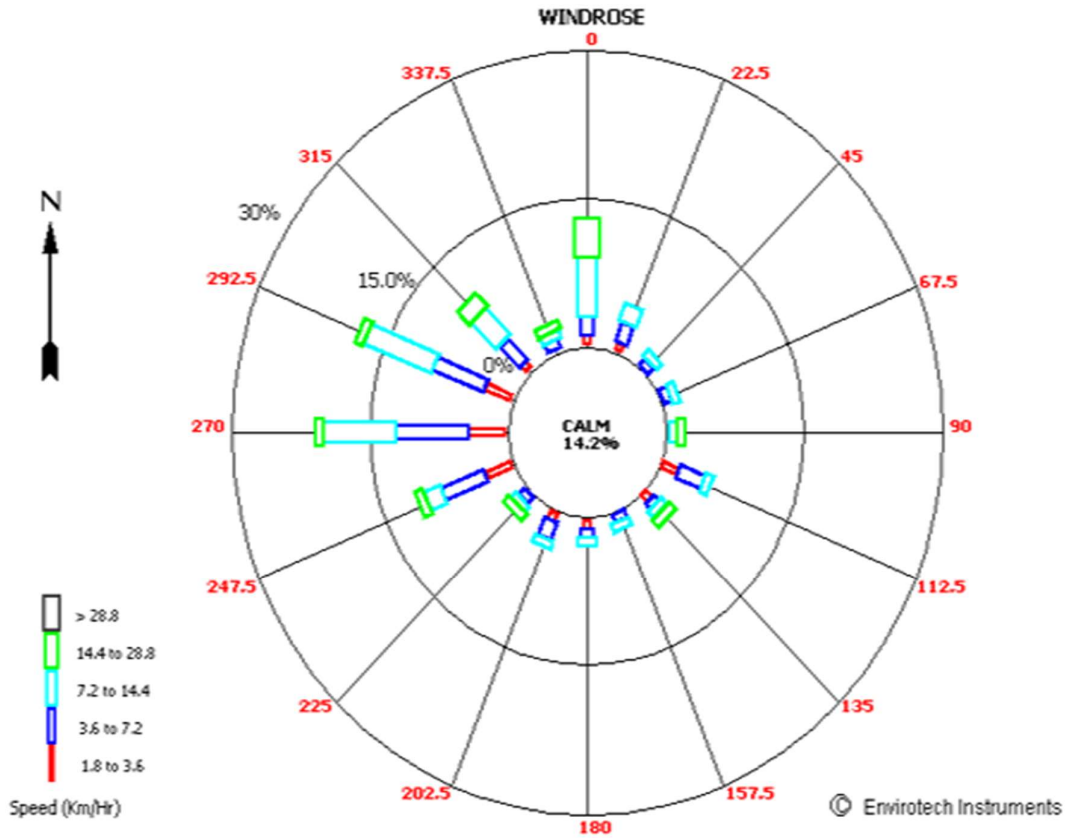
ADANI POWER RAJASTHAN LIMITED

01.04.2022 to 30.04.2022



AVERAGE DAILY METEROLOGICAL DATA OF MAY -2022

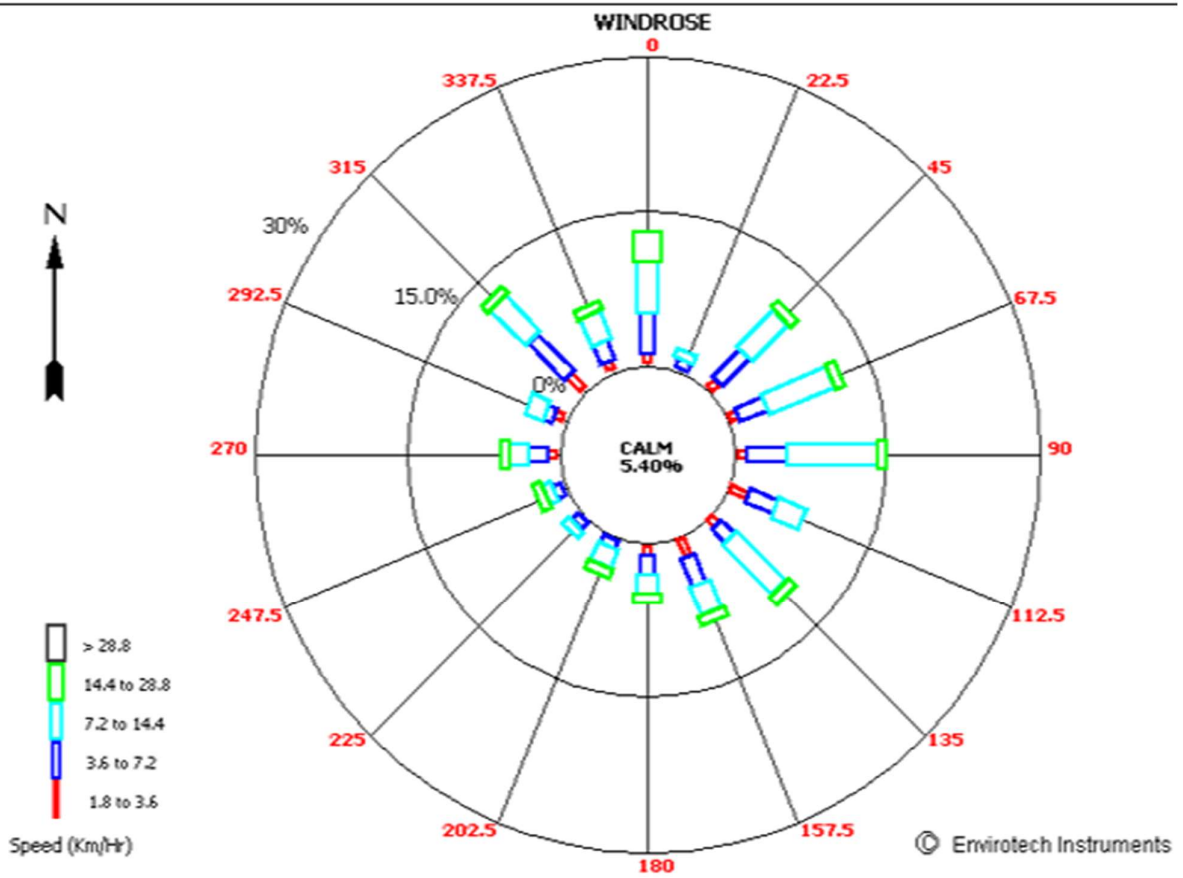
Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.05.2022	33.0	45.4	13.0	43.3	0
02.05.2022	32.0	44.2	15.2	41.5	0
03.05.2022	32.2	43.3	14.2	29.3	0
04.05.2022	30.2	42.3	14.1	37.5	0
05.05.2022	29.6	42.4	14.1	42.5	0
06.05.2022	30.3	43.0	15.2	34.0	0
07.05.2022	23.3	44.0	20.3	51.6	0
08.05.2022	20.2	45.5	23.0	64.0	0
09.05.2022	20.0	45.4	11.0	77.3	0
10.05.2022	31.3	44.5	12.2	38.2	0
11.05.2022	31.5	45.5	11.0	34.3	0
12.05.2022	31.1	47.0	10.0	28.4	0
13.05.2022	32.1	47.2	9.1	22.2	0
14.05.2022	33.1	46.4	12.1	38.3	0
15.05.2022	33.3	45.3	14.2	45.3	0
16.05.2022	33.3	43.5	9.0	33.6	0
17.05.2022	31.1	44.2	11.6	27.5	0
18.05.2022	31.0	43.2	14.0	30.2	0
19.05.2022	32.0	46.0	11.0	30.0	0
20.05.2022	34.1	46.4	13.0	34.0	0
21.05.2022	33.3	42.6	16.1	45.3	0
22.05.2022	32.2	42.2	21.2	52.0	0
23.05.2022	25.4	39.1	32.4	81.0	12.5
24.05.2022	25.0	37.5	36.0	78.5	0
25.05.2022	28.1	41.0	21.1	57.2	0
26.05.2022	30.1	41.6	19.4	47.2	0
27.05.2022	28.0	40.6	23.2	51.3	0
28.05.2022	31.2	41.0	25.5	60.2	0
29.05.2022	31.2	42.0	24.5	57.0	0
30.05.2022	31.2	42.9	14.1	42.8	0
31.05.2022	32.0	43.6	15.3	45.4	0
Max.	34.1	47.2	36.0	81.0	12.5
Min.	20.0	37.5	9.0	22.2	



AVERAGE DAILY METEROLOGICAL DATA OF JUNE -2022

<i>Date</i>	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.06.2022	33.0	45.0	18.2	47.7	0
02.06.2022	34.0	46.0	24.5	57.0	0
03.06.2022	33.2	45.2	13.3	27.6	0
04.06.2022	34.0	46.0	14.1	42.8	0
05.06.2022	33.0	45.0	15.3	45.4	0

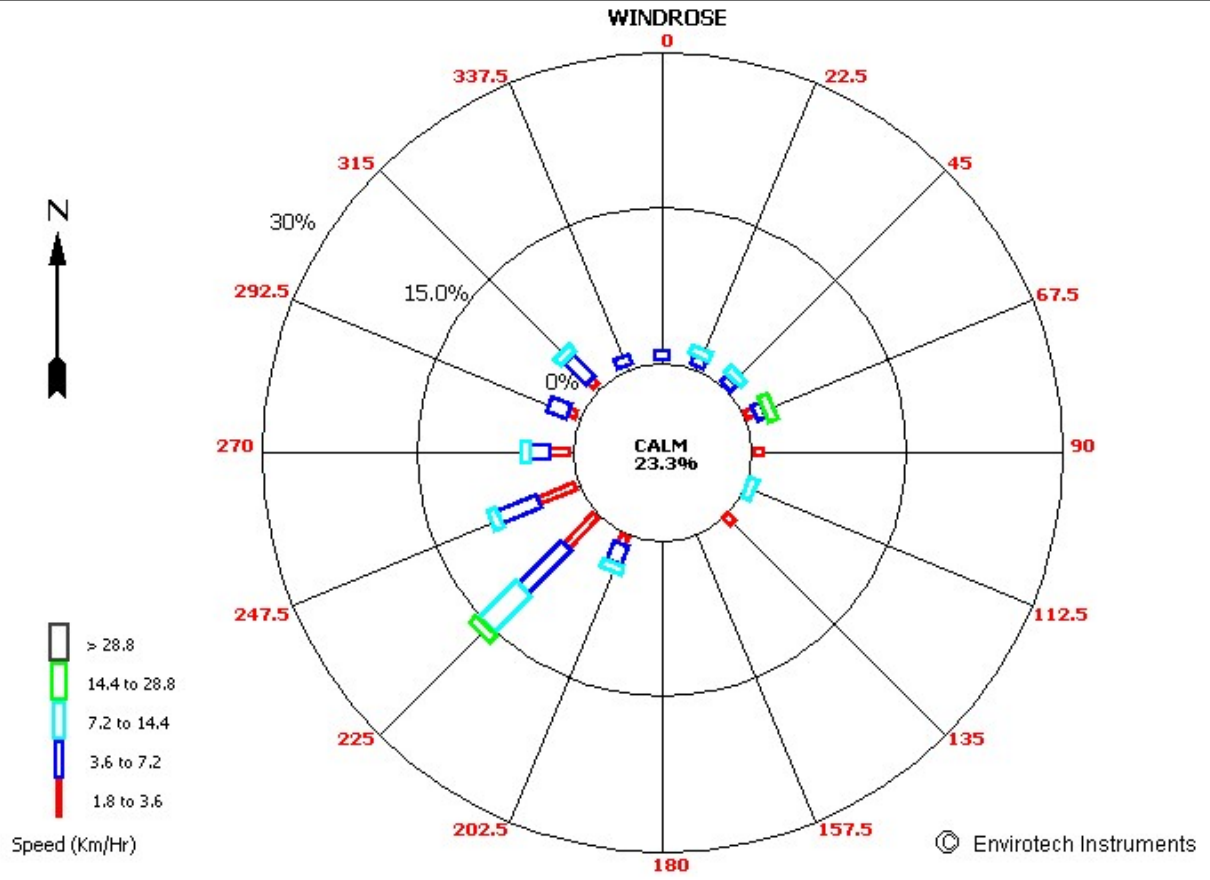
06.06.2022	36.0	47.0	12.1	38.3	0
07.06.2022	34.0	46.0	14.1	42.8	0
08.06.2022	34.0	45.0	16.3	46.4	0
09.06.2022	33.0	45.0	14.1	42.8	0
10.06.2022	34.0	46.0	15.3	45.4	0
11.06.2022	34.5	45.2	16.0	34.0	0
12.06.2022	30.1	37.5	16.0	34.0	0
13.06.2022	27.0	40.1	16.0	87.2	18
14.06.2022	30.0	43.0	22.4	69.0	0
15.06.2022	26.2	42.5	18.9	52.3	0
16.06.2022	28.1	38.1	40.2	86.3	23
17.06.2022	26.0	33.0	49.2	84.1	11.5
18.06.2022	26.2	38.3	37.0	91.1	0
19.06.2022	25.1	36.2	49.6	94.2	8
20.06.2022	25.9	37.2	50.1	86.9	10.5
21.06.2022	24.2	33.3	61.1	89.3	22.5
22.06.2022	26.2	35.5	50.0	89.1	0.5
23.06.2022	25.1	36.2	49.6	84.2	0
24.06.2022	27.3	40.1	23.3	77.3	0
25.06.2022	28.4	41.6	19.1	56.2	0
26.06.2022	31.2	41.6	23.3	53.0	0
27.06.2022	29.1	39.5	39.3	81.2	14.5
28.06.2022	24.2	33.3	61.1	89.3	0
29.06.2022	26.2	35.5	50.0	89.1	6
30.06.2022	25.1	36.2	49.6	84.2	106
Max.	36.0	47.0	61.1	94.2	
Min.	24.2	33.0	12.1	27.6	220.5



AVERAGE DAILY METEROLOGICAL DATA OF JULY -2022

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.07.2022	28.4	41.6	19.1	56.2	0
02.07.2022	31.2	41.6	23.3	53.0	0
03.07.2022	29.1	39.5	39.3	81.2	7
04.07.2022	25.0	39.9	18.9	65.3	0
05.07.2022	25.9	37.2	50.1	86.9	34.5
06.07.2022	26.0	37.1	50.1	96.0	21
07.07.2022	22.0	40.0	40.1	97.0	53
08.07.2022	24.0	38.0	39.3	81.2	1.5

09.07.2022	27.1	32.0	71.3	91.1	0.5
10.07.2022	26.1	32.2	69.1	94.5	15
11.07.2022	27.0	34.1	63.1	96.1	10
12.07.2022	26.2	35.1	62.3	96.5	25.5
13.07.2022	24.0	35.0	63.1	96.1	19
14.07.2022	27.0	37.3	51.0	96.4	1
15.07.2022	27.1	38.1	61.5	97.1	35
16.07.2022	26.0	38.0	50.1	86.9	0
17.07.2022	27.0	32.0	50.1	96.0	0
18.07.2022	28.0	36.5	59.2	92.3	6.5
19.07.2022	28.0	36.0	60.1	95.6	0
20.07.2022	27.2	31.4	77.0	90.6	0
21.07.2022	27.0	37.0	59.4	95.3	32.5
22.07.2022	22.0	32.0	78.6	95.4	22
23.07.2022	26.0	31.1	78.0	97.6	7.5
24.07.2022	26.1	32.6	69.3	95.5	0
25.07.2022	26.0	28.4	86.2	97.5	6
26.07.2022	25.2	31.3	75.4	98.3	3
27.07.2022	26.2	32.6	67.3	93.3	24.5
28.07.2022	27.0	31.2	72.2	94.1	0
29.07.2022	26.0	31.1	73.5	95.0	19
30.07.2022	26.0	31.1	73.5	93.4	0
31.07.2022	26.0	31.1	78.0	97.6	0
Max.	31.2	41.6	86.2	98.3	
Min.	22.0	28.4	18.9	53.0	344



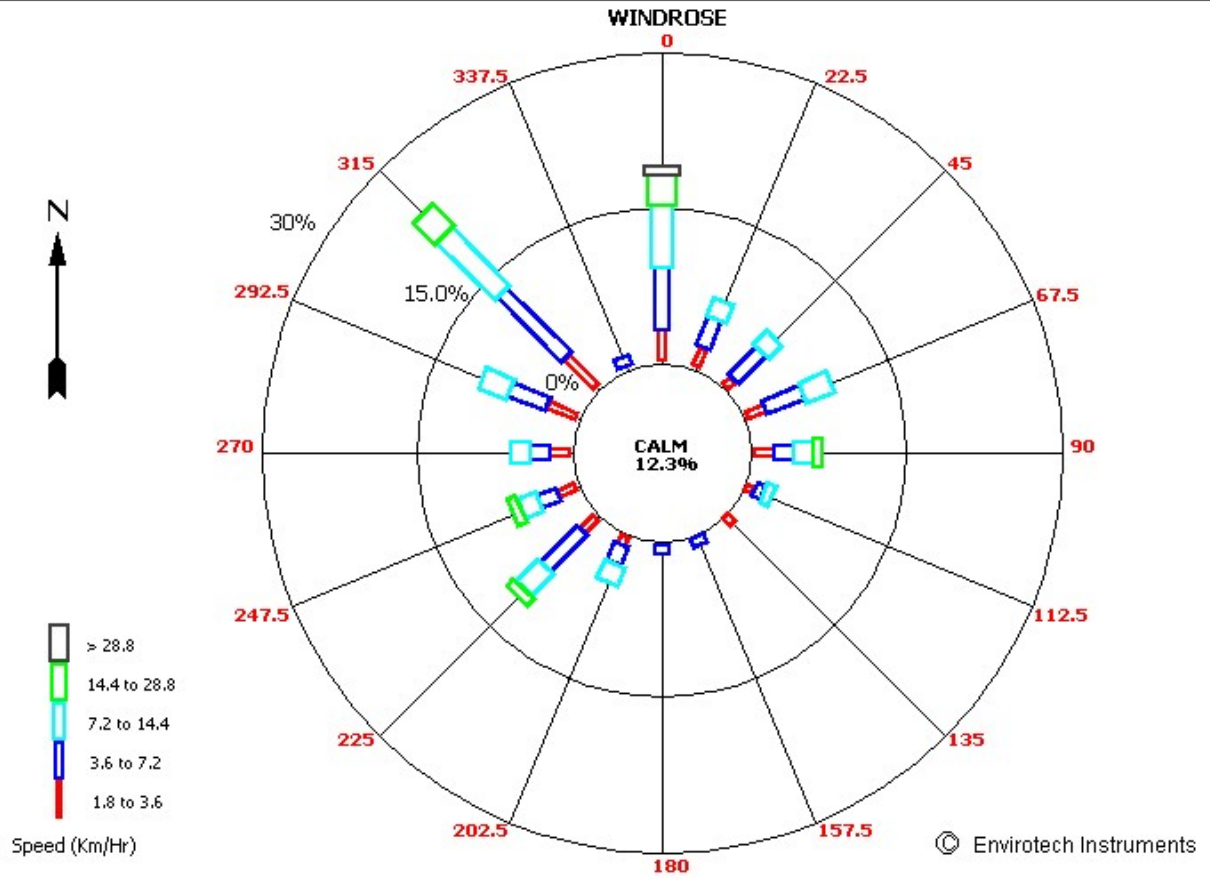
AVERAGE DAILY METEROLOGICAL DATA OF AUGUST- 2022

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.08.2022	26.1	33.0	64.0	97.2	0
02.08.2022	27.0	34.1	64.2	88.5	0
03.08.2022	26.0	34.1	64.3	94.6	35.5
04.08.2022	27.2	33.3	68.1	97.2	0
05.08.2022	27.0	31.3	74.0	94.4	26.5
06.08.2022	26.1	36.0	55.6	94.4	16.5
07.08.2022	27.0	32.3	73.1	93.0	0
08.08.2022	26.2	34.3	64.0	94.6	0
09.08.2022	28.0	35.2	62.0	92.6	0.5
10.08.2022	28.1	33.4	64.2	89.5	1
11.08.2022	26.2	31.1	78.1	98.3	11.5
12.08.2022	25.2	30.4	79.0	98.1	17.5
13.08.2022	26.0	32.3	70.0	94.6	3
14.08.2022	24.2	29.0	85.0	96.4	35.5
15.08.2022	25.0	32.2	68.0	98.4	27.5
16.08.2022	25.1	27.5	92.0	98.2	7.5
17.08.2022	25.2	32.1	68.0	98.4	0
18.08.2022	25.2	32.4	65.1	98.2	0
19.08.2022	26.1	32.5	63.1	93.1	0
20.08.2022	26.0	30.2	79.2	94.2	7.5
21.08.2022	24.0	29.0	87.1	98.3	50
22.08.2022	24.0	26.6	94.2	98.4	110.5
23.08.2022	25.1	29.5	77.1	98.3	1.5
24.08.2022	24.3	31.0	67.2	95.4	8
25.08.2022	24.0	30.3	71.2	98.2	13
26.08.2022	25.0	31.3	74.0	96.3	7.5
27.08.2022	26.0	33.3	59.1	95.3	0
28.08.2022	26.2	33.3	56.1	92.4	0
29.08.2022	26.1	33.5	57.0	88.3	0
30.08.2022	26.0	35.2	55.3	93.5	0
31.08.2022	27.1	36.2	53.2	94.1	0
Max.	28.1	36.2	94.2	98.4	380.5
Min.	24.0	26.6	53.2	88.3	

Time : 00:00 - 23:00
Date : 01/08/22 - 31/08/22

Set Title

ADANI POWER RAJ. LTD
KAWAI



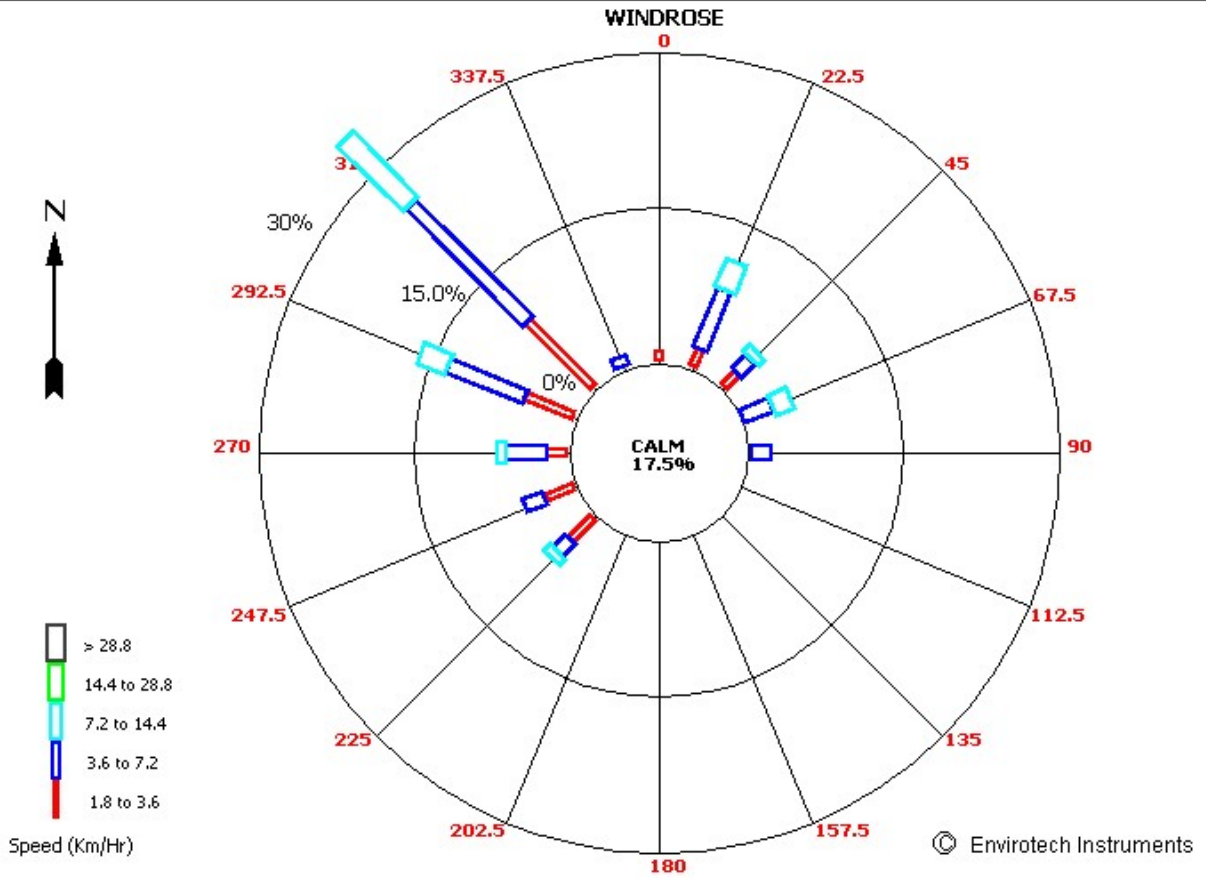
AVERAGE DAILY METEROLOGICAL DATA OF SEPTEMBER- 2022

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.09.2022	26.1	32.1	65.1	93.1	0.5
02.09.2022	27.0	35.1	59.0	92.3	0
03.09.2022	27.0	35.5	54.1	92.3	0
04.09.2022	28.0	35.1	57.2	89.3	0
05.09.2022	27.1	35.0	52.0	91.0	0
06.09.2022	26.0	35.3	51.0	88.0	0
07.09.2022	28.9	36.4	53.4	88.4	0
08.09.2022	24.3	36.4	46.3	95.4	0
09.09.2022	28.1	37.2	48.6	89.4	0
10.09.2022	26.0	36.3	56.2	95.3	37.5
11.09.2022	26.1	35.2	54.5	98.3	0
12.09.2022	27.1	34.0	58.5	91.2	0
13.09.2022	26.4	30.4	71.2	95.0	15.5
14.09.2022	25.1	28.3	90.0	98.4	53.5
15.09.2022	26.1	28.5	90.6	98.4	48
16.09.2022	26.0	33.6	63.4	98.3	11
17.09.2022	25.1	33.5	58.0	96.6	0
18.09.2022	25.0	34.3	51.3	92.4	0
19.09.2022	26.0	35.5	50.4	85.2	0
20.09.2022	26.1	33.5	58.0	87.2	0.5
21.09.2022	23.6	32.1	60.0	97.2	1
22.09.2022	25.0	27.6	90.1	98.2	32.5
23.09.2022	24.1	31.4	63.1	93.5	37.5
24.09.2022	25.0	32.0	65.0	97.4	0
25.09.2022	24.0	33.4	52.2	95.6	0
26.09.2022	24.5	34.1	54.0	92.1	0
27.09.2022	25.1	36.1	45.0	95.2	0
28.09.2022	25.3	36.0	41.1	94.5	0
29.09.2022	25.1	35.8	51.0	90.1	0
30.09.2022	26.0	36.3	38.1	88.3	0
Max.	28.9	37.2	90.6	98.4	237.5
Min.	23.6	27.6	38.1	85.2	

Time : 00:00 - 09:00
Date : 01/09/22 - 30/09/22

Set Title

ADANI POWER RAJ. LTD
KAWAI



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 centre.

The measurements were conducted during the period of **April 2022 to September 2022**.

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 PM₁₀, PM_{2.5}, SO_x, NO_x and Hg are presented in table as given below:

TABLE 4.2: AMBIENT AIR QUALITY MONITORING RESULTS

Quarter I (April- 2022 to June- 2022)								
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	Mukhandpura	NAAQ Standard
1	Particulate Matter, PM ₁₀ , µg/m ³	75.89	80.72	81.33	60.73	59.62	55.02	100
2	Particulate Matter, PM _{2.5} , µg/m ³	35.35	38.41	37.39	26.83	33.13	23.08	60
3	Nitrogen Dioxide (NO ₂), µg/m ³	13.78	13.98	14.92	11.87	12.35	10.66	80
4	Sulphur Dioxide (SO ₂), µg/m ³	8.1	8.28	8.45	5.58	3.91	4.49	80
5	Carbon Monoxide, µg/m ³	440	430	380	260	250	250	4000
6	Ammonia, µg/m ³	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	400
7	Ozone, µg/m ³	31.6	28.3	27.8	BDL(<20.0)	BDL(<20.0)	BDL(<20.0)	100
8	Lead, µg/m ³	0.15	0.19	0.13	0.07	0.10	0.07	1.0
9	Arsenic, ng/m ³	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	6.0
10	Nickel, ng/m ³	13.0	14.0	9.5	4.9	10.5	3.7	20
11	Benzene, µg/m ³	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	5.0
12	Benzo-alfa-pyrene, ng/m ³	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	1.0
13	Mercury (Hg), ng/m ³	BDL(<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	-

Quarter II (July -2022 to September- 2022)								
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 , µg/m ³	64.97	64.49	62.25	66.55	50.46	54.64	100
2	Particulate Matter, PM _{2.5} , µg/m ³	32.06	31.04	28.12	28.31	28.37	26.45	60
3	Nitrogen Dioxide (NO ₂), µg/m ³	16.57	16.62	14.97	13.17	13.1	12.95	80
4	Sulphur Dioxide (SO ₂), µg/m ³	9.06	8.03	8.23	12.18	5.27	7.54	80
5	Carbon Monoxide, µg/m ³	370	360	390	250	250	230	4000
6	Ammonia, µg/m ³	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	400
7	Ozone, µg/m ³	26.8	26.5	29.6	21.6	22.5	23.6	100
8	Lead, µg/m ³	0.09	0.08	0.13	0.06	0.06	0.06	1.0
9	Arsenic, ng/m ³	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	6.0
10	Nickel, ng/m ³	6.1	7.0	12.6	5.0	4.0	4.6	20
11	Benzene, µg/m ³	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	5.0
12	Benzo-alfa-pyrene, ng/m ³	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	BDL (<0.5)	1.0
13	Mercury (Hg), ng/m ³	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)	-

5 AMBIENT NOISE LEVEL

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

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

TABLE 5.1: NOISE MONITORING RESULTS [INDUSTRIAL AREA]

Quarter I (April-2022 to June- 2022)		
Location	Day Time Leq in dB(A)	Night Time Leq in dB(A)
West of Stack (Near Coal Handling Plant)	70.6	61.5
South East of Stack (Near CT 2)	68.3	60.4
North East of Stack (Near Reservoir)	69.8	59.7

Quarter II (July-2022 to September- 2022)		
Location	Day Time Leq in dB(A)	Night Time Leq in dB(A)
West of Stack (Near Coal Handling Plant)	64.9	56.8
South East of Stack (Near CT 2)	69.1	60.7
North East of Stack (Near Reservoir)	66.7	58.6

TABLE 5.2: NOISE MONITORING RESULTS [RESIDENTIAL AREA]

Quarter I (April- 2022 to June- 2022)		
Location	Day Time Leq in dB(A)	Night Time Leq in dB(A)
Sidni (Near Labour Colony)	49.5	41.1
Kawai Village	52.5	43.1
Mukhandpura	52.5	42.4

Quarter II (July -2022 to September- 2022)		
Location	Day Time Leq in dB(A)	Night Time Leq in dB(A)
Sidni (Near Labour Colony)	50.5	40.7
Kawai Village	53.8	43.5
Mukhandpura	51.4	40.9

TABLE 5.3: NOISE MONITORING RESULTS [DG Set]

Quarter II (July-2022 to September- 2022)			
Parameter	DG Set-I	DG Set-II	DG Set-III
Noise level (dB(A) (inside the acoustic enclosure Room)	102.6	103.2	101.5
Noise level 0.5m away from outside the engine room, (db) (Outside the acoustic enclosure)	72.7	73.5	71.9
Insertion Loss	29.9	29.7	29.6

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 2022 to September 2022.

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)	µg/m ³	USEPA-29

TABLE 6.2: STACK MONITORING RESULTS

S. No	Parameter	Unit	Quarter I (April- 2022 to June- 2022)	
			Unit-I	Unit-II
1	Exit Gas Velocity	m/sec	28.06	26.11
2	Flow Rate	Nm ³ /hr	3382590.75	3170951.87
3	Particulate Matter (PM)	mg/Nm ³	37.62	33.58
4	Sulphur dioxide (SO ₂)	mg/Nm ³	1076	1046
5	Oxide of nitrogen (as NO _x) at 15 % O ₂	mg/Nm ³	330	316
6	Mercury as particulate (Hgp)	µg/m ³	0.01	0.01

S. No	Parameter	Unit	Quarter II (July- 2022 to September- 2022)	
			Unit-I	Unit-II
1	Exit Gas Velocity	m/sec	22.65	-
2	Flow Rate	Nm ³ /hr	2806460.51	-
3	Particulate Matter (PM)	mg/Nm ³	36.12	-
4	Sulphur dioxide (SO ₂)	mg/Nm ³	1036	-
5	Oxide of nitrogen (as NO _x) at 15 % O ₂	mg/Nm ³	267	-
6	Mercury as particulate (Hgp)	µg/m ³	0.01	-

TABLE 6.3: DG STACK MONITORING RESULTS

Parameter	Unit	Quarter II (July- 2022 to September 2022)		
		DG Set-I	DG Set-II	DG Set-III
Particulate Matter (PM)	mg/Nm ³	50.01	62.52	44.17
Oxide of Nitrogen (NO _x) at 15% O ₂	ppmv	230	210	280
Carbon monoxide (CO)	mg/Nm ³	110	80	90
NMHC as C at 15% O ₂	mg/Nm ³	25	23	24

7 WATER QUALITY RESULTS [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 2022 to September 2022. The parameters covered in the monitoring are depict below:

TABLE 7.1.1: RESULTS OF GROUND WATER MONITORING

Quarter I (April- 2022 to June- 2022)									
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)	7.57	7.90	7.58	8.24	8.05	8.26	7.96	7.62
2	Colour, Hazen	<5	<5	<5	<5	<5	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	0.3	< 0.1	0.5	< 0.1	<0.1	0.3	0.4	0.2
5	Total Dissolved Solids, mg/l	862	907	1008	592	722	680	177	333
6	Electrical Conductivity, μ S/cm	1275	1490	1706	944	1155	1006	285	502
7	Total Hardness (as CaCO ₃), mg/l	509.8	352.94	368.63	341.18	519.61	192.16	98.04	250.98
8	Calcium (as Ca), mg/l	145.1	103.53	67.45	87.84	125.49	43.92	31.37	92.55
9	Magnesium (as Mg), mg/l	35.74	22.87	48.6	29.54	50.03	20.01	4.76	4.76

10	Chlorides (as Cl ⁻), mg/l	122.3	229.93	171.22	52.83	141.87	146.76	12.72	14.68
11	Sulphate (as SO ₄), mg/l	348.57	125.71	142.14	35.42	114.28	125.71	13.29	20.42
12	Iron (as Fe), mg/l	BDL (< 0.01)	BDL (<0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)
13	Total Chromium (as Cr), mg/l	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)
14	Arsenic (as As), mg/l	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)
15	Lead (as Pb), mg/l	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)
16	Silica (as SiO ₂) mg/l	9.54	10.91	17.95	10.91	5.27	6.13	7.95	9
17	Mercury ,mg/l	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)
18	Appearance	Not Agreeable	Not Agreeable	Agreeable	Agreeable	Agreeable	Not Agreeable	Not Agreeable	Not Agreeable
19	Appearance after Filtration	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
20	Methyl orange Alkalinity as CaCO ₃ mg/l	162.96	209.52	543.2	302.64	170.72	139.68	89.24	236.68
21	P- Alkalinity mg/l	ND	ND	ND	ND	ND	ND	ND	ND
22	Non Carbonate Hardness (as CaCO ₃ mg/l	346.84	143.42	ND	38.54	348.89	52.48	8.8	14.3
23	E coli MPN/100ml	ND	ND	ND	ND	ND	ND	ND	ND
24	Total coliform, MPN/100ml	ND	ND	ND	ND	ND	ND	ND	ND

Quarter II (July-2022 to September-2022)									
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)	6.61	6.79	7.06	7.42	6.75	6.90	7.23	7.11
2	Colour, Hazen	<5	<5	<5	<5	<5	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	2.6	BDL(<0.1)	< 0.1	< 0.1	5.8	< 0.1	< 0.1	0.8
5	Total Dissolved Solids, mg/l	139	646	1028	648	820	648	221	266
6	Electrical Conductivity, µS/cm	225	1080	1714	1104	1384	1101	355	407
7	Total Hardness (as CaCO ₃), mg/l	73.47	334.69	428.57	330.61	479.59	285.71	151.02	195.92
8	Calcium (as Ca), mg/l	21.22	102.86	97.96	88.16	134.69	76.73	45.71	65.31
9	Magnesium (as Mg), mg/l	4.96	18.84	44.63	26.78	34.71	22.81	8.93	7.93
10	Chlorides (as Cl ⁻), mg/l	9.78	123.28	146.76	45.01	132.09	131.11	14.68	7.83
11	Sulphate (as SO ₄), mg/l	37.5	83.75	100.63	69.25	296.87	101.25	28.37	39.1
12	Iron (as Fe), mg/l	BDL (< 0.01)	BDL (<0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)	BDL (< 0.01)
13	Total Chromium (as Cr), mg/l	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)
14	Arsenic (as As), mg/l	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)
15	Lead (as Pb), mg/l	BDL(<0.01)	BDL(<0.1)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)
16	Silica (as SiO ₂) mg/l	7.38	13.81	26.66	27.62	5.71	13.33	7.14	8.5
17	Mercury ,mg/l	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)

18	Appearance	Not Agreeable	Agreeable	Agreeable	Agreeable	Not Agreeable	Agreeable	Agreeable	Not Agreeable
19	Appearance after Filtration	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
20	Methyl orange Alkalinity as CaCO ₃ mg/l	55.44	201.96	435.6	388.08	128.7	190.08	130.68	186.12
21	P- Alkalinity mg/l	ND	ND	ND	ND	ND	ND	ND	ND
22	Non Carbonate Hardness (as CaCO ₃ mg/l	18.03	132.73	ND	ND	350.89	95.63	20.34	9.8
23	E coli MPN/100ml	ND	ND	ND	20	ND	ND	ND	ND
24	Total coliform, MPN/100ml	ND	ND	ND	115	ND	ND	ND	ND

7.2 SURFACE WATER:

TABLE 7.2.1: RESULTS OF SURFACE WATER MONITORING

Quarter I (April -2022 to June- 2022)				
S. No.	Parameter	Barlan Pond	Kawai Pond	Parvan River
1	pH (at 25 °C)	8.47	8.39	8.28
2	Colour, Hazen	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	0.6	0.9	0.7
5	Total Dissolved Solids, mg/l	148	526	372
6	Electrical Conductivity, μ S/cm	235	858	596
7	Total Hardness (as CaCO ₃), mg/l	43.14	133.33	152.94
8	Calcium (as Ca), mg/l	8.63	14.12	21.96
9	Magnesium (as Mg), mg/l	5.24	23.82	23.82
10	Chlorides (as Cl ⁻), mg/l	27.4	181.01	35.22
11	Sulphate (as SO ₄), mg/l	3.00	35.71	34.37
12	Iron (as Fe), mg/l	BDL(<0.01)	BDL(<0.01)	BDL (< 0.01)
13	Total Chromium (as Cr), mg/l	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)
14	Arsenic (as As), mg/l	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)
15	Lead (as Pb), mg/l	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)
16	Silica (as SiO ₂) mg/l	1.64	4.64	19.32
17	Mercury ,mg/l	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)
18	Appearance	Not Agreeable	Not Agreeable	Not Agreeable

19	Appearance after Filtration	Agreeable	Agreeable	Agreeable
20	Methyl orange Alkalinity as CaCO ₃ mg/l	97.0	213.4	174.6
21	P- Alkalinity mg/l	3.28	ND	ND
22	Non Carbonate Hardness (as CaCO ₃ mg/l	ND	ND	ND
23	E coli MPN/100ml	ND	ND	ND
24	Total coliform, MPN/100ml	ND	ND	ND

Quarter II (July- 2022 to September- 2022)				
S. No.	Parameter	Barlan Pond	Kawai Pond	Parvan River
1	pH (at 25 °C)	8.39	8.42	8.18
2	Colour, Hazen	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	0.7	1.6	BDL(<0.1)
5	Total Dissolved Solids, mg/l	83	328	268
6	Electrical Conductivity, µS/cm	167	558	413
7	Total Hardness (as CaCO ₃), mg/l	36.73	138.78	171.43
8	Calcium (as Ca), mg/l	10.61	29.39	44.08
9	Magnesium (as Mg), mg/l	2.48	15.87	14.88
10	Chlorides (as Cl ⁻), mg/l	7.83	68.49	17.61
11	Sulphate (as SO ₄), mg/l	BDL(<1.0)	22	15.87
12	Iron (as Fe), mg/l	BDL(<0.01)	BDL(<0.01)	BDL (< 0.01)
13	Total Chromium (as Cr), mg/l	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)
14	Arsenic (as As), mg/l	BDL(<0.001)	BDL(<0.001)	BDL(<0.001)
15	Lead (as Pb), mg/l	BDL(<0.01)	BDL(<0.01)	BDL(<0.01)

16	Silica (as SiO ₂) mg/l	0.95	10.47	21.43
17	Mercury ,mg/l	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)
18	Appearance	Agreeable	Not Agreeable	Agreeable
19	Appearance after Filtration	Agreeable	Agreeable	Agreeable
20	Methyl orange Alkalinity as CaCO ₃ mg/l	71.28	154.44	162.36
21	P- Alkalinity mg/l	7.92	3.96	ND
22	Non Carbonate Hardness (as CaCO ₃ mg/l	ND	ND	9.07
23	E coli MPN/100ml	ND	ND	ND
24	Total coliform, MPN/100ml	ND	ND	ND

8 STP WATER

The measurements were conducted during the period of April 2022 to September 2022. The parameters covered in the monitoring are depict below:

TABLE 8.1: RESULTS OF STP WATER

Quarter I (April- 2022 to June-2022)											
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	10KLD III Guest House	10KLD 3 BHK	60KLD STP in Township (Old)	10KLD Health centre
1	pH (at 25°C)	7.36	7.71	7.89	7.24	7.28	7.75	7.21	7.07	7.02	7.95
2	Total Suspended Solid (TSS) mg/l	28	12	28	14	18	57	21	9	28	11
3	Nitrate Nitrogen mg/l	8.13	7.82	7.86	8.03	7.42	8.75	7.85	7.12	8.23	8.49
4	Ammonical Nitrogen (as NH ₃ -N) mg/l	9.71	4.42	7.56	9.42	5.24	9.74	8.42	4.76	6.56	9.16
5	Biochemical Oxygen Demand (BOD) mg/l	17.33	10.33	12.67	15.67	12.25	12.33	11.33	4.29	8	13.33
6	Chemical Oxygen Demand (COD) mg/l	130.56	94.66	114.24	146.88	120.77	104.45	97.92	22.85	58.75	130.56
7	Total Kjeldahl Nitrogen mg/l	23.74	16.12	19.72	25.74	15.79	21.77	22.72	12.95	14.82	19.42
8	Oil & Grease mg/l	5	4	5	5	5	4	4	2	3	5
9	Free Available Chlorine mg/l	0.2	BDL (<0.1)	BDL(<0.1)	BDL (<0.1)	BDL (<0.1)	BDL (<0.1)	BDL (<0.1)	BDL (<0.1)	BDL (<0.1)	BDL (<0.1)
10	Bioassay Test	90% Survival of Fish after 96 hours in 100% effluent	90% Survival of Fish after 96 hours in 100% effluent	90% Survival of Fish after 96 hours in 100% effluent	90% Survival of Fish after 96 hours in 100% effluent	90% Survival of Fish after 96 hours in 100% effluent	90% Survival of Fish after 96 hours in 100% effluent	90% 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	90% Survival of Fish after 96 hours in 100% effluent

Quarter II (July-2022 to September-2022)											
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	10KLD III Guest House	10KLD 3 BHK	60KLD STP in Township (Old)	10KLD Health Centre
1	pH (at 25°C)	7.04	7.10	7.13	7.07	7.09	7.29	7.12	7.13	7.21	7.05
2	Total Suspended Solid (TSS) mg/l	36	13	39	22	16	48	9	19	35	20
3	Nitrate Nitrogen mg/l	7.01	4.89	5.91	7.15	5.56	7.20	4.34	5.09	4.75	6.46
4	Ammonical Nitrogen (as NH ₃ -N) mg/l	12.43	7.83	8.12	7.46	6.72	7.68	7.89	8.16	7.75	8.12
5	Biochemical Oxygen Demand (BOD) mg/l	18.67	7.67	11.75	9.33	11.5	10.67	7.25	8.83	8.25	9.17
6	Chemical Oxygen Demand (COD) mg/l	155.52	58.75	93.31	72.58	92.16	82.94	41.47	62.21	65.66	79.49
7	Total Kjeldahl Nitrogen mg/l	34.67	18.96	22.82	19.83	18.45	33.06	17.41	21.93	19.56	21.50
8	Oil & Grease mg/l	5	3	4	3	4	4	3	3	3	3
9	Free Available Chlorine mg/l	BDL (<0.1)	BDL (<0.1)	BDL(<0.1)	BDL (<0.1)	BDL(<0.1)	BDL(<0.1)	BDL (<0.1)	BDL (<0.1)	BDL (<0.1)	BDL (<0.1)
10	Bioassay Test	90% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent	90% 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

9 ETP WATER

The measurements were conducted during the period of April 2022 to September 2022. The parameters covered in the monitoring are depict below:

TABLE 9.1: RESULTS OF ETP OUTLET

S. No.	Parameter	Unit	Quarter I (April-2022 to June-2022)
1	pH	-	7.37
2	Total Suspended Solids (TSS)	mg/l	3
3	Outlet Temperature	°C	32
4	Chemical Oxygen Demand (COD), mg/l	mg/l	24.83
5	Copper (as Cu), mg/l	mg/l	0.03
6	Iron (as Fe) mg/l	mg/l	BDL(<0.01)
7	Zinc (as Zn) mg/l	mg/l	0.02
8	Phosphate (as P), mg/l	mg/l	BDL(<0.1)
9	Oil & Grease, mg/l	mg/l	2
10	Sulphide	mg/l	BDL (<0.1)
11	Free Available Chlorine	mg/l	BDL (<0.1)

S. No.	Parameter	Unit	Quarter II (July 2022 to Sep. 2022)
1	pH	-	7.43
2	Total Suspended Solids (TSS)	mg/l	12
3	Outlet Temperature	°C	30
4	Chemical Oxygen Demand (COD), mg/l	mg/l	34.56
5	Copper (as Cu), mg/l	mg/l	0.08
6	Iron (as Fe) mg/l	mg/l	0.03
7	Zinc (as Zn) mg/l	mg/l	0.19
8	Phosphate (as P), mg/l	mg/l	BDL(<0.1)
9	Oil & Grease, mg/l	mg/l	2
10	Sulphide	mg/l	BDL (<0.1)
11	Free Available Chlorine	mg/l	BDL (<0.1)

10 ASH RECOVERY WATER

The measurements were conducted during the period of April 2022 to September 2022. 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- 2022 to June- 2022)	
			Ash Recovery Pump House 1	Ash Recovery Pump House 2
1	Lead (as Pb)	mg/l	BDL(<0.01)	BDL(<0.01)
2	Arsenic (as As)	mg/l	BDL(<0.001)	BDL(<0.001)
3	Total Chromium (as Cr)	mg/l	BDL(<0.01)	BDL(<0.01)
4	Cadmium (as Cd)	mg/l	BDL(<0.001)	BDL(<0.001)
5	Mercury (as Hg)	mg/l	BDL(<0.001)	BDL(<0.001)

S. No.	Parameter	Units	Quarter II (July- 2022 to September- 2022)	
			Ash Recovery Pump House 1	Ash Recovery Pump House 2
1	Lead (as Pb)	mg/l	BDL(<0.01)	BDL(<0.01)
2	Arsenic (as As)	mg/l	BDL(<0.001)	BDL(<0.001)
3	Total Chromium (as Cr)	mg/l	BDL(<0.01)	BDL(<0.01)
4	Cadmium (as Cd)	mg/l	BDL(<0.001)	BDL(<0.001)
5	Mercury (as Hg)	mg/l	BDL(<0.001)	BDL(<0.001)

11 FLY ASH [SILO]

The measurements were conducted during the period of April 2022 to September 2022. The parameters covered in the monitoring are depict below:

TABLE 11.1: RESULTS OF FLY ASH SAMPLE (Unit I)

S. No.	Parameter	Unit	Quarter I (April- 2022 to June- 2022)
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	13.0
4	Total Chromium as Cr	mg/kg	7.60

S. No.	Parameter	Unit	Quarter II (July- 2022 to September- 2022)
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	BDL(<0.001)
4	Total Chromium as Cr	mg/kg	4.80

TABLE 11.2: RESULTS OF FLY ASH SAMPLE (Unit II)

S. No.	Parameter	Unit	Quarter I (April- 2022 to June- 2022)
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	13.20
4	Total Chromium as Cr	mg/kg	7.25

S. No.	Parameter	Unit	Quarter II (July- 2022 to September- 2022)
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	BDL(<0.001)
4	Total Chromium as Cr	mg/kg	4.50

12 SOIL

The measurements were conducted during the period of April 2022 to September 2022. The parameters covered in the monitoring are depict below:

TABLE 12.1: RESULTS OF SOIL MONITORING

S. No.	Parameter	Quarter I (April- 2022 to June- 2022)		
		Nimoda Village	Kawai Village	Phulbaroda Village
1	Boron [mg/kg]	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)
2	Calcium as CaO [%]	1.14	1.20	1.82
3	Magnesium as MgO [%]	0.82	0.69	1.06
4	Potassium as K ₂ O [%]	0.52	0.25	0.32
5	Iron as Fe [%]	3.58	3.12	3.84
6	Manganese as Mn [mg/kg]	1012.81	1023	1029
7	Phosphorus [%]	0.0081	0.0029	0.0024

S. No.	Parameter	Quarter II (July- 2022 to September- 2022)		
		Nimoda Village	Kawai Village	Phulbaroda Village
1	Boron [mg/kg]	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)
2	Calcium as CaO [%]	1.32	1.19	2.12
3	Magnesium as MgO [%]	0.73	0.75	1.64
4	Potassium as K2O [%]	0.46	0.24	0.28
5	Iron as Fe [%]	1.24	3.92	2.44
6	Manganese as Mn [mg/kg]	717	0.08	680
7	Phosphorus [%]	0.0075	0.0021	0.0031



**ADANI POWER RAJASTHAN LIMITED
2X660 MW KAWAI THERMAL POWER STATIONS**

CONTINUOUS EMISSION MONITORING RESULTS		
Station: Stack Attached to Boiler 1 & 2		
Report type: Mean & Daily		
Time Base: 24 Hour		
Date (DD/MM/YY)	UNIT 1	UNIT 2
	PM (mg/Nm³)	
2022-04-01 00:00:00	38.87	37.84
2022-04-02 00:00:00	40.91	37.82
2022-04-03 00:00:00	42.78	39.35
2022-04-04 00:00:00	41.35	38.35
2022-04-05 00:00:00	39.97	38.42
2022-04-06 00:00:00	41.42	38.51
2022-04-07 00:00:00	41.15	37.75
2022-04-08 00:00:00	42.19	38.45
2022-04-09 00:00:00	41.53	38.53
2022-04-10 00:00:00	41.62	38.94
2022-04-11 00:00:00	40.92	39.06
2022-04-12 00:00:00	42.29	39.21
2022-04-13 00:00:00	42.38	38.79
2022-04-14 00:00:00	40.68	38.64
2022-04-15 00:00:00	41.86	38.35
2022-04-16 00:00:00	42.25	38.4
2022-04-17 00:00:00	40.6	38.22
2022-04-18 00:00:00	39.15	37.92
2022-04-19 00:00:00	41.32	38.31
2022-04-20 00:00:00	42.88	38.56
2022-04-21 00:00:00	41.94	38.86
2022-04-22 00:00:00	40.66	38.29
2022-04-23 00:00:00	39.43	37.88
2022-04-24 00:00:00	40.27	37.9
2022-04-25 00:00:00	40.72	38.77
2022-04-26 00:00:00	39.75	40.94
2022-04-27 00:00:00	38.04	34.96
2022-04-28 00:00:00	Site Shutdown	33.69
2022-04-29 00:00:00	Site Shutdown	35.94
2022-04-30 00:00:00	Site Shutdown	36.24
Min	38.04	33.69
Max	42.88	40.94
AVG	41.00	38.10

**ADANI POWER RAJASTHAN LIMITED
2X660 MW KAWAI THERMAL POWER STATIONS**

CONTINUOUS EMISSION MONITORING RESULTS		
Station: Stack Attached to Boiler 1 & 2		
Report type: Mean & Daily		
Time Base: 24 Hour		
Date (DD/MM/YY)	UNIT 1	UNIT 2
PM (mg/Nm ³)		
2022-05-01 00:00:00	Site Shutdown	36.48
2022-05-02 00:00:00	Site Shutdown	37.96
2022-05-03 00:00:00	Site Shutdown	38.76
2022-05-04 00:00:00	Site Shutdown	39.78
2022-05-05 00:00:00	39.26	37.96
2022-05-06 00:00:00	34.55	35.97
2022-05-07 00:00:00	33.86	35.29
2022-05-08 00:00:00	34.05	37.02
2022-05-09 00:00:00	32.57	34.05
2022-05-10 00:00:00	30.56	33.46
2022-05-11 00:00:00	31.06	35.64
2022-05-12 00:00:00	33.65	37.55
2022-05-13 00:00:00	31.54	38.4
2022-05-14 00:00:00	32.26	38.48
2022-05-15 00:00:00	27.81	31.86
2022-05-16 00:00:00	29.91	33.11
2022-05-17 00:00:00	30.13	34.28
2022-05-18 00:00:00	31.2	36.24
2022-05-19 00:00:00	38.35	38.09
2022-05-20 00:00:00	30.21	35.92
2022-05-21 00:00:00	28.91	29.49
2022-05-22 00:00:00	29.23	28.68
2022-05-23 00:00:00	28.92	28.66
2022-05-24 00:00:00	30.82	31.6
2022-05-25 00:00:00	32.76	34.02
2022-05-26 00:00:00	34.44	36.02
2022-05-27 00:00:00	30.23	33.56
2022-05-28 00:00:00	32.06	37.57
2022-05-29 00:00:00	31.48	36.53
2022-05-30 00:00:00	37.86	39.13
2022-05-31 00:00:00	35.71	39.29
MIN	27.81	28.66
Max	39.26	39.78
AVG	32.35	35.51

**ADANI POWER RAJASTHAN LIMITED
2X660 MW KAWAI THERMAL POWER STATIONS**

CONTINUOUS EMISSION MONITORING RESULTS		
Station: Stack Attached to Boiler 1 & 2		
Report type: Mean & Daily		
Time Base: 24 Hour		
Date (DD/MM/YY)	UNIT 1	UNIT 2
	PM (mg/Nm³)	
2022-06-01 00:00:00	36.43	38.12
2022-06-02 00:00:00	38.34	39.55
2022-06-03 00:00:00	25.05	39.99
2022-06-04 00:00:00	Site Shutdown	40.54
2022-06-05 00:00:00	Site Shutdown	41.4
2022-06-06 00:00:00	Site Shutdown	41.17
2022-06-07 00:00:00	Site Shutdown	39.47
2022-06-08 00:00:00	Site Shutdown	40.24
2022-06-09 00:00:00	Site Shutdown	40.14
2022-06-10 00:00:00	Site Shutdown	40.91
2022-06-11 00:00:00	Site Shutdown	40.4
2022-06-12 00:00:00	40.3	39.94
2022-06-13 00:00:00	40.51	40.48
2022-06-14 00:00:00	39.27	40.23
2022-06-15 00:00:00	36.86	40.69
2022-06-16 00:00:00	36.77	40.17
2022-06-17 00:00:00	Site Shutdown	39.03
2022-06-18 00:00:00	Site Shutdown	38.72
2022-06-19 00:00:00	Site Shutdown	37.33
2022-06-20 00:00:00	Site Shutdown	35.68
2022-06-21 00:00:00	26.54	36.12
2022-06-22 00:00:00	32.51	39.07
2022-06-23 00:00:00	39.15	41.56
2022-06-24 00:00:00	Analyser Maintenance	
2022-06-25 00:00:00	41.16	39.53
2022-06-26 00:00:00	39.75	40.48
2022-06-27 00:00:00	33.52	41.36
2022-06-28 00:00:00	34.2	41.27
2022-06-29 00:00:00	28.39	38.47
2022-06-30 00:00:00	Internet Suspended by District Administration	
Min	25.05	35.68
Max	41.16	41.56
Avg	35.55	39.72

**ADANI POWER RAJASTHAN LIMITED
2X660 MW KAWAI THERMAL POWER STATIONS**

CONTINUOUS EMISSION MONITORING RESULTS		
Station: Stack Attached to Boiler 1 & 2		
Report type: Mean & Daily		
Time Base: 24 Hour		
Date (DD/MM/YY)	UNIT 1	UNIT 2
PM (mg/Nm³)		
2022-07-01 00:00:00	Internet Suspended	Internet Suspended
2022-07-02 00:00:00	Internet Suspended	Internet Suspended
2022-07-03 00:00:00	Internet Suspended	Internet Suspended
2022-07-04 00:00:00	Internet Suspended	Internet Suspended
2022-07-05 00:00:00	37.38	38.34
2022-07-06 00:00:00	32.29	39.07
2022-07-07 00:00:00	35.14	38.91
2022-07-08 00:00:00	38.8	38.68
2022-07-09 00:00:00	34.57	40.09
2022-07-10 00:00:00	35.18	41.78
2022-07-11 00:00:00	33.98	42.13
2022-07-12 00:00:00	33.1	41.66
2022-07-13 00:00:00	Internet Down	Internet Down
2022-07-14 00:00:00	35.2	41.11
2022-07-15 00:00:00	32.32	41.55
2022-07-16 00:00:00	33.77	41.69
2022-07-17 00:00:00	36.01	41.18
2022-07-18 00:00:00	41.39	40.14
2022-07-19 00:00:00	41.64	39.87
2022-07-20 00:00:00	36.41	41.14
2022-07-21 00:00:00	33.92	41.84
2022-07-22 00:00:00	38.01	41.3
2022-07-23 00:00:00	34.63	41.63
2022-07-24 00:00:00	36.58	41.57
2022-07-25 00:00:00	Internet Down	Internet Down
2022-07-26 00:00:00	35.24	41.64
2022-07-27 00:00:00	38.51	41.08
2022-07-28 00:00:00	38.46	41.19
2022-07-29 00:00:00	38.72	40.98
2022-07-30 00:00:00	34.84	41.86
2022-07-31 00:00:00	34.31	41.79
Min	32.29	38.34
Max	41.64	42.13
Avg.	36.02	40.89

**ADANI POWER RAJASTHAN LIMITED
2X660 MW KAWAI THERMAL POWER STATIONS**

CONTINUOUS EMISSION MONITORING RESULTS		
Station: Stack Attached to Boiler 1 & 2		
Report type: Mean & Daily		
Time Base: 24 Hour		
Date (DD/MM/YY)	UNIT 1	UNIT 2
	PM (mg/Nm³)	
2022-08-01 00:00:00	37.09	Site Shutdown
2022-08-02 00:00:00	37.62	Site Shutdown
2022-08-03 00:00:00	39.43	Site Shutdown
2022-08-04 00:00:00	39.41	Site Shutdown
2022-08-05 00:00:00	39.06	Site Shutdown
2022-08-06 00:00:00	39.64	Site Shutdown
2022-08-07 00:00:00	40.04	Site Shutdown
2022-08-08 00:00:00	39.7	Site Shutdown
2022-08-09 00:00:00	38.48	Site Shutdown
2022-08-10 00:00:00	40.4	Site Shutdown
2022-08-11 00:00:00	37.62	Site Shutdown
2022-08-12 00:00:00	39.43	Site Shutdown
2022-08-13 00:00:00	39.41	Site Shutdown
2022-08-14 00:00:00	39.06	Site Shutdown
2022-08-15 00:00:00	39.37	Site Shutdown
2022-08-16 00:00:00	39.78	Site Shutdown
2022-08-17 00:00:00	41.16	Site Shutdown
2022-08-18 00:00:00	43.69	Site Shutdown
2022-08-19 00:00:00	37.62	Site Shutdown
2022-08-20 00:00:00	39.43	Site Shutdown
2022-08-21 00:00:00	39.41	Site Shutdown
2022-08-22 00:00:00	39.06	Site Shutdown
2022-08-23 00:00:00	37.62	Site Shutdown
2022-08-24 00:00:00	39.43	Site Shutdown
2022-08-25 00:00:00	39.41	Site Shutdown
2022-08-26 00:00:00	39.06	Site Shutdown
2022-08-27 00:00:00	44.04	Site Shutdown
2022-08-28 00:00:00	43.58	Site Shutdown
2022-08-29 00:00:00	44.42	Site Shutdown
2022-08-30 00:00:00	Site Shutdown	Site Shutdown
2022-08-31 00:00:00	Site Shutdown	Site Shutdown
Min	37.09	Site Shutdown
Max	44.42	Site Shutdown
AVG	39.77	Site Shutdown

**ADANI POWER RAJASTHAN LIMITED
2X660 MW KAWAI THERMAL POWER STATIONS**

CONTINUOUS EMISSION MONITORING RESULTS		
Station: Stack Attached to Boiler 1 & 2		
Report type: Mean & Daily		
Time Base: 24 Hour		
Date (DD/MM/YY)	UNIT 1	UNIT 2
	PM (mg/Nm³)	
2022-09-01 00:00:00	Site Shutdown	Site Shutdown
2022-09-02 00:00:00	Site Shutdown	Site Shutdown
2022-09-03 00:00:00	Site Shutdown	Site Shutdown
2022-09-04 00:00:00	44.89	Site Shutdown
2022-09-05 00:00:00	44.23	Site Shutdown
2022-09-06 00:00:00	44.11	30.6
2022-09-07 00:00:00	43.72	41.66
2022-09-08 00:00:00	43.06	41.85
2022-09-09 00:00:00	43.49	41.78
2022-09-10 00:00:00	28.99	42
2022-09-11 00:00:00	Site Shutdown	42.21
2022-09-12 00:00:00	Site Shutdown	42.27
2022-09-13 00:00:00	43.06	41.89
2022-09-14 00:00:00	43.89	41.96
2022-09-15 00:00:00	43.27	42.18
2022-09-16 00:00:00	43.69	42.04
2022-09-17 00:00:00	43.64	42.1
2022-09-18 00:00:00	42.31	41.89
2022-09-19 00:00:00	42.29	41.7
2022-09-20 00:00:00	43.38	41.64
2022-09-21 00:00:00	44.34	Site Shutdown
2022-09-22 00:00:00	44.72	Site Shutdown
2022-09-23 00:00:00	45.38	Site Shutdown
2022-09-24 00:00:00	45.1	Site Shutdown
2022-09-25 00:00:00	44.67	42.51
2022-09-26 00:00:00	42.99	42.09
2022-09-27 00:00:00	44.11	41.95
2022-09-28 00:00:00	43.7	41.76
2022-09-29 00:00:00	43.61	41.56
2022-09-30 00:00:00	42.81	41.32
MIN	28.99	30.60
Max	45.38	42.51
AVG	43.18	41.38

ADANI POWER RAJASTHAN LIMITED**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.	Apr-2022	22.0 Meter	27.0 Meter	31.0 Meter
2.	May-2022	25.0 Meter	28.0 Meter	34.0 Meter
3.	June-2022	21.5 Meter	16.0 Meter	29.5 Meter
4.	July-2022	18.5 Meter	17.0 Meter	26.0 Meter
5.	Aug-2022	5.5 Meter	9.0 Meter	11.5 Meter
6.	Sep-2022	3.0 Meter	10.5 Meter	7.5 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 Rajasthan Limited

2 x 660 MW Kawai Thermal Power Station

Ash Generation, Utilization and Disposal Details (MT/Month)

S. No.	Month	Total Ash Generation	ASH UTILIZATION			Disposal In Ash Dyke	Total Ash Utilization	Percentage of Ash utilization	Balance in Ash Silo (Cumulative #)
			For Brick Construction	For Cement Manufacturing	Reclamation of Low Lying area				
1	Apr-22	153754	47905	99934	11000	0.00	158839	103.31	2868
2	May-22	149207	24805	73892	55740	0.00	154437	103.51	2101
3	Jun-22	116895	3575	97522	6800	0.00	107897	92.30	889
4	Jul-22	124380	0	103614	10000	0.00	113764	91.46	255
5	Aug-22	62397	0	55614	1500	0.00	57114	91.53	174
6	Sep-22	98062	0	80075	3000	0.00	83075	84.72	1491
Total		704695	76285	510651	88040	0.00	675126	95.80	1491

Balance in Silo-1491 MT

Greenbelt Details:

Area (ha)	No. of Trees Planted	No. of Shrubs Planted
117.0	1,20,754	1,76,000

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.	Albizia lebeck	Siris
18.	Pongamia pinnata	Karanj
19.	Cordia longifolia	Lasoorra
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



Corporate Social Responsibility

Six-month Report (April 2022- September 2022)

Adani Power Rajasthan Limited, Kawai

Overview of Kawai Site

At present we are working in 28 villages, 14 Gram Panchayats, 1 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)

- Chatrapura
- Baldevpura
- Dhara
- Nimoda
- Khedligaddiyan
- Salpura
- Kawai
- Mukundpura

Cluster Two (Pipe Line Zone)

- Sodalehri
- Kharkhada
Ramlothan
- Dadwara
- Bamori
- Choithya
- Mytha
- Hatidilod
- Phoollbaroda
- Zarkhand

Cluster Three (Anicut Area)

- Atru
- Aton
- Baldevpura
(anicut)
- Kunjer

Cluster Four (Buffer Zone)

- Aamapura
- Bamapura
- Lolahedi
- Sindhani
- Haniheda
- Barla
- Khedli bansla

Education

JNV coaching classes:

- This Year 6 students have been selected at JNV, Baran.
- At APRL we conduct a small event invite to selected students and parents; Senior management of APRL interacted with students.
- Parents organize an event and share their feedback and shown gratitude towards Adani foundation.

UDAAN:

- UDAAN resume at Kawai; Head O&M, Head Safety, Admin. Head and CSR head inaugurate the session and interact with participants.
- schools are register them self thru web portal and smooth functioning online system.
- 20 exposure visits conducted with 1054 participants.

Sports training and competition:

- State government initiate a program "RAJIV GANDHI RURAL OLYMPIC" for encourage sports habit among rural youth and provide platform to rural talent.
- We supported to GP Kawai and Block level tournament under RAJIV GANDHI RURAL OLYMPIC GAMES.

Safety park inauguration at JNV Atru:

- On 24th May 2022; Adani power COO Shri Jaydeb Nanda inaugurate Safety park and handover to JNV.
- Students of 12th class visit to Safety park; COO sir interact with students and share insights of Adani Safety culture.

Education



JNV students @Adani



Parents recognize to Adani



UDAAN @Auditorium



UDAAN- Group picture



UDAAN @Safety park



Rural Olympic games



Inauguration of Safety park



Group photo @Safety park

Education (Success story: JNV selected students)

- JNV Coaching Classes:
 - It is pleasure movement to share that @Kawai under program JNV Coaching classes 2021-22, Total 6 children got selected in Jawahar Navodaya Selection Test from marginalized section of APRL vicinity.
 - At JNV Atru has total 80 seats in class six and which are filled with national level selection test called "JNVST" and all 80 seats divided into 8 blocks of Baran district. Seats allocation is based on reservation policy of JNV around 9 to 10 seats allotted to Atru block. For JNVST approx. 15000 children attempt the selection test where our coaching students secure 6 seats.
 - Parents and school invite us and showing Gratitude in a program as arranged at Govt. Sr. sec. school Kawai. Parents share their feedback towards coaching facilities and recognize the efforts of Adani foundation people feel secure because their children now will take Quality education with most renowned institute of Govt. of India. Students emotionally share their 6-month coaching experience where they learn and enjoy the tenure.



Mahesh-
Haniheda



Lavesh
K.Ramlothan



Hemant- Kawai



Khushi- Kawai



Sneha- Kawai



Anika- Kawai

Adani Vidyalaya, Kawai

➤ Academic activities:

- Adani Vidyalaya start new session 2022-23 with Saraswati pooja and welcome to students.
- Planning to organize various Olympiads in school for all students.
- Music classes were arranged for learning prayers and song on patriotism.
- Installed many indoor and outdoor equipment for Games and physical activity.
- Children participated in SOF exam and passed with flying colors. They were awarded with certificate of excellence.
- Parents Teachers Meeting conducted. PA-2 papers were shown to the parents.

➤ Event celebration and extracurricular activities @ AVK:

- All National days, Occasion and Festivals celebrated @AVK like- Gandhi Jayanti, Vijayadashami, Diwali, Mathematics day, Guru purnima, Netaji Subhash Chandra Bose Week, Basant Panchami, National science day,
- World Health Day was celebrated in the school on April 7, 2022- A medical camp was organized for dental, eye and weight check-up of the students.
- An educative and interactive workshop on 'Good Touch and Bad Touch' was organized by AVK for safety and awareness of children as well as parents.
- Students made posters for National Fire Service day and winners were awarded.
- Celebration of World Environment day: Various competition and a rally was organized by students for spreading awareness on the environment Day.
- Fathers' day celebrated at AVK: A fireless cooking competition was organized where children and their fathers bonded over cooking activity.
- International Yoga day celebrated by AVK and arrange a Yoga session for all students.
- Orientation program conducted; wherein all the parents and teachers of respective classes gathered and discussed about smooth functioning of our academics and Non-academic.
- Rakhi making competition was conducted, and wonderful creations were witnessed.
- Shri Krishna-Jansthami celebrated- Pot making activity was conducted with active participation.
- Parents Teachers Meeting conducted. PA-2 papers were shown to the parents.

➤ Trainings and Learning activities for teachers:

- Training session: organized a training on the topic- "Ownership and Accountability" for all staff members of AVK.
- English communication workshop was conducted by one of the staff member .
- Effective Communication session arranged for our teachers.

Adani Vidyalaya, Kawai



Session starts with Poojan



Certificate to students



Int. Yoga day celebration



Medical chekup @AVK



Environment day Rally



Workshop- Good-Bad touch



Independence day celebration



Parents-Teachers meeting

Community Health

➤ Mobile health care unit:-

- ❖ MHCU covered 28 villages in a week and provide doorstep health facilities to community.

Month	Village OPD				Other services				
	Male	Female	Children	Total	School & other camp	Blood sugar testing	Referred cases	Home visits	Awareness session
April	1007	907	453	2367	14	00	1	3	1
May	1012	936	491	2439	6	12	0	1	2
June	997	940	591	2528	6	18	0	4	5
July	1682	1274	577	3533	14	13	1	4	10
August	1603	1286	602	3491	10	15	0	4	9
September	1613	1492	543	3648	10	30	1	5	6
Total	7914	6835	3257	18006	60	88	3	21	33

➤ Other Health initiatives:-

- ❖ Blood donation awareness session organized at Seendhani & Aamapura village on "World Blood Donor Day- 14th June.
- ❖ Conduct the Awareness session about Breast feeding on the occasion of "World Breast feeding Week" at two different location of Salpura village.
- ❖ Conduct the O2-awareness session about how to care heart at the occasion of "World Heart Day" at two location Kharkhada and Aton site.

Community Health



MHCU ongoing service



Home visit by MHCU



ECG test @MHCU



Awareness session



Awareness session



Home visit by MHCU



School health camp



Awareness session

Community Health (Case Study)

Case Study

- Name - Kasturi Bai
- Age - 78 years
- Site Name – Amapura



Kasturi Bai suffering from Breathlessness/Asthma she is regular beneficiary of our MHCU from more than three years. She comes to our site regularly for the medicines and check-up.

When something 3 years ago she started to come. MHCU team found that she is suffering from Breathlessness/Asthma after the examination doctor prescribed her the regular medicines.

She informed that three years back she came to know about our MHCU free of cost treatment and she came to the site and told her health issues to the doctor and the MHCU team briefed her about the services rendered by the Mobile Healthcare Unit. The cordial attitude shown by the staff, she felt comfortable and also shared all her problems with the MHCU staff and was treated by the Medical Consultant with suitable treatment and compliance including free medicines, counselling and regular health check-ups. After availing regular treatment now she felt improvement and got relief in her health condition. Also she was able to save some money and time which she used to spend on her treatment from the private clinic.

She is very happy and satisfied with MHCU treatment.

She is very thankful to Adani Foundation.

Conclusion-This MHCU service has been very successful in reaching out to a section of the underprivileged that reside at Amapura.

Community Health (Case Study)

Case Study

- Name – Shanti Bai
- Age - 70 years
- Site name- Nimoda.



Shanti Bai suffering from hypertension, Gastritis and weakness. Shanti Bai is regular beneficiary of our MHCU from more than six years. She comes to our site regularly for the medicines and BP check-up.

When this month she came MHCU team found that her B.P. was on the higher side as she was not taking her medicines regularly. After the examination MHCU doctor prescribed her the regular B.P. medicines along with the iron tablets so that weakness can be recovered.

She informed that six years back she came to know about our MHCU free of cost treatment and she came to the MHCU site and told her health issues to the MHCU doctor and the team briefed her about the services rendered by the Mobile Healthcare Unit. The cordial attitude shown by the MHCU staff, she felt comfortable and also shared all her problems with the MHCU staff and was treated by the Medical Consultant with suitable treatment and compliance including free medicines, counselling and regular health check-ups. After availing regular treatment she felt improvement and got relief in her health condition. Also, she was able to save the money which she used to spend on her treatment from the private clinic at Atru.

She is very happy and satisfied with MHCU treatment.

She is very thankful to Adani Foundation and HelpAge India as she felt there is someone who is looking after her.

Conclusion-This MHCU service has been very successful in reaching out to a section of the underprivileged that reside at Nimoda.

Community Health (Case Study)

Case Study

- Name – Mr. Chhagan Lal
- Age - 72 years
- Site name- Kunjer.



Mr. Chhagan Lal suffering from Asthama he is regular beneficiary of our MHCU from three year. He comes to our site regularly for the medicines and check-up.

When something 3 year ago he started to come. MHCU team find that he is suffering form Asthama after the examination doctor prescribed her the regular medicines.

He informed that three year back he came to knew about our MHCU free of cost treatment and he come to MHCU site and told her health issues to the doctor and the team briefed her about the services rendered by Mobile Healthcare Unit. The cordial attitude shown by the MHCU staff, she felt comfortable and also shared her all the problems to the MHCU staff and treated by the Medical Consultant with suitable treatment compliance including free medicines, counselling and regular health check-up. After availing regular treatment now, he felt improvement and got relief in her health condition. Also he able to save some money which she use to spent on her treatment from the Private clinic.

He is very happy and satisfied with MHCU treatment. He is very thankful to Adani Foundation.

Conclusion-This MHCU service has been very successful in reaching out to a section of the underprivileged that reside at Kunjer.

Sustainable Livelihood

PASHUDHAN: –

We are implementing cattle breed improvement programme since 2017 in 27 villages.

- ❖ 348 Cattle covered thru Artificial insemination in 1st six month, 2022-23.
- ❖ 253 new calf born in 1st six month, 2022-23.
- ❖ 234 cattle found pregnant 1st six month, 2022-23.
- ❖ LAMPI vaccination to 100 cattle with support of Govt. department.
- ❖ Feed supplementary provided to 164 farmers.
- ❖ Fodder demonstration cutting started– Green fodder will be available for next 4 months to 150 farmers.

Sr. No.	Particular	Achievement till September 2021
1	Artificial Insemination	3837
2	Pregnant	2011
3	Calves	1376
4	Vaccination	7958



Sustainable Livelihood

KRISHI KOUSHAL: -

- Agriculture seed distribution to 10 farmers for Kharif crop.
- Conduct farmers training for improved agriculture practices and motivates to use of Neno Urea.
- Total 90 farmers participated and provide Neno Urea to 50 farmers.
- Orchard development program:
 - ❖ Under orchard development program- Mango and Chikoo fruiting started. During field visit its confirmed that 10 farmers earning Rs. 3000 to 5000.
 - ❖ 2950 fruit plantation distributed to farmers for development 10 new wadi.
 - ❖ Fertilizer distributed along with plants for better yield of orchard.

Institution Building –

- Training organized for FPO members, Chartered Accountant explain procedure and solve queries about functioning of FPO.
- Inauguration of Milk collection center by divine hand of COO Sh. Jaydeb Nanda sir on 25th May.
- Community contribution of Rs. 3,99, 970/- Cheque handover to FPO and conduct meeting of Board of directors.
- FSSAI License under process for regularize FPO activities.
- Independence day- AAZADI KA AMRATMHOTSAV celebrated at Nimoda center by FPO- Hadoti Pragatisheel Producer Company Ltd.
- Approx. 400-liter milk collection every day from 6 milk collection center villages.
- Organize exposure visit at Adani Wilmar for Board of Directors of FPO.
- Bank account open for all Board of Directors for smooth and transparent transactions under FPO.

Sustainable Livelihood



Training for FPO members



Fruit plant distribution



Inauguration of Milk center



Milk collection center



Monthly village level meeting



Independence day @FPO



Exposure @Adani wilmar



Farmers training

Blood donation drive

- 24th June the auspicious occasion celebrated at Kawai as every year.
- Total 684 blood unit collected voluntarily; 4 agencies involve in this blood donation drive.
- District collector, CMHO Baran and block CMHO visited and inaugurate the blood donation drive at APRL.
- District collector appreciate the effort of Adani foundation and do the plantation at Shantigram township.
- All Adanian, partner organization and some nearby community people also participate for this successful event.

Budget V/s Actual Half Yearly FY 2022-2023

Sr No	Activities	Cost Centre	Internal Order	Proposed Budget F.Y.2022-23			Expenses for Half Year - 2022 (in Lacks)	% of utilization	Remarks
				Capex	Opex	Total			
A.	General Management and Administration	35004401		16.50	32.47	48.97	13.89	14.14%	
B.	Education	35004000		0.00	20.60	20.60	4.50	21.84%	
C.	Community Health	35004101		0.00	93.18	93.18	49.52	53.14%	
D.	Sustainable Livelihood Development	35004301		0.00	66.44	66.44	24.63	37.07%	
E.	Community Infrastructure Development	35004201		0.00	54.66	54.66	1.94	3.55%	
	Total Budget:			16.50	267.35	283.85	94.48	33.29%	

Blood donation drive



Awareness rally @APRL



Awareness rally @Township



District collector visit @Health center



Blood donation camp inauguration



Blood donation



Group photo @ Blood donation drive

adani

Growth
with
Goodness



Thank You

adani
Power

Ref: APRL/PK/GOVT/RSPCB/00591

Date: 27th September 2022

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

Subject: Environmental Statement for the Financial Year 2021-22.

Ref : Consent to Operate Order No. 2019 - 2020/HDF/2773 dated 09.08.2019

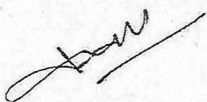
Dear Sir,


With reference to above subject, kindly find enclosed herewith Environmental Statement for financial year ending 2021-22, along with Form-V prescribed under Rule 14 of the Environment (Protection) Rules 1986, in respect of Kawai Thermal Power Station.

Kindly acknowledge the same.

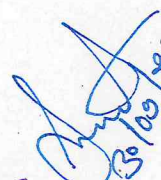
Thanking You,

For Adani Power Rajasthan Ltd.


Authorized Signatory

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

Encl : As above


क्षेत्रीय कार्यालय
रा. प्र. नि. मं.
झालावाड़

Adani Power Rajasthan Ltd
NH 90, Atru Road
Village Kawai, Tehsil Atru
Baran 325 219
Rajasthan, India
CIN U40104GJ2008PLC052743

Tel +91 744-27-78600
info@adani.com
www.adanipower.com

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

ENVIRONMENT STATEMENT

FOR FINANCIAL YEAR

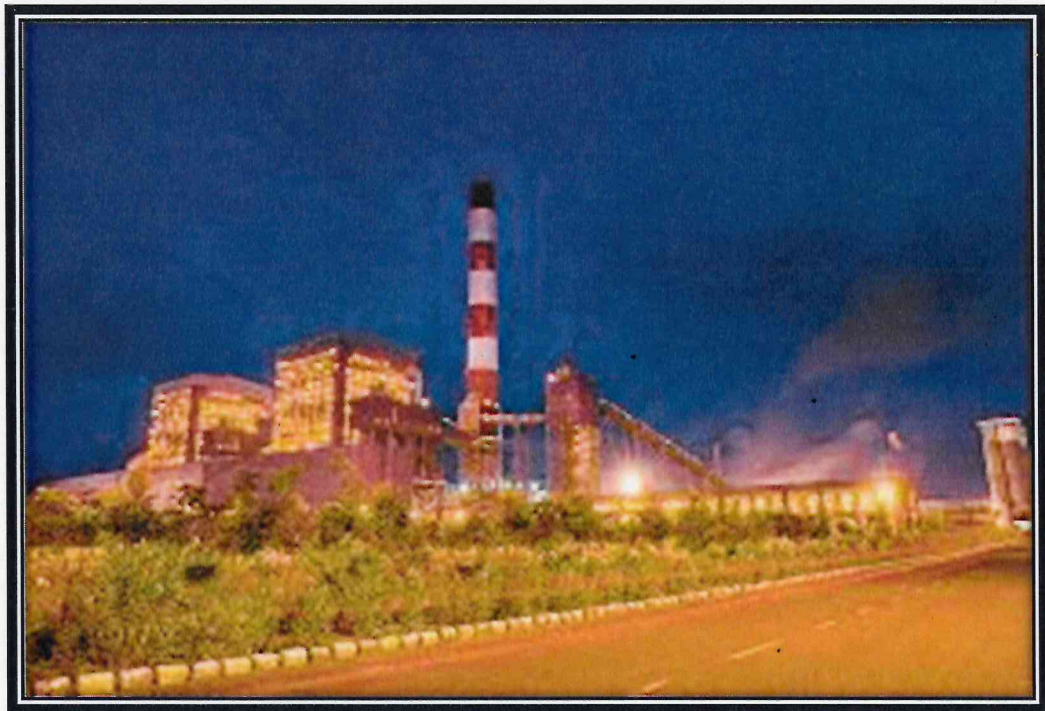
2021 - 2022

1320 (2×660) MW

KAWAI THERMAL POWER PLANT

Submitted to:

Rajasthan State Pollution Control Board, Jaipur



Submitted By:

adani
-Power

ADANI POWER RAJASTHAN LIMITED

**Village: Kawai, Taluka: Atru
Baran, Rajasthan**

ENVIRONMENTAL STATEMENT

FORM V
(See Rule 14)

From:
Adani Power Rajasthan Ltd.
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 2021 to March 2022)

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– Red Category)
 - Secondary-(STC Code) :- NA
- iii) Production Capacity-Units : 1320 (2x660) MW 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 29.02.2024).
- v) Date of the last environmental statement submitted: **22.09.2021**

PART B

Water and Raw Material Consumption:

1. Water consumption **m³/d**
- a) Process : 935.19
 - b) Cooling : 50818.72
 - c) Domestic : 492.14

Name of Products	Process water consumption per unit of product output	
	During the previous financial year (2020-21)	During the current financial year (2021-22)
	(1)	(2)
Power	2.27 KL/MWh	2.28 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 (2020-21)	During the current financial year (2021-22)
(1) Coal	Electricity Generation	564.21 gm/kwh	581.84 gm/kwh
(2) Fuel Oil	Electricity Generation	0.03 ml/kwh	0.05 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: 2.02 TPD Unit#2: 2.04 TPD	Unit#1: 31.33 Unit#2: 30.20	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 (2020-21)	During the current financial year (2021-22)
a)	From Process <ul style="list-style-type: none"> • Used/Spent Oil 	<ul style="list-style-type: none"> • 7.08 KL (Generated) • 13.84 KL (disposed) • 0.79 KL (Balance) 	<ul style="list-style-type: none"> • 24.592 KL (Generated) • 23.717 KL (disposed) • 1.037 KL (Balance)
	<ul style="list-style-type: none"> • Discarded Containers 	<ul style="list-style-type: none"> • 03 Nos. (Generated) • 68 Nos. (disposed) • 04 Nos. (Balance) 	<ul style="list-style-type: none"> • 117 Nos. (Generated) • 115 Nos. (disposed) • 06 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 (2020-21)	During the current financial year (2021-22)
a)	From Process (Bottom Ash)	3,73,106 MT (Disposed to Bricks manufacturers)	3,63,740 MT (Disposed to Bricks manufacturers)
b)	From pollution control facilities (Ash from ESP)	11,89,727 (Dispose to Cement manufacturer)	10,22,481 (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	42,810 MT (In reclamation of low-lying area in Plant premises)	1,78,600 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 off through authorized recyclers. (Please Refer Part - D for Hazardous waste generation and disposal)

- Fly Ash utilized by following Industries
 - A INFRASTRUCTURE LTD
 - ACC LTD
 - AMBUJA CEMENTS LTD
 - BIRLA CORPORATION LTD
 - DCM SHRIRAM LTD
 - J K CEMENT WORKS ALIGARH
 - J K CEMENT WORKS MANGROL
 - J K CEMENT WORKS NIMBAHERA
 - J K LAKSHMI CEMENT LTD
 - JAGDISH JINDAL AND COMPANY
 - KARNEE ENTERPRISES
 - MANGAL ROAD LINES
 - MANGALAM CEMENT LTD
 - NUVOCO VISTAS CORPORATION LTD
 - PARIN TRADING CORPORATION
 - SHRI HARI ISHWARDAS TRANSPORT
 - SHRIRAM CEMENT WORKS
 - THE INDIA CEMENTS LTD
 - UDAIPUR CEMENT WORKS LTD
 - ULTRATECH CEMENT LTD
 - ULTRATECH NATHDWARA CEMENT LTD
 - VEDAVYA ROADLINES
 - VIRAT SUPPLIERS
 - WONDER CEMENT LTD

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 Rajasthan 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 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 the 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 in Rainwater Harvesting Pond.
- Recycling and reusing of treated water in plant operation.
- Organic waste is being utilize in Organic waste convertor 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

- Propose to Install of Flue Gas Desulphurization (FGD) unit to reduce SO₂ emission as per CPCB direction.
- Installation of Flow monitoring device at both flue cane of Unit-1 & 2.

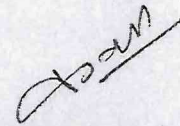
PART - I

Miscellaneous

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

1. 1,13,526 trees and 1,70,000 shrubs planted up to financial year 2021-22 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. Six monthly EC Compliance report is being submitted to RSPCB/MoEF&CC on regular basis.

11. 5S Implementation for waste minimization
12. IFC Performance Standards (PS-1 to PS-8) has been implemented on Environment and social sustainability.
13. Single use plastic is banned in plant premises.
14. MoEFCC, RSPCB approved third Party Environment Monitoring is being carried out at quarterly basis.



Authorized Signatory
(Adani Power Rajasthan Limited)



National Accreditation Board for
Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

**ENVIRONMENTAL LABORATORY, ADANI POWER
RAJASTHAN LIMITED**

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-5235

Issue Date: 28/08/2019

Valid Until:

27/08/2021*

*The validity is extended for one year up to 27.08.2022

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 Identity : ADANI POWER RAJASTHAN LIMITED

Signed for and on behalf of NABL



N. Venkateswaran
Chief Executive Officer

Adani Power Rajasthan Limited

Annexure-VIII

Expenditure for Environmental Protection & CSR		
(Fig. in Rs. Lacs)		
Sr. No.	Particular	Expenditure from (April-2022 to September-2022)
1.	Rural Development/CSR Activities (Education, community health, Sustainable Livelihood, community Infrastructure development etc.)	94.48
2.	Green belt Development (Horticulture)	58.1
3.	Legal, Consent fees	40.09
4.	Third party monitoring, Services and Equipment & Instruments maintenance, Communication cost.	6.0
5.	Insurance, training, and external environmental Management (IMS)	10.1
6.	Cost involved in emission treatment and disposal (AHP, ETP, CHP etc.)	565.5
Total		774.27



भारत सरकार

Government of India

वाणिज्य और उद्योग मंत्रालय

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)

Petroleum & Explosives Safety Organisation (PESO)

आग्रपाली 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 : 09/01/2020

सेवा में /To,

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

9 JAN 2020

विषय /Sub : Plot No, Plot No. 504, Khasara No. 1337, Survey No. 1337,, NA, Village-Kawai, Teh-Atru,, 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,, 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 - दिनांक 07/12/2019 का अवलोकन करें ।
Please refer to your letter No.: -, dated 07/12/2019

अनुज्ञप्ति संख्या P/HQ/RJ/15/2337 (P295058) दिनांक 16/04/2019 को दिनांक 31/12/2022 तक नवीनीकृत कर इस पत्र के साथ अग्रपिठ की जा रही है ।
Licence No. P/HQ/RJ/15/2337 (P295058) dated 16/04/2019 is forwarded herewith duly renewed upto 31/12/2022.

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कड़ाई 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
कुते उप मुख्य विस्फोटक नियंत्रक
For Dy. Chief Controller of Explosives
जयपुर/Jaipur

(अधिक जानकारी जैसे आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारे 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 भंडारण के लिए अनुज्ञप्ति
LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

अनुज्ञप्ति सं. (Licence No.) : P/HQ/RJ/15/2337(P295058)

फीस रूपर (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 विनिर्दिष्ट 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 उपावद्ध हैं, में दिखाए गए स्थान पर भण्डारण 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 है।

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 2022 तक प्रवृत्त रहेगी।
The Licence shall remain in force till the 31st day of December 2022

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 विशिष्टां संलग्न अनुमोदित नक्शे में दिखाई गई हैं Plot No: Plot No. 504, Khasara No. 1337, Survey No. 1337,, NA, Village-Kawai, Teh-Atru,, Taluka: Atru, District: BARAN, State: Rajasthan, PIN: 325219 स्थान पर अवस्थित हैं 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,, 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.

पेज सं. 2

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 नवीकरण की तारीख समाप्ति की तारीख अनुज्ञापन प्राधिकारी के हस्ताक्षर और उनके अधीन बनाए गए नियमों या इस अनुज्ञप्ति Date of Date of स्टाम्प की शर्तों का उल्लंघन न होने की दशा में यह Renewal Expiry of license Signature and office stamp of the 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.

1).	16/12/2013	31/12/2016	Sd/- Dr. Yogesh khare 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	Dr. G. K. PANDEY Controller of Explosives For Dy. Chief Controller of Explosives Jaipur

Dr. G. K. Pandey
उप मुख्य विस्फोटक नियंत्रक
जयपुर

यदि अनुज्ञप्ति परिसर इसमें उपाब्द विवरण और शर्तों के अनुरूप नहीं पाए जाते हैं और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति मंजूर की गई है उनमें 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 पश्चात्तवर्ती 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.