



## Power

Ref: APL/APRL/EMD/EC/MoEF/253/05/22  
Date: 28/05/2022

To,

**Additional Principal Chief Conservator of Forest (APCCF)**  
**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, Fly ash & CSR Report etc. for the period of **October'2021 to March'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)**  
**Head - AESG**

**Encl:** as above

**CC:**

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

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

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

Adani Power Rajasthan Ltd  
Adani Corporate House  
Shantigram, S G Highway  
Ahmedabad 382 421  
Gujarat, India  
CIN: U40104GJ2008PLC052743

Tel +91 79 2555 4444  
Fax +91 79 2555 7177  
info@adani.com  
www.adanipower.com

**SIX MONTHLY COMPLIANCE REPORT OF  
ENVIRONMENTAL CLEARANCE**

**1320 (2x660) MW Thermal Power Plant**

**At**

**KAWAI VILLAGE, ATRU TEHSIL  
BARAN DISTRICT  
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**



***Submitted By:***

**Environment Management Department  
Adani Power Rajasthan Limited**

**Kawai Village, Atru Tehsi,  
Baran District, Rajasthan**

**PERIOD: October'2021 to March'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 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 (MoEFCC) and has also obtained Consent to Establish (CTE) as well as Consent to Operate (CTO) from Rajasthan Pollution Control Board (RPCB). 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 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 MoEF&CC 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 Wildlife conservation plan has already done (Document no. EES/AG/001/259-Biological study) by consultant in consultation with forest department & conservation plan already submitted to the Chief WildLife Warden, Jaipur for approval. The Report also submitted to the DFO Baran. A copy of the conservation plan was submitted to your office along with Six monthly compliance report
(iv)	Possibility for harnessing solar power within the premises of the plant particularly at available roof tops shall be examined and status of implementation shall be submitted.	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	Being complied.

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	rail. The project proponent shall take up the matter with the Railways and shall submit action taken and implementation status to the ministry from time to time.	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. (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	Regular monitoring of ground water quality

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	shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline so as to ensure that the ground water quality is not adversely affected due to the project.	including heavy metals is being carried out in and around the plant area by MoEFCC accredited agency and NABL accredited Environment laboratory of APRL. Monitoring report is attached as <b>Annexure-I</b> . Three Piezometric wells are established around the ash pond. Record are being maintained and attached as <b>Annexure-II</b> .
(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 <b>Annexure I</b> .
(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, MoEFCC regional office, Lucknow and MoEFCC New Delhi. Rainwater harvesting pond already constructed within the plant to store and reuses more than <b>1,20,000 m<sup>3</sup></b> of water.
(xvii)	Additional soil for leveling 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 were 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.

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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 <sub>x</sub> , NO <sub>x</sub> and PM <sub>2.5</sub> & PM <sub>10</sub> . 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 <sub>2</sub> , NO <sub>x</sub> , 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 <b>Annexure IA</b> .
(xxi)	High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm <sup>3</sup> .	A high Efficiency Electrostatic Precipitators has been provided to each boiler (ESPs) to meet particulate emission less than 50mg/Nm <sup>3</sup> , ESP efficiency is being observed by our operation department. Details of monitoring results as carried out by MoEF approved third party for our Unit-1 and 2 & also same is being submitted to Statutory body on regular basis. All stack monitoring results are well within the prescribed limit which is showing efficiency of ESP. Monitoring results are attached as <b>Annexure I</b> .
(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, SPCB as well as CEA. Implementation status of fly ash utilization is enclosed herewith. Detailed report enclosed as <b>Annexure-III</b>
(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 cement India Ltd, India Cements Ltd, Heidelberg cement India

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		Ltd., TSG Ashtech Movers Pvt. Ltd., etc. Heavy metal analysis is being carried out for As, Pb, Hg, Cr Fe, Cu, Zn, Cd, and Ni in fly ash. Analysis report attached as Annexure-I.
(xxv)	Ash pond (if any) shall be lined with HDPE/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Well design ash pond with LDPE lining has been established as per guidelines of MOEF/CEA/CPCB. Safety measure such as bund with toe wall and lining of side slope is done to prevent any leachate.
(xxvi)	Sulphur and ash contents in the imported coal to be used in the project shall not exceed 0.6 % and 34 % respectively at any given time. In case of variation of coal quality at any point of time fresh reference shall be made to Ministry for suitable amendments to environmental clearance condition wherever necessary.	Complied EC amended on 13.03.2014 for change in the fuel quality & source.
(xxvii)	Green Belt consisting of 3 tiers of plantations of native species around the plant of atleast 75 m width shall be raised (except in areas not feasible). The density of trees shall not be less than 2500 per Ha and rate of survival at least 80%.	Green belt / plantation is being developed. Our efforts are to develop more greenery in and around the plant premises. Full-fledged horticulture department is established under the guidance of the experienced horticulturist in consultation with the local forest department for the development of green belt / plantation has been established. About 113526 tree saplings have been planted and achieved 90% survival rate. Green Belt report enclosed as <b>Annexure-IV</b>
(xxviii )	Over and above the green belt, as carbon sink, social forestry shall be carried out in close consultation with the Forests Department. The project proponent shall accordingly identify blocks of land / degraded forests and shall undertake regeneration of degraded forests at a large scale. In pursuance to this the project proponent shall formulate time bound action plan along with financial allocation and shall submit status of implementation to the Ministry within six months.	Social forestry with active participation of the villagers and school children are being carried out in close consultation with Forest Department, Action plan regarding social forestry and regeneration of degraded forest is under implementation. Planted 1200 Saplings along with the NH-90 in association with forest department. About 500 trees are also planted in school campus & villages.
(xxix)	Atleast three nearest village shall be adopted and basic amenities like development of roads, drinking water	Baldevpura, Kawai, Salpura, Khedli Gaddiyan and Nimoda are adopted for development of basic amenities in co-ordination with the

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	supply, primary health centre, primary school etc. shall be developed in co-ordination with the district administration.	district administration. Beside 41 Schools, 2 PHC, 1 CHC of surrounding Gram Panchayats are adopted in association with district administration of Govt. of Rajasthan.
(xxx)	The project proponent shall also adequately contribute in the development of the neighboring villages. Special package with implementation schedule for providing free potable drinking water supply in the nearby villages and schools shall be undertaken in a time bound manner.	Being Complied Need based assessment study report have been conducted in FY 2021-22. Recommendation made in the report are being implemented by Adani Foundation. Detailed report enclosed as <b>Annexure V</b>
(xxxi)	CSR schemes shall be undertaken based on need assessment in and around the villages within 5 km of the site and in constant consultation with the village Panchayat and the District Administration. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken.	Based on the need-based assessment report under the CSR, recommendations made in the CSR report are being implemented by Adani Foundation. Main Focus has been given on Education, Health, Alternative Livelihood and Rural Infrastructure. Detailed report enclosed as <b>Annexure V</b>
(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 <b>Annexure V</b>
(xxxiii )	An amount of Rs 28.0 Crores shall be earmarked as one time capital cost for CSR programme as committed by the project proponent. Subsequently a recurring expenditure of Rs 5.6 Crores per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within six month along with road map for implementation.	Separate budget has been earmarked for CSR activities. CSR activities are being carried out by Adani Foundation. CSR report and expenditures for period Oct-2021 to Mar-22 is attached as <b>Annexure V &amp; VIII</b> respectively.
(xxxiv )	It shall be ensured that in-built monitoring mechanism for the schemes identified is in place and annual social audit shall be got done from the nearest government institute of repute in the region. The	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

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	project proponent shall also submit the status of implementation.	monthly compliance report.
<b>Additional Specific Conditions</b>		
(xxxv)	The Coal transportation by road shall be through tarpaulin covered trucks for a maximum period of two years and hence forth shall be only through mechanically covered trucks.	Coal is being transported by Rail up to Plant premises.
(xxxvi)	Avenue plantation of 2/3 rows all along the road shall be carried out by project proponent at its own expenses.	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 are maintained the approach road from plant main gate to the nearest highway (NH-90) and linked road to plant.
(xxxviii)	Sulphur and ash contents in the domestic coal to be used in the project shall not exceed 0.4% and 33% at any given time. In case of variation of coal quality at any point of time, fresh reference shall be made to the ministry for suitable amendments to environmental clearance condition wherever necessary.	Being Complied Half yearly & annual reports of Ash Utilization & ash content in coal being submitted MoEFCC 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.	<b>Being Complied</b> 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 street light 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	The generated fly ash is being used by cement industries as per 'Fly Ash Notification'.

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	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 State Pollution Control Board and implementation done in close co-ordination with the State Pollution Control Board.	Copy of annual data on fly ash generation & utilization is being submitted to MoEFCC, CPCB, and SPCB & Central Electricity Authority (CEA).  Fly Ash generation & utilization is attached as <b>Annexure III.</b>
(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. NABL certificate attached as <b>Annexure-VII.</b>
(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. <b>Environmental Management System as per EMS ISO 14001 implemented Integrated Management System (IMS) is also Implemented.</b>
<b>B</b>	<b>General Conditions:</b>	
(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 m3/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.



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		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 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.	Adequate safety team has been established in plant site to take preventive control measures. Fire hydrant system for fire-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. Explosive licence/ certificate is attached as <b>Annexure-IX.</b>			
(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 are available for the drivers and contractual workers during construction.			
(vi)	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 85 dB(A) from source. For people working in the high noise area, requisite personal protective equipment like earplugs / ear-muffs etc. shall be provided. Workers engaged in noisy area such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy / less noisy area.	Necessary action has been taken care to maintain noise levels in work zone area within 85 dB(A) from source during the plant operation. The personal protective equipment (PPE) is provided to workers & employees working in noisy areas. Noise level monitoring is carried out regularly. Periodic audiometric check-up is carried out. Occupational Health & Safety Management System as per ISO 45001 as implemented.			
(vii)	Regular monitoring of ambient air ground level concentration of SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>2.5</sub> & PM <sub>10</sub> 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	Regular Environmental monitoring of SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>2.5</sub> & PM <sub>10</sub> 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			

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	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.	has been established. Monitoring reports attached as <b>Annexure I</b> .
(viii)	Provision shall be made for the housing of construction labour (as applicable) within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche, etc. The housing may be in the form of temporary structure to be removed after the completion of the project.	During construction, provision was made for common facilities to labours as toilets, safe drinking water, medical health care etc. who were engaged for construction.
(ix)	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board / Committee and may also be seen at website of the Ministry of Environment and Forest at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Complied Advertised in local daily News Paper 'Dainik Bhaskar and Rajasthan Patrika' on 10th May 2011 in Hindi.
(x)	A copy of clearance letter shall be sent by the proponent to concern 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	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. <b>Environmental Management System as per EMS ISO: 14001 implemented.</b>

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	organization and he shall be held responsible for implementation of environmental regulations and social impact improvement / mitigation measures.	
(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.	<p>Six monthly Environmental Clearance compliance status report is regularly submitted to MoEFCC, CPCB and SPCB. The same is sent by email also.</p> <p>Compliance status updated on company's website <a href="http://www.adanipower.com">www.adanipower.com</a></p>
(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/00568, dated-22.09.2021.
(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.	<p>Six monthly compliance on the Environment Clearance granted by MoEF is being submitted to MoEF, CPCB &amp; RSPCB regularly.</p> <p>Compliance status updated on company's website.</p> <p>Compliance report for the period of April'2021 to September'2021 had been submitted to your good office vide letter no.: APL/APRL/EMD/EC/MoEF/241/11/21 dated 21.11.2021</p>
(xv)	Regional Office of the Ministry of Environment & Forest will monitor the	Noted Compliance assured

**Adani Power Rajasthan Limited**

	implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environmental Management Plan along with additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly basis. Criteria pollutants levels including NOx (from stack & ambient air) shall be displayed at the main gate of the power plant.	
(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 other purposes and year-wise expenditure should be reported to the Ministry.	Being Followed. Separate fund has already been allocated and being utilize for Environmental Protection. Environment protection measures (EMP & CER) Expenditure (Oct- 2021 to Mar- 2022) is attached as Annexure-VIII.
(xvii)	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Complied
(xviii)	Full cooperation shall be extended to the Scientists / Officers from the Ministry / Regional Office of the Ministry at Rajasthan / CPCB / SPCB who would be monitoring the compliance of environmental status.	Noted, Full co-operation shall be extended.

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

**adani**<sup>™</sup>

**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: October 2021 to March 2022**

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## 1 EXECUTIVE SUMMARY

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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 2x660MW 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 analysed at **Team Test House**, Jaipur.

The overall results for Third and Fourth quarter are found to be satisfactory. The plant was performing well during the monitoring and environmental parameters in each segment like Ambient Air, Emission Air, Soil, Water, and Noise are found to be within the desired limits.

**Authorized Signatory**

## **2 BRIEF DESCRIPTION OF ADANI POWER AND KAWAI THERMAL POWER STATION**

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### **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.

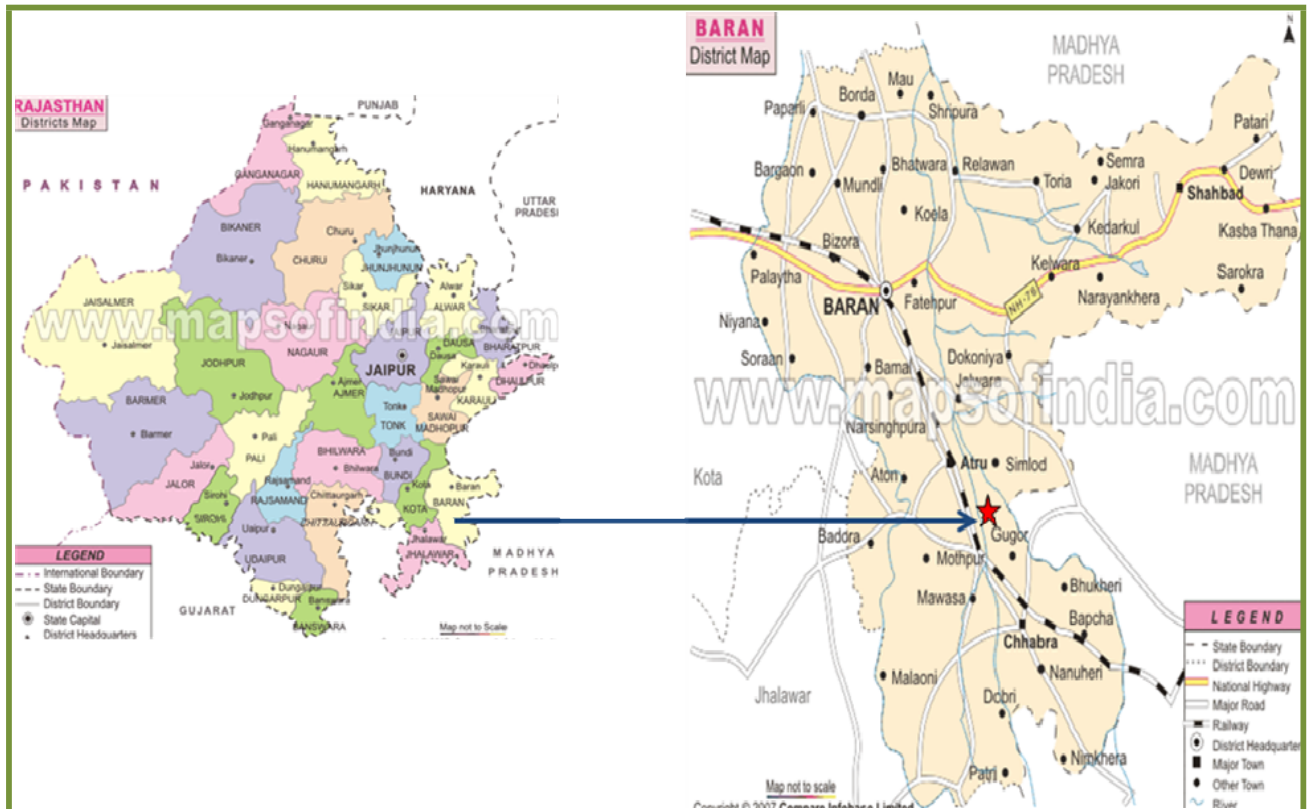
The plant is covered in around 350 Ha. area. The possession of 350 Ha has been already given to APRL by Govt. of Rajasthan. The coal and water requirement of the plant is 5.6 MTPA and 34 MCM respectively.

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

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



Location Map

**METEROLOGICAL DATA**  
**AVERAGE DAILY METEROLOGICAL DATA OF October -2021**

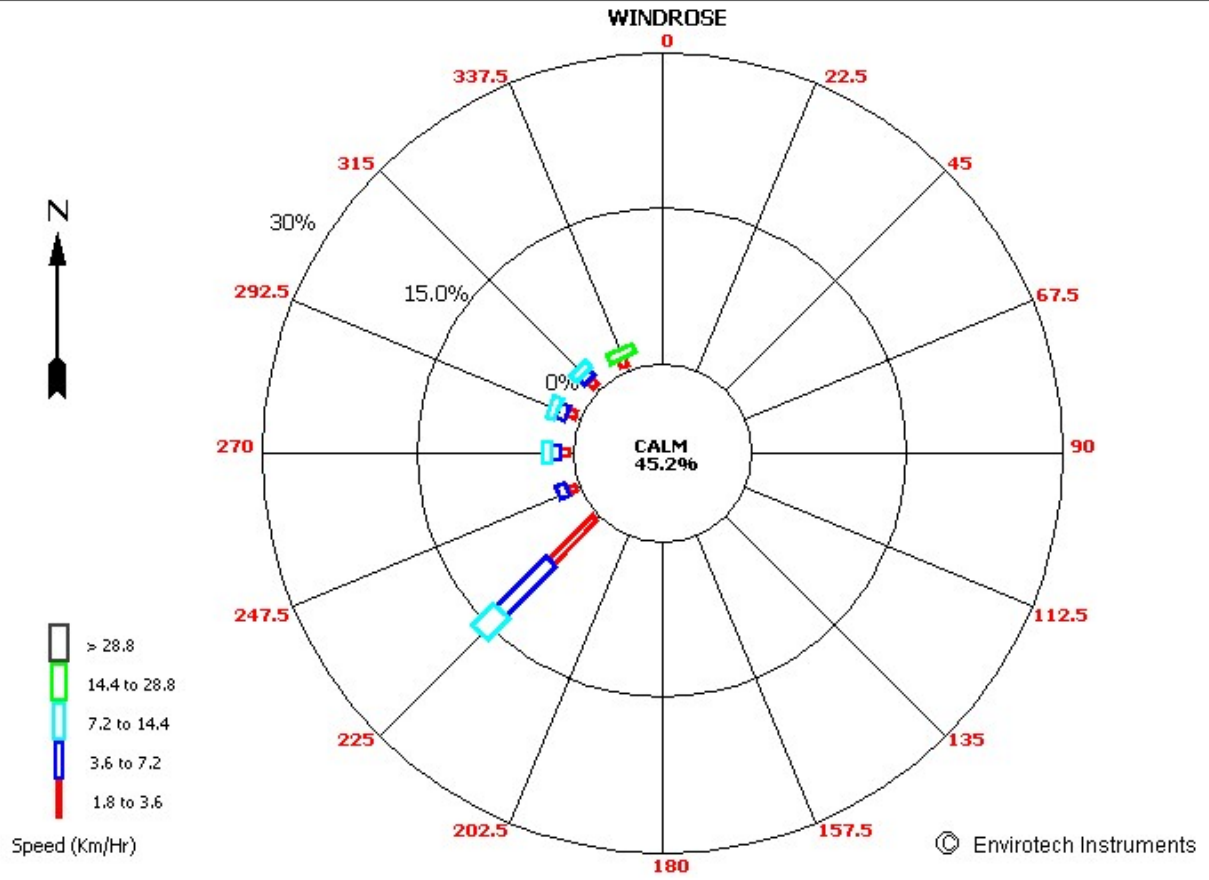
Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.10.2021	26	35.1	53	94.4	0
02.10.2021	25	32.1	69.4	95.4	25.5
03.10.2021	25	35.4	51.3	98.4	0
04.10.2021	26	36.1	52	94.5	0
05.10.2021	27.3	35.3	52.2	89.2	0
06.10.2021	28	37.2	46.2	91.4	0
07.10.2021	27	37.4	38	90.1	0
08.10.2021	26	37.5	34.2	89.3	0
09.10.2021	24.2	36.5	31.2	86.1	0
10.10.2021	25	37.5	29.2	82.6	0
11.10.2021	24	38.2	27.2	82.6	0
12.10.2021	23.3	37.4	31	80	0
13.10.2021	25	36.5	28.2	79.4	0
14.10.2021	25.2	35.5	18.2	69.2	0
15.10.2021	21	35.4	23.2	76.6	0
16.10.2021	22	36.1	30	69.5	0
17.10.2021	25.4	36.3	44.5	96.1	5
18.10.2021	24	29.3	71	96.4	23.5
19.10.2021	23.2	31.6	58.2	98.1	0
20.10.2021	23	32.3	46	94.3	0
21.10.2021	20.6	34.5	31.1	85.2	0
22.10.2021	21	33.3	31.4	82.3	0
23.10.2021	21.2	32.4	32.6	80.2	0
24.10.2021	21	32.1	35.2	83.1	0
25.10.2021	21	33.3	35.5	85	0
26.10.2021	22.1	32.5	37	82.4	0
27.10.2021	22	32.5	27	80.6	0
28.10.2021	18.1	32.2	28.3	78.3	0
29.10.2021	19	31.6	26.2	77.3	0
30.10.2021	18.1	31	28.1	73.5	0
31.10.2021	17	32.6	20.3	79.1	0
Max.	28	38.2	71	98.4	54
Min.	17	29.3	18.2	69.2	

Time : 00:00 - 23:00

Date : 01/10/21 - 31/10/21

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KAWAI



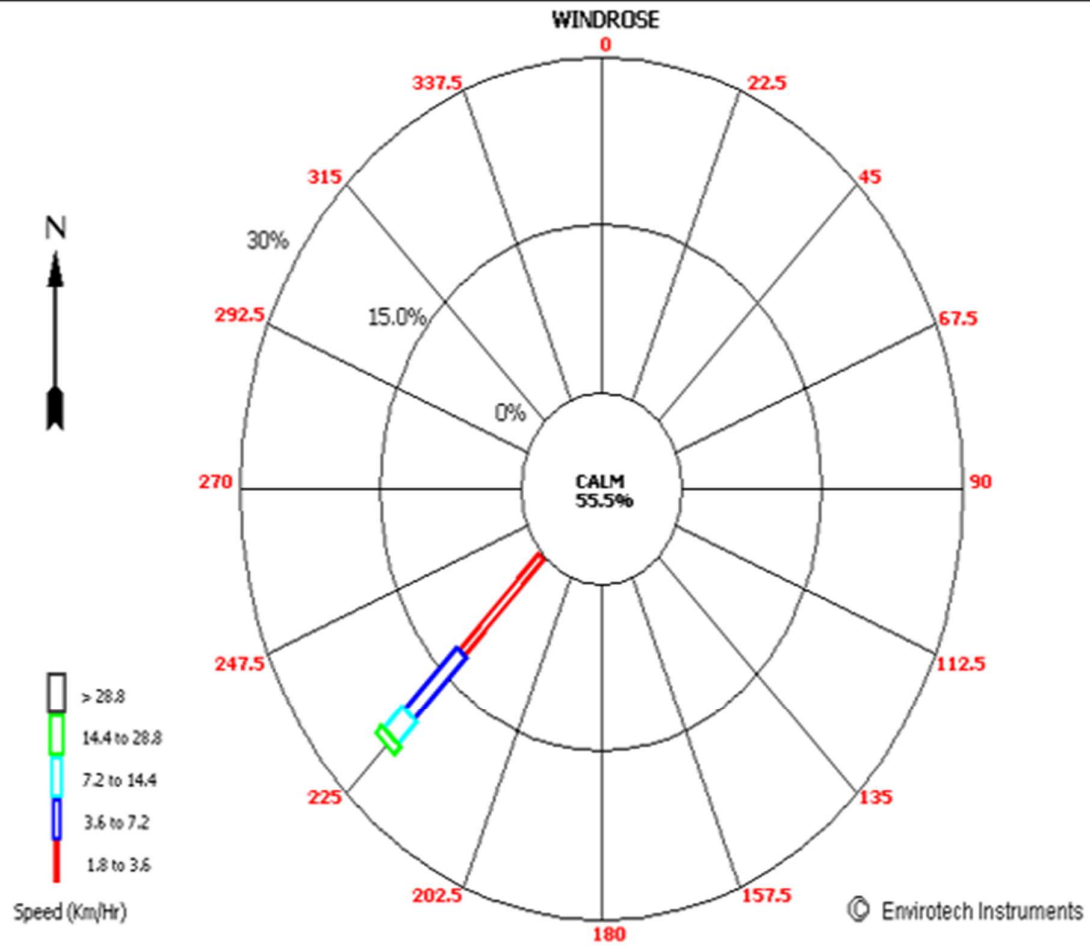
**AVERAGE DAILY METEROLOGICAL DATA OF November -2021**

Date	Temp		Relative Humidity		Rainfall
	Min	Max	Min	Max	Total
01.11.2021	18.1	34.2	19.0	58.3	0.0
02.11.2021	19.0	33.1	22.6	62.0	0.0
03.11.2021	18.2	32.4	22.0	60.1	0.0
04.11.2021	18.1	32.5	21.0	67.1	0.0
05.11.2021	19.1	33.1	23.1	64.6	0.0
06.11.2021	18.2	30.6	22.5	63.1	0.0
07.11.2021	16.1	31.3	25.3	71.3	0.0
08.11.2021	17.2	33.2	23.0	72.6	0.0
09.11.2021	18.1	32.6	23.2	70.1	0.0
10.11.2021	17.2	32.3	19.2	71.1	0.0
11.11.2021	17.2	33.2	23.0	65.0	0.0
12.11.2021	17.2	30.2	31.0	65.0	0.0
13.11.2021	16.3	29.6	27.0	68.3	0.0
14.11.2021	17.1	29.2	25.2	68.0	0.0
15.11.2021	16.1	28.5	26.0	68.0	0.0
16.11.2021	16.1	28.4	25.3	63.4	0.0
17.11.2021	16.5	27.6	35.2	64.1	0.0
18.11.2021	18.0	26.1	44.6	97.3	15.5
19.11.2021	18.1	25.5	64.1	97.4	0.5
20.11.2021	19.3	25.3	68.1	97.5	0.0
21.11.2021	19.0	30.0	47.2	97.1	0.0
22.11.2021	21.1	29.6	41.0	92.2	0.0
23.11.2021	17.0	31.0	36.4	92.0	0.0
24.11.2021	17.0	31.6	37.0	84.0	0.0
25.11.2021	18.0	29.2	38.3	70.3	0.0
26.11.2021	16.0	31.0	28.1	89.0	0.0
27.11.2021	17.0	31.3	25.5	72.1	0.0
28.11.2021	18.1	31.3	27.1	67.3	0.0
29.11.2021	17.1	29.3	32.0	71.0	0.0
30.11.2021	17.0	27.5	32.2	71.0	0.0
Max.	21.1	34.2	68.1	97.5	
Min.	16.0	25.3	19.0	58.3	16.0

Time : 00:00 - 23:00  
Date : 01/11/21 - 30/11/21

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### AVERAGE DAILY METEROLOGICAL DATA OF December -2021

<i>Date</i>	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.12.2021	18.1	22.5	55.1	82.0	0.0
02.12.2021	17.6	20.6	68.0	93.3	0.5
03.12.2021	16.0	24.1	53.0	92.1	0.0
04.12.2021	15.2	27.2	49.0	87.4	0.0
05.12.2021	18.0	28.5	41.2	79.1	0.0
06.12.2021	19.2	27.5	51.2	85.1	0.0
07.12.2021	17.1	27.0	39.0	88.5	0.0
08.12.2021	14.2	25.5	41.3	86.4	0.0
09.12.2021	15.0	26.2	39.0	71.2	0.0
10.12.2021	15.0	25.4	36.2	76.2	0.0
11.12.2021	12.1	25.4	34.3	90.2	0.0
12.12.2021	12.2	26.3	38.0	83.3	0.0
13.12.2021	14.0	27.6	42.2	80.2	0.0
14.12.2021	17.0	27.2	48.5	78.4	0.0
15.12.2021	16.0	25.3	53.3	84.0	0.0
16.12.2021	16.2	26.4	54.2	89.5	0.0
17.12.2021	16.2	29.3	39.2	86.0	0.0
18.12.2021	14.2	22.1	24.2	82.3	0.0
19.12.2021	7.2	23.2	28.0	86.3	0.0
20.12.2021	9.1	24.5	24.2	80.5	0.0
21.12.2021	10.1	27.3	26.5	81.2	0.0
22.12.2021	11.1	27.4	30.2	81.1	0.0
23.12.2021	14.0	28.5	33.1	76.0	0.0
24.12.2021	15.1	25.3	52.1	75.3	0.0
25.12.2021	14.0	27.2	36.1	93.2	0.0
26.12.2021	15.1	27.1	41.2	81.3	0.0
27.12.2021	15.1	22.3	61.3	90.1	0.0
28.12.2021	15.1	22.3	43.3	99.2	20.0
29.12.2021	13.0	20.0	67.0	97.0	0.0
30.12.2021	11.3	20.5	54.3	96.5	0.0
Max.	19.2	29.3	68.0	99.2	20.5
Min.	7.2	20.0	24.2	71.2	

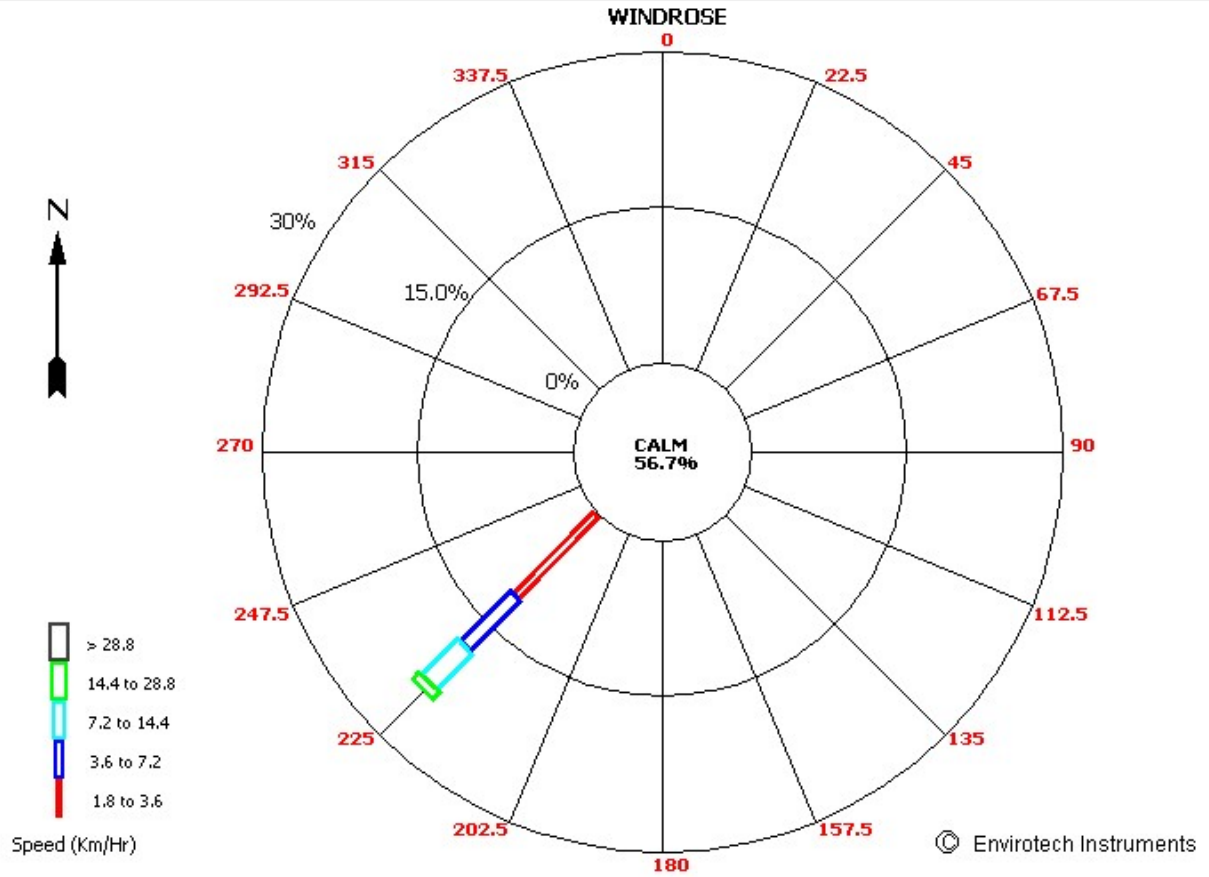
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Date : 01/12/21 - 31/12/21

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## AVERAGE DAILY METEROLOGICAL DATA OF January -2022

<i>Date</i>	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.01.2022	13.0	23.1	48.1	96.6	0
02.01.2022	13.0	23.6	47.4	93.2	0
03.01.2022	12.3	24.3	39.5	92.1	0
04.01.2022	12.4	25.2	41.5	92.1	0
05.01.2022	16.0	26.5	47.0	89.0	0
06.01.2022	17.2	21.6	85.2	97.4	11
07.01.2022	16.0	24.3	72.5	97.2	4.5
08.01.2022	17.1	25.0	70.3	95.6	2
09.01.2022	14.0	19.3	71.0	97.0	0
10.01.2022	10.0	18.0	72.1	96.6	0
11.01.2022	8.1	18.2	67.0	96.5	0
12.01.2022	10.2	20.5	51.5	95.5	0
13.01.2022	8.3	21.2	52.2	96.4	0
14.01.2022	10.2	21.5	43.2	94.5	0
15.01.2022	10.3	21.4	47.4	91.2	0
16.01.2022	9.2	14.3	85.1	96.5	0
17.01.2022	10.0	15.2	80.0	96.5	0
18.01.2022	8.0	14.4	87.4	96.6	0
19.01.2022	7.0	25.5	34.3	96.4	0
20.01.2022	13.0	27.1	37.2	85.2	0
21.01.2022	11.0	22.1	66.4	96.5	0
22.01.2022	16.3	25.6	38.3	95.1	0
23.01.2022	15.0	20.2	51.0	92.0	0
24.01.2022	10.1	19.5	51.4	92.6	0
25.01.2022	9.6	21.3	36.6	90.2	0
26.01.2022	9.1	21.4	34.3	92.2	0
27.01.2022	8.2	21.4	34.1	87.0	0
28.01.2022	9.0	23.6	31.5	87.3	0
29.01.2022	9.0	26.0	29.2	87.5	0
30.01.2022	10.0	28.3	30.0	90.4	0
31.01.2022	12.5	28.1	31.2	80.5	0
Max.	17.2	28.3	87.4	97.4	17.5
Min.	7.0	14.3	29.2	80.5	



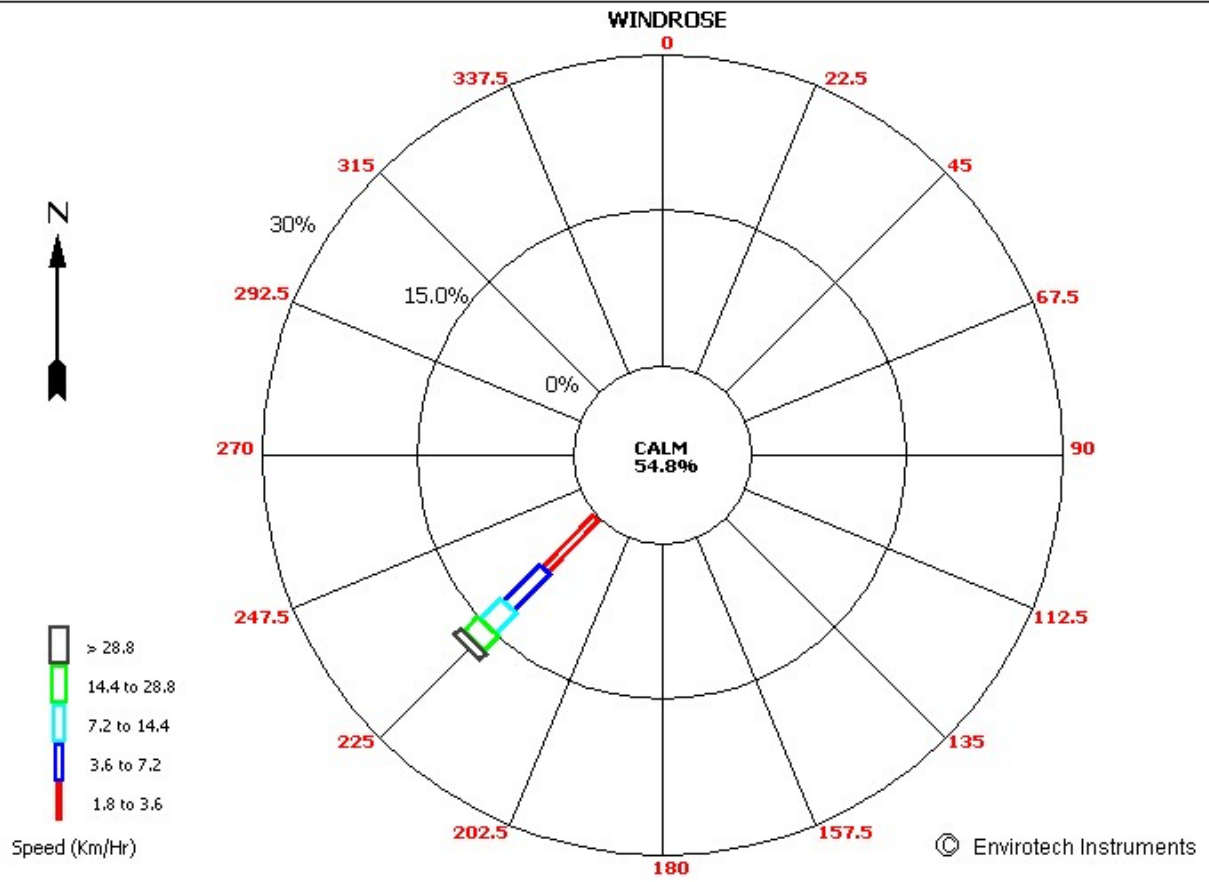
Time : 00:00 - 23:00

Date : 01/01/22 - 31/01/22

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### AVERAGE DAILY METEROLOGICAL DATA OF February- 2022

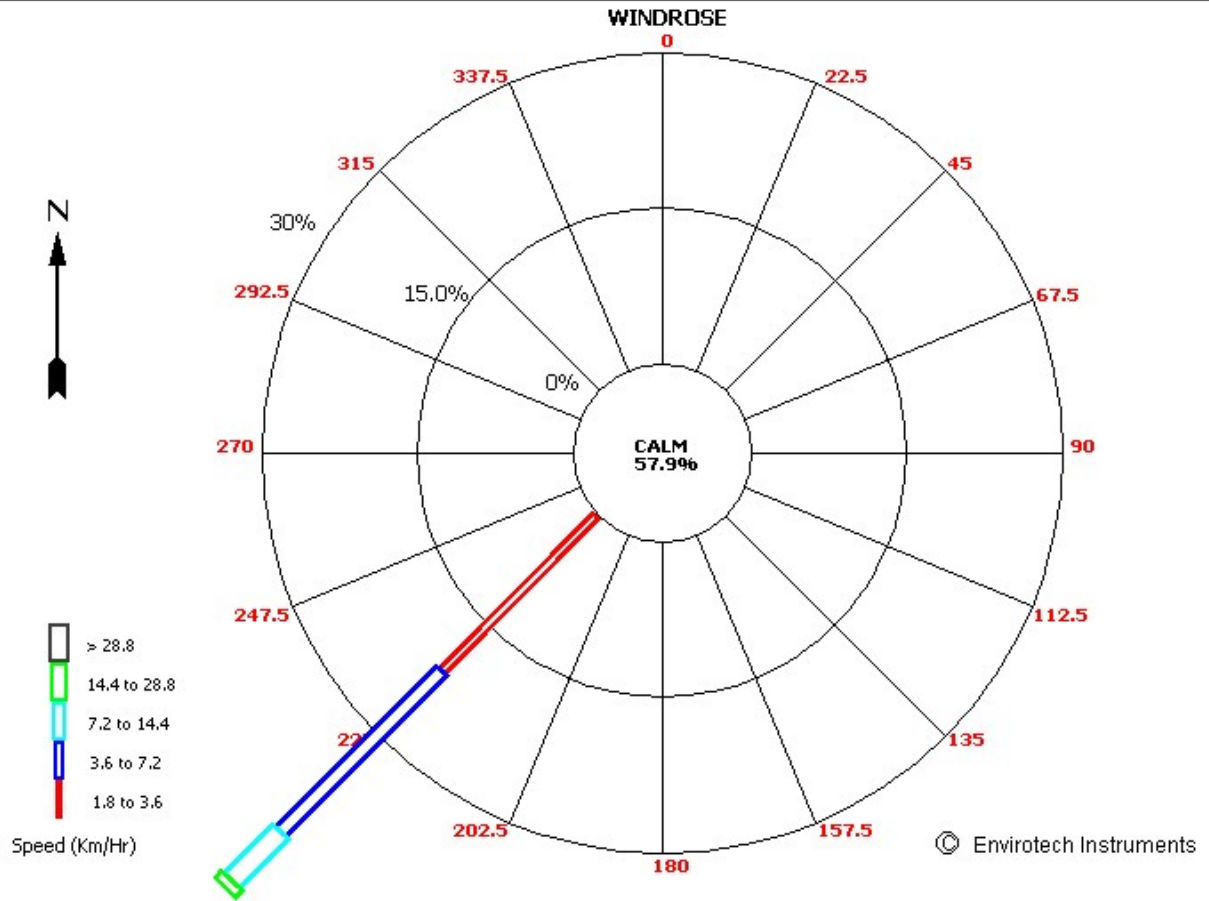
Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.02.2022	14.1	28.5	43.3	79.1	0
02.02.2022	14.2	30	28	94.1	0
03.02.2022	16.2	28.5	29	81.5	0
04.02.2022	11.1	25.3	29	84.2	0
05.02.2022	10	26.1	22.3	82	0
06.02.2022	12.2	27.4	29.3	83.4	0
07.02.2022	13.1	28.5	27.1	80.2	0
08.02.2022	14	30	29.1	78	0
09.02.2022	14.2	27.3	42.3	83	0
10.02.2022	13.1	25.3	39.1	96.4	0
11.02.2022	11.1	22.4	39.1	88.2	0
12.02.2022	11	27	25	84.3	0
13.02.2022	11	28.3	23.1	84.1	0
14.02.2022	13.1	29.2	28	71.5	0
15.02.2022	11	29.2	23.1	96.4	0
16.02.2022	14.3	29	24	75.2	0
17.02.2022	14.5	29.2	21.1	69.4	0
18.02.2022	14.3	29.2	21.1	75.2	0
19.02.2022	14.3	31.3	27.3	75.2	0
20.02.2022	14.1	30.6	21	76	0
21.02.2022	14.1	32.5	18	69.5	0
22.02.2022	17.3	34	22.2	69.1	0
23.02.2022	18	33.3	28	66.1	0
24.02.2022	18.1	31	33.6	78	0
25.02.2022	17	33.1	25	77.3	0
26.02.2022	19.1	34.2	19.5	63.2	0
27.02.2022	18	30.3	33.3	81.2	0
28.02.2022	18	29.3	21.1	74.1	0
Max.	19.1	34.2	43.3	96.4	0
Min.	10	22.4	18	63.2	

Time : 00:00 - 23:00

Date : 01/02/22 - 28/02/22

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ADANI POWER RAJ. LTD  
KAWAI



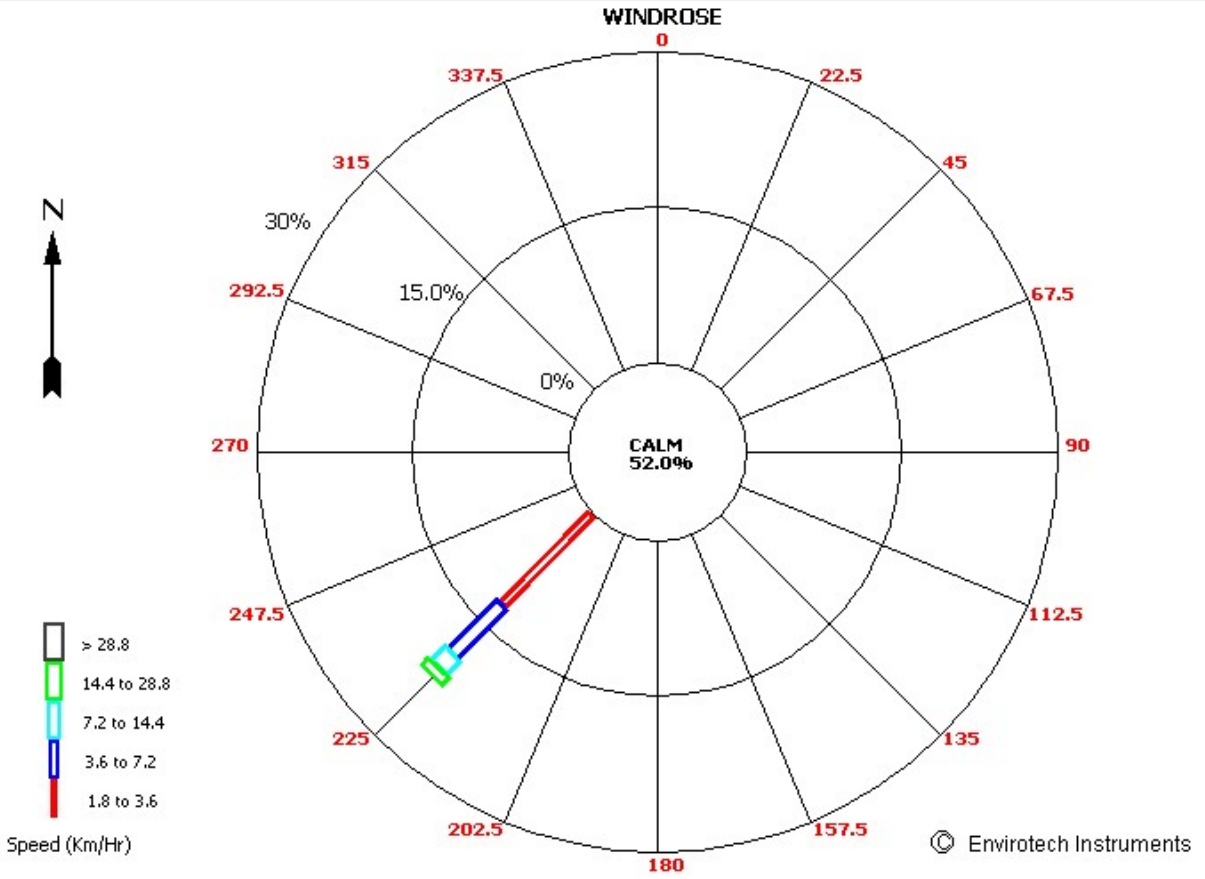
## AVERAGE DAILY METEROLOGICAL DATA OF March- 2022

Date	Temp (Deg C)		Relative Humidity (%)		Rainfall (mm)
	Min	Max	Min	Max	Total
01.03.2022	13	32.3	18.2	68.4	0
02.03.2022	16	33.2	24.2	62.6	0
03.03.2022	18	34.3	26.4	69	0
04.03.2022	17.2	32.3	28.5	74.1	0
05.03.2022	16.1	31.5	20.2	72.1	0
06.03.2022	16	34	17	70	0
07.03.2022	20	36.1	20.3	59.5	0
08.03.2022	20.2	36.1	23	64	0
09.03.2022	19.3	35.5	26.4	80.5	1.5
10.03.2022	18.1	33	26	87.2	0
11.03.2022	18.1	35.5	26.4	87.2	0
12.03.2022	19	35	22	67.6	0
13.03.2022	18	36.6	20.1	77.2	0
14.03.2022	21.2	38.5	18.2	60.1	0
15.03.2022	22	39.5	15.1	55.1	0
16.03.2022	23.1	39.5	17	49.1	0
17.03.2022	23.2	40.3	16.2	52.3	0
18.03.2022	23	40.4	20.2	55.1	0
19.03.2022	25	40.3	20	58.2	0
20.03.2022	24	39.6	13	42.4	0
21.03.2022	22.3	39.6	12.4	46.2	0
22.03.2022	23.3	39.4	14.2	45.4	0
23.03.2022	24.2	40.1	16	44.2	0
24.03.2022	27.2	35.5	21	41.2	0
25.03.2022	22.1	39.4	14.1	54.1	0
26.03.2022	24.2	39.6	11.2	39.2	0
27.03.2022	22.1	40.2	9.1	38.5	0
28.03.2022	24	41.5	9.3	32.2	0
29.03.2022	24.2	42.1	10.3	32	0
30.03.2022	25	42.4	10.1	32.2	0
31.03.2022	26.2	42.5	12.1	32.2	0
Max.	27.2	42.5	28.5	87.2	
Min.	16	31.5	9.1	32	1.5

Time : 00:00 - 23:00  
Date : 01/03/22 - 31/03/22

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 October 2021 to March 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 3.1 TECHNICAL PROTOCOLS USED FOR AMBIENT AIR QUALITY MONITORING.**

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

#### 4.1 AMBIENT AIR QUALITY RESULTS

The detailed on-site monitoring results of PM10, PM2.5, SO<sub>x</sub>, NO<sub>x</sub> and Hg are presented in table as given below:

**TABLE 3.2: AMBIENT AIR QUALITY MONITORING RESULTS**

Quarter III (Oct 2021 to Dec 2021)								
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 <sub>10</sub> , µg/m <sup>3</sup>	65.84	74.84	67.58	57.24	63.64	72.04	100
2	Particulate Matter, PM <sub>2.5</sub> , µg/m <sup>3</sup>	28.33	33	30.33	22.76	26.16	29.39	60
3	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	16.5	15.6	14.8	15.9	15.1	15.4	80
4	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	13.1	13.4	12.9	11.6	12.0	11.4	80
5	Carbon Monoxide, µg/m <sup>3</sup>	320	320	320	230	210	230	4000
6	Ammonia, µg/m <sup>3</sup>	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	400
7	Ozone, µg/m <sup>3</sup>	28.6	30.5	26.5	21.8	23.2	23.5	100
8	Lead, µg/m <sup>3</sup>	0.16	0.12	0.15	0.11	0.08	0.07	1.0
9	Arsenic, ng/m <sup>3</sup>	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	6.0
10	Nickel, ng/m <sup>3</sup>	6.3	7.9	4.5	6.1	5.5	4.5	20
11	Benzene, µg/m <sup>3</sup>	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 <sup>3</sup>	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 <sup>3</sup>	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	BDL (<1.0)	-

Quarter IV (Jan 2022 to Mar 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 <sub>10</sub> , µg/m <sup>3</sup>	80.58	78.45	76.01	68.81	64.58	60.75	100
2	Particulate Matter, PM <sub>2.5</sub> , µg/m <sup>3</sup>	43.63	37.59	36.62	28.04	26.46	27.15	60
3	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	16.62	16.54	15.98	11.89	12.85	11.63	80
4	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	12.84	11.86	10.25	8.08	7.22	8.09	80
5	Carbon Monoxide, µg/m <sup>3</sup>	470	430	390	250	230	210	4000
6	Ammonia, µg/m <sup>3</sup>	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	BDL (<10.0)	400
7	Ozone, µg/m <sup>3</sup>	28.6	31.2	30.5	23.6	23.6	21.5	100
8	Lead, µg/m <sup>3</sup>	0.15	0.17	0.13	0.10	0.09	0.14	1.0
9	Arsenic, ng/m <sup>3</sup>	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	BDL (<2.0)	6.0
10	Nickel, ng/m <sup>3</sup>	4.4	6.9	7.5	4.3	7.8	7.9	20
11	Benzene, µg/m <sup>3</sup>	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 <sup>3</sup>	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 <sup>3</sup>	ND	ND	ND	ND	ND	ND	-



## 5 AMBIENT NOISE LEVEL

The measurements are done using the sound level meter with data logger. 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]**

<b>Quarter III (Oct 2021 to Dec 2021)</b>		
<b>Location</b>	<b>Day Time Leq in dB(A)</b>	<b>Night Time Leq in dB(A)</b>
West of Stack (Near Coal Handling Plant)	65.5	58.7
South East of Stack (Near CT 2)	64.8	57.2
North East of Stack (Near Reservoir)	66.9	58.3

<b>Quarter IV (Jan 2022 to Mar 2022)</b>		
<b>Location</b>	<b>Day Time Leq in dB(A)</b>	<b>Night Time Leq in dB(A)</b>
West of Stack (Near Coal Handling Plant)	63.0	54.5
South East of Stack (Near CT 2)	64.1	55.7
North East of Stack (Near Reservoir)	62.3	54.4

**TABLE 5.2: NOISE MONITORING RESULTS [RESIDENTIAL AREA]**

<b>Quarter III (Oct 2021 to Dec 2021)</b>		
<b>Location</b>	<b>Day Time Leq in dB(A)</b>	<b>Night Time Leq in dB(A)</b>
Sidni (Near Labour Colony)	51.3	41.5
Kawai Village	53.2	42.0
Mukhandpura	52.3	41.8

<b>Quarter IV (Jan 2022 to Mar 2022)</b>		
<b>Location</b>	<b>Day Time Leq in dB(A)</b>	<b>Night Time Leq in dB(A)</b>
Sidni (Near Labour Colony)	51.9	42.4
Kawai Village	53.6	42.5
Mukhandpura	53.5	41.7

**TABLE 5.3: NOISE MONITORING RESULTS [DG Set]**

<b>Quarter IV (Jan 2022 to Mar 2022)</b>			
<b>Parameter</b>	<b>DG Set-I</b>	<b>DG Set-II</b>	<b>DG Set-III</b>
Noise level (dB(A) (inside the acoustic enclosure Room)	103.6	104.2	103.8
Noise level 0.5m away from outside the engine room, (db) (Outside the acoustic enclosure)	73.5	72.8	73.9
Insertion Loss	30.1	31.4	29.9

## 6 STACK

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Emission measurements are required to identify and quantify a wide range of pollutants in Stack Emissions. The measurements were conducted during the period of October 2021 to March 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 <sup>3</sup>	IS 11255 (P-1)
2	Sulphur dioxide (SO <sub>2</sub> )	mg/ Nm <sup>3</sup>	IS 11255 (P-2)
3	Oxide of nitrogen (NO <sub>x</sub> ),	mg/ Nm <sup>3</sup>	IS:11255 (P-7)
4	Carbon monoxide (CO)	%	IS:13270-1992
5	Mercury as particulate (Hgp)	µg/m <sup>3</sup>	USEPA-29

**TABLE 6.2: STACK MONITORING RESULTS**

S. No	Parameter	Unit	Quarter III (Oct 2021 to Dec 2021)	
			Unit-I	Unit-II
1	Exit Gas Velocity	m/sec	22.57	21.13
2	Flow Rate	Nm <sup>3</sup> /hr	2869185.67	2707222.55
3	Particulate Matter (PM)	mg/Nm <sup>3</sup>	35.19	38.7
4	Sulphur dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	1178	1170
5	Oxide of nitrogen (as NO <sub>x</sub> ) at 15 % O <sub>2</sub>	mg/Nm <sup>3</sup>	313	298
6	Mercury as particulate (Hgp)	µg/m <sup>3</sup>	0.007	0.005

S. No	Parameter	Unit	Quarter IV (Jan 2022 to Mar 2022)	
			Unit-I	Unit-II
1	Exit Gas Velocity	m/sec	22.98	23.22
2	Flow Rate	Nm <sup>3</sup> /hr	2906209.27	2911780.22
3	Particulate Matter (PM)	mg/Nm <sup>3</sup>	32.97	36.06
4	Sulphur dioxide (SO <sub>2</sub> )	mg/Nm <sup>3</sup>	1052	1088
5	Oxide of nitrogen (as NO <sub>x</sub> ) at 15 % O <sub>2</sub>	mg/Nm <sup>3</sup>	356	352
6	Mercury as particulate (Hgp)	µg/m <sup>3</sup>	0.01	0.008

**TABLE 6.3: DG STACK MONITORING RESULTS**

Parameter	Unit	Quarter IV (Jan 2022 to Mar 2022)		
		DG Set-I	DG Set-II	DG Set-III
Particulate Matter (PM)	mg/Nm <sup>3</sup>	47.76	47.75	4959
Oxide of Nitrogen (NOx) at 15% O <sub>2</sub>	ppmv	343	297	316
Carbon monoxide (CO)	mg/Nm <sup>3</sup>	116	120	97
NMHC as C at 15% O <sub>2</sub>	mg/Nm <sup>3</sup>	38	41	35

## 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 October 2021 to March 2022. The parameters covered in the monitoring are depict below:

**TABLE 7.1.1: RESULTS OF GROUND WATER MONITORING**

Quarter III (Oct 2021 to Dec 2021)									
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)	8.20	6.76	7.29	7.46	6.64	7.00	6.97	6.60
2	Colour, Hazen	<5	<5	<5	<5	<5	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	6.2	< 0.1	< 0.1	< 0.1	<0.1	< 0.1	< 0.1	6.8
5	Total Dissolved Solids, mg/l	645	747	1100	562	910	668	158	518
6	Electrical Conductivity, $\mu$ S/cm	860	1115	1701	923	1152	1108	239	701
7	Total Hardness (as CaCO <sub>3</sub> ), mg/l	337.25	392.16	568.63	294.12	470.59	313.73	147.06	274.51
8	Calcium (as Ca), mg/l	92.55	101.96	113.73	78.43	113.73	70.59	31.37	81.57
9	Magnesium (as Mg), mg/l	25.73	33.35	69.08	23.82	45.26	33.35	16.67	17.15

10	Chlorides (as Cl <sup>-</sup> ), mg/l	78.84	152.75	271.02	53.22	123.51	157.68	21.68	51.25
11	Sulphate (as SO <sub>4</sub> ), mg/l	192.22	76.11	65.55	42.52	227.77	72.22	12.22	98.88
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 <sub>2</sub> ) mg/l	7.77	12.22	26.66	27.22	8.88	13.88	13.88	9.44
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	Turbid	Clear	Clear	Clear	Clear	Clear	Clear	Turbid
19	Appearance after Filtration	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
20	Methyl orange Alkalinity as CaCO <sub>3</sub> mg/l	54.32	221.16	360.84	287.12	108.64	217.28	58.2	124.16
21	P- Alkalinity mg/l	ND	ND	ND	ND	ND	ND	ND	ND
22	Non Carbonate Hardness (as CaCO <sub>3</sub> mg/l	282.93	171	207.79	7	361.95	96.45	88.86	150.35
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 IV (Jan 2022 to Mar 2022)									
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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)	6.89	7.56	7.39	7.66	6.85	7.53	7.33	6.56
2	Colour, Hazen	<5	<5	<5	<5	<5	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	BDL(<0.1)	BDL(<0.1)	< 0.1	< 0.1	<0.1	< 0.1	< 0.1	6.8
5	Total Dissolved Solids, mg/l	649	832	556	582	918	717	127	653
6	Electrical Conductivity, $\mu$ S/cm	1025	1311	881	914	1311	1118	204	1004
7	Total Hardness (as CaCO <sub>3</sub> ), mg/l	388.35	388.35	201.94	322.33	475.73	271.84	81.55	388.35
8	Calcium (as Ca), mg/l	116.5	116.5	48.16	62.14	128.16	73.79	24.85	112.62
9	Magnesium (as Mg), mg/l	23.59	23.59	19.82	40.58	37.74	21.23	4.72	25.95
10	Chlorides (as Cl <sup>-</sup> ), mg/l	91.6	178.38	109.92	53.03	120.53	139.81	13.5	91.6
11	Sulphate (as SO <sub>4</sub> ), mg/l	261.66	60.00	26.66	36.66	295.83	108.33	10.66	263.33
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 <sub>2</sub> ) mg/l	10.68	12.5	11.14	24.55	8.36	16.36	10.18	12.27



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	Turbid	Clear	Clear	Clear	Clear	Clear	Clear	Turbid
19	Appearance after Filtration	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
20	Methyl orange Alkalinity as CaCO3 mg/l	74.48	382.20	243.04	352.8	127.4	264.6	78.4	74.48
21	P- Alkalinity mg/l	ND	ND	ND	ND	ND	ND	ND	ND
22	Non Carbonate Hardness (as CaCO3 mg/l	313.87	6.15	ND	ND	348.33	7.24	3.15	313.87
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

## 7.2 SURFACE WATER:

**TABLE 7.2.1: RESULTS OF SURFACE WATER MONITORING**

		Quarter III (Oct 2021 to Dec 2021)		
S. No.	Parameter	Barlan Pond	Kawai Pond	Parvan River
1	pH (at 25 °C)	7.56	7.83	8.14
2	Colour, Hazen	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	<0.1	<0.1	<0.1
5	Total Dissolved Solids, mg/l	112	438	259
6	Electrical Conductivity, $\mu\text{S}/\text{cm}$	169	667	396
7	Total Hardness (as $\text{CaCO}_3$ ), mg/l	54.9	211.76	184.31
8	Calcium (as Ca), mg/l	10.98	42.35	40.78
9	Magnesium (as Mg), mg/l	6.67	25.73	20.01
10	Chlorides (as Cl <sup>-</sup> ), mg/l	11.33	73.91	43.36
11	Sulphate (as $\text{SO}_4$ ), mg/l	11.66	26.55	11.77
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 <sub>2</sub> ) mg/l	3.27	8.88	20.55
17	Mercury ,mg/l	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)
18	Appearance	Clear	Turbid	Clear
19	Appearance after Filtration	Clear	Clear	Clear
20	Methyl orange Alkalinity as CaCO <sub>3</sub> mg/l	69.84	232.8	162.96
21	P- Alkalinity mg/l	ND	ND	ND
22	Non Carbonate Hardness (as CaCO <sub>3</sub> mg/l	ND	ND	21.35
23	E coli MPN/100ml	ND	ND	ND
24	Total coliform, MPN/100ml	ND	ND	ND

		<b>Quarter IV (Jan 2022 to Mar 2022)</b>		
<b>S. No.</b>	<b>Parameter</b>	<b>Barlan Pond</b>	<b>Kawai Pond</b>	<b>Parvan River</b>
1	pH (at 25 °C)	8.48	7.46	8.11
2	Colour, Hazen	<5	<5	<5
3	Odour	Agreeable	Agreeable	Agreeable
4	Turbidity, NTU	<0.1	<0.1	BDL(<0.1)
5	Total Dissolved Solids, mg/l	124	1075	282
6	Electrical Conductivity, $\mu$ S/cm	217	1617	435
7	Total Hardness (as CaCO <sub>3</sub> ), mg/l	44.66	466.02	170.87
8	Calcium (as Ca), mg/l	11.65	104.85	34.17
9	Magnesium (as Mg), mg/l	3.77	49.54	20.76
10	Chlorides (as Cl <sup>-</sup> ), mg/l	21.21	173.56	27
11	Sulphate (as SO <sub>4</sub> ), mg/l	12.16	89.16	25.66
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 <sub>2</sub> ) mg/l	0.59	25	21.36
17	Mercury ,mg/l	BDL (< 0.001)	BDL (< 0.001)	BDL (< 0.001)
18	Appearance	Clear	Clear	Clear

19	Appearance after Filtration	Clear	Clear	Clear
20	Methyl orange Alkalinity as CaCO <sub>3</sub> mg/l	ND	421.4	172.48
21	P- Alkalinity mg/l	ND	ND	ND
22	Non Carbonate Hardness (as CaCO <sub>3</sub> mg/l	44.66	44.62	ND
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 October 2021 to March 2022. The parameters covered in the monitoring are depict below:

**TABLE 8.1: RESULTS OF STP WATER**

Quarter III (Oct 2021 to Dec 2021)											
S. No.	Parameter	45 KLD 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 New	10KLD III Guest House	10KLD 3 BHK	60KLD STP in Township (Old)	10KLD Hospital
1	pH (at 25 °C)	7.59	7.12	7.17	7.24	7.12	7.52	7.10	7.27	7.56	7.07
2	Total Suspended Solid (TSS) mg/l	40	21	35	36	32	47	54	44	38	26
3	Nitrate Nitrogen mg/l	7.82	7.89	8.14	7.88	7.42	7.12	7.45	8.25	7.56	7.86
4	Ammonical Nitrogen (as NH <sub>3</sub> -N) mg/l	10.64	2.72	8.23	5.32	2.24	9.52	11.12	13.72	7.24	9.86
5	Biochemical Oxygen Demand (BOD) mg/l	27.14	5.57	10.75	11.75	5.71	11.25	23	13.33	14.67	11.67
6	Chemical Oxygen Demand (COD) mg/l	167.04	66.82	129.92	155.9	74.24	107.65	152.19	111.36	96.51	107.65
7	Total Kjeldahl Nitrogen mg/l	25.2	11.96	15.96	15.12	5.32	23.41	24.16	28	17.90	23.84
8	Oil & Grease mg/l	4	4	3	5	3	4	5	4	4	5
9	Free Available Chlorine mg/l	BDL (<0.1)	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	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	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	90% Survival of Fish after 96 hours in 100% effluent	100% Survival of Fish after 96 hours in 100% effluent

Quarter IV (Jan 2022 to Mar 2022)											
S. No.	Parameter	45 KLD 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 New	10KLD III Guest House	10KLD 3 BHK	60KLD STP in Township (Old)	10KLD Hospital
1	pH (at 25°C)	7.40	7.19	7.53	7.40	7.29	7.42	7.35	7.42	7.41	7.32
2	Total Suspended Solid (TSS) mg/l	53	24	23	37	25	60	56	23	24	28
3	Nitrate Nitrogen mg/l	8.89	7.42	7.76	8.69	8.49	8.05	8.16	8.71	7.82	8.26
4	Ammonical Nitrogen (as NH <sub>3</sub> -N) mg/l	12.43	3.09	7.79	6.81	3.18	11.49	12.57	11.89	5.89	11.27
5	Biochemical Oxygen Demand (BOD) mg/l	25.33	6.44	12.25	11.17	8.25	13.67	20.33	15.33	13.2	12.5
6	Chemical Oxygen Demand (COD) mg/l	176.26	81.6	137.09	133.82	84.86	127.3	172.99	120.77	101.18	130.56
7	Total Kjeldahl Nitrogen mg/l	28.71	13.75	14.26	18.45	7.12	25.29	28.76	30.42	15.42	25.89
8	Oil & Grease mg/l	6	3	4	4	4	4	5	5	4	4
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	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	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

## 9 ETP WATER

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The measurements were conducted during the period of October 2021 to March 2022. The parameters covered in the monitoring are depict below:

**TABLE 9.1: RESULTS OF ETP OUTLET**

S. No.	Parameter	Unit	Quarter III (Oct 2021 to Dec 2021)
1	pH	-	6.99
2	Total Suspended Solids (TSS)	mg/l	10
3	Outlet Temperature	°C	18
4	Chemical Oxygen Demand (COD), mg/l	mg/l	29.7
5	Copper (as Cu), mg/l	mg/l	0.03
6	Iron (as Fe) mg/l	mg/l	0.05
7	Zinc (as Zn) mg/l	mg/l	0.18
8	Phosphate (as P), mg/l	mg/l	BDL(<0.1)
9	Oil & Grease, mg/l	mg/l	3
10	Sulphide	mg/l	BDL (<0.1)
11	Free Available Chlorine	mg/l	BDL (<0.1)



S. No.	Parameter	Unit	Quarter IV (Jan 2022 to Mar 2022)
1	pH	-	6.80
2	Total Suspended Solids (TSS)	mg/l	11
3	Outlet Temperature	°C	22
4	Chemical Oxygen Demand (COD), mg/l	mg/l	35.9
5	Copper (as Cu), mg/l	mg/l	0.05
6	Iron (as Fe) mg/l	mg/l	0.04
7	Zinc (as Zn) mg/l	mg/l	0.27
8	Phosphate (as P), mg/l	mg/l	BDL(<0.1)
9	Oil & Grease, mg/l	mg/l	3
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 October 2021 to March 2022. The parameters covered in the monitoring are depict below:

**TABLE 10.1: RESULTS OF ASH RECOVERY WATER Sample**

S. No.	Parameter	Units	Quarter III (Oct 2021 to Dec 2021)	
			Ash Recovery Pump House 1	Ash Recovery Pump House 2
1	Lead (as Pb)	mg/l	0.02	0.02
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)	0.002
5	Mercury (as Hg)	mg/l	BDL(<0.001)	BDL (<0.001)

S. No.	Parameter	Units	Quarter IV (Jan 2022 to Mar 2022)	
			Ash Recovery Pump House 1	Ash Recovery Pump House 2
1	Lead (as Pb)	mg/l	0.03	0.02
2	Arsenic (as As)	mg/l	BDL(<0.01)	BDL(<0.01)
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 October 2021 to March 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 III
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	18.41
4	Total Chromium as Cr	mg/kg	BDL(<0.01)

S. No.	Parameter	Unit	Quarter IV
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	257.47
4	Total Chromium as Cr	mg/kg	9.65

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

S. No.	Parameter	Unit	Quarter III
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	20.08
4	Total Chromium as Cr	mg/kg	BDL(<0.01)

S. No.	Parameter	Unit	Quarter IV
1	Arsenic (As)	mg/kg	BDL(<0.001)
2	Mercury (Hg)	mg/kg	BDL(<0.001)
3	Lead as Pb	mg/kg	98.63
4	Total Chromium as Cr	mg/kg	9.08

## 12 SOIL

The measurements were conducted during the period of October 2021 to March 2022. The parameters covered in the monitoring are depict below:

**TABLE 12.1: RESULTS OF SOIL MONITORING**

S. No.	Parameter	Quarter III		
		Nimoda Village	Kawai Village	Phulbaroda Village
1	Boron [mg/kg]	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)
2	Calcium as CaO [%]	0.70	2.09	2.59
3	Magnesium as MgO [%]	0.35	0.86	0.81
4	Potassium as K <sub>2</sub> O [%]	0.15	0.27	0.24
5	Iron as Fe [%]	1.94	2.49	2.78
6	Manganese as Mn [mg/kg]	427.64	631.90	803.29
7	Phosphorus [%]	0.018	0.028	0.026

S. No.	Parameter	Quarter IV		
		Nimoda Village	Kawai Village	Phulbaroda Village
1	Boron [mg/kg]	BDL(<1.0)	BDL(<1.0)	BDL(<1.0)
2	Calcium as CaO [%]	1.90	1.76	1.71
3	Magnesium as MgO [%]	0.71	0.91	0.81
4	Potassium as K <sub>2</sub> O [%]	0.37	0.33	0.38
5	Iron as Fe [%]	2.06	2.24	2.11
6	Manganese as Mn [mg/kg]	246.26	266.46	251.31
7	Phosphorus [%]	0.0023	0.0059	0.0026



**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 <sup>3</sup> )		
2021-10-01 00:00:00	S/D	35.41
2021-10-02 00:00:00	S/D	35.38
2021-10-03 00:00:00	S/D	35.22
2021-10-04 00:00:00	S/D	35.00
2021-10-05 00:00:00	S/D	34.89
2021-10-06 00:00:00	S/D	35.31
2021-10-07 00:00:00	S/D	35.55
2021-10-08 00:00:00	S/D	35.32
2021-10-09 00:00:00	S/D	35.56
2021-10-10 00:00:00	S/D	35.41
2021-10-11 00:00:00	S/D	35.55
2021-10-12 00:00:00	S/D	37.04
2021-10-13 00:00:00	S/D	40.18
2021-10-14 00:00:00	S/D	39.74
2021-10-15 00:00:00	S/D	38.92
2021-10-16 00:00:00	S/D	35.6
2021-10-17 00:00:00	S/D	34.21
2021-10-18 00:00:00	S/D	33.60
2021-10-19 00:00:00	S/D	34.13
2021-10-20 00:00:00	S/D	35.20
2021-10-21 00:00:00	S/D	34.68
2021-10-22 00:00:00	S/D	33.92
2021-10-23 00:00:00	S/D	35.53
2021-10-24 00:00:00	S/D	32.57
2021-10-25 00:00:00	S/D	32.92
2021-10-26 00:00:00	S/D	33.23
2021-10-27 00:00:00	S/D	35.27
2021-10-28 00:00:00	S/D	35.57
2021-10-29 00:00:00	S/D	34.13
2021-10-30 00:00:00	S/D	33.37
2021-10-31 00:00:00	S/D	35.63
<b>Min</b>	S/D	32.57
<b>Max</b>	S/D	40.18
<b>AVG</b>	S/D	35.29

**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 <sup>3</sup> )	
2021-10-01 00:00:00	SD	33.53
2021-10-02 00:00:00	SD	35.34
2021-10-03 00:00:00	SD	34.24
2021-10-04 00:00:00	SD	31.82
2021-10-05 00:00:00	SD	31.64
2021-10-06 00:00:00	SD	35.16
2021-10-07 00:00:00	SD	33.85
2021-10-08 00:00:00	SD	34.64
2021-10-09 00:00:00	SD	35.51
2021-10-10 00:00:00	SD	35.81
2021-10-10 00:00:00	SD	36.33
2021-10-12 00:00:00	SD	34.5
2021-10-13 00:00:00	SD	36.36
2021-10-14 00:00:00	35.1	36.88
2021-10-15 00:00:00	29.85	33.98
2021-10-16 00:00:00	29.78	35.26
2021-10-17 00:00:00	27.94	33.24
2021-10-18 00:00:00	27.27	34.41
2021-10-19 00:00:00	29.91	33.41
2021-10-20 00:00:00	33.82	34.74
2021-10-21 00:00:00	30.6	36.25
2021-10-22 00:00:00	28.48	37.54
2021-10-23 00:00:00	31.98	34.00
2021-10-24 00:00:00	34.96	34.03
2021-10-25 00:00:00	34.4	34.18
2021-10-26 00:00:00	31.44	36.18
2021-10-27 00:00:00	36.02	36.24
2021-10-28 00:00:00	33.09	35.51
2021-10-29 00:00:00	28.36	34.97
2021-10-30 00:00:00	35.54	36.10
<b>Min</b>	27.27	31.64
<b>Max</b>	36.02	37.54
<b>AVG</b>	31.68	34.86



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

<b>CONTINUOUS EMISSION MONITORING RESULTS</b>		
<b>Station: Stack Attached to Boiler 1 &amp; 2</b>		
<b>Report type: Mean &amp; Daily</b>		
<b>Time Base: 24 Hour</b>		
<b>Date (DD/MM/YY)</b>	<b>UNIT 1</b>	<b>Unit 2</b>
	<b>PM (mg/Nm<sup>3</sup>)</b>	
2021-12-01 00:00:00	33.12	35.04
2021-12-02 00:00:00	28.69	34.42
2021-12-03 00:00:00	30.01	33.85
2021-12-04 00:00:00	32.48	34.78
2021-12-05 00:00:00	32.59	35.16
2021-12-06 00:00:00	29.56	35.3
2021-12-07 00:00:00	30.28	37.03
2021-12-08 00:00:00	30.06	36.48
2021-12-09 00:00:00	31.21	36.53
2021-12-10 00:00:00	29.43	34.18
2021-12-10 00:00:00	31.25	36.06
2021-12-12 00:00:00	30.85	S/D
2021-12-13 00:00:00	31.91	S/D
2021-12-14 00:00:00	28.33	S/D
2021-12-15 00:00:00	29.04	36.47
2021-12-16 00:00:00	29.99	36.75
2021-12-17 00:00:00	35.5	34.74
2021-12-18 00:00:00	32.69	34.21
2021-12-19 00:00:00	36.96	35.26
2021-12-20 00:00:00	37.17	36.14
2021-12-21 00:00:00	34.25	37.66
2021-12-22 00:00:00	36.09	39.25
2021-12-23 00:00:00	42.34	39.83
2021-12-24 00:00:00	39.43	39.82
2021-12-25 00:00:00	32.16	38.67
2021-12-26 00:00:00	34.84	37.81
2021-12-27 00:00:00	32.39	37.19
2021-12-28 00:00:00	33.46	34.1
2021-12-29 00:00:00	32.59	32.37
2021-12-30 00:00:00	28.81	33.56
2021-12-31 00:00:00	28.80	32.74
<b>Min</b>	<b>28.33</b>	<b>32.37</b>
<b>Max</b>	<b>42.34</b>	<b>39.83</b>
<b>Avg</b>	<b>32.46</b>	<b>35.91</b>

**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 <sup>3</sup> )	
2022-01-01 00:00:00	29.76	33.24
2022-01-02 00:00:00	30.01	32.64
2022-01-03 00:00:00	35.69	35.01
2022-01-04 00:00:00	31.64	36.3
2022-01-05 00:00:00	35.61	37.71
2022-01-06 00:00:00	33.68	36.37
2022-01-07 00:00:00	31.11	36.12
2022-01-08 00:00:00	34.62	33.45
2022-01-09 00:00:00	29.2	34.58
2022-01-10 00:00:00	28.89	35.7
2022-01-11 00:00:00	33.96	35.97
2022-01-12 00:00:00	41.29	37
2022-01-13 00:00:00	28.73	33.22
2022-01-14 00:00:00	31.86	33.4
2022-01-15 00:00:00	35.2	33.26
2022-01-16 00:00:00	31.69	32.74
2022-01-17 00:00:00	29.9	34.29
2022-01-18 00:00:00	33.21	34.55
2022-01-19 00:00:00	36.26	38.16
2022-01-20 00:00:00	37.4	37.18
2022-01-21 00:00:00	37.37	39.68
2022-01-22 00:00:00	29.3	37.24
2022-01-23 00:00:00	30.23	38.26
2022-01-24 00:00:00	30.15	35.9
2022-01-25 00:00:00	33.19	37.56
2022-01-26 00:00:00	35.28	36.99
2022-01-27 00:00:00	31.41	37.19
2022-01-28 00:00:00	31.11	37.79
2022-01-29 00:00:00	33.9	38.16
2022-01-30 00:00:00	34.31	38.65
2022-01-31 00:00:00	36.75	39.57
<b>Min</b>	<b>28.73</b>	<b>32.64</b>
<b>Max</b>	<b>41.29</b>	<b>39.68</b>
<b>AVG</b>	<b>32.99</b>	<b>36.06</b>

**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 <sup>3</sup> )	
2022-02-01 00:00:00	33.11	39.55
2022-02-02 00:00:00	35.87	37.07
2022-02-03 00:00:00	29.27	40.39
2022-02-04 00:00:00	26.44	40.35
2022-02-05 00:00:00	31.74	35.91
2022-02-06 00:00:00	28.58	36.94
2022-02-07 00:00:00	31.46	38.37
2022-02-08 00:00:00	34.75	39.57
2022-02-09 00:00:00	30.68	39.34
2022-02-10 00:00:00	SD	40.07
2022-02-11 00:00:00	SD	39.54
2022-02-12 00:00:00	SD	39.44
2022-02-13 00:00:00	SD	39.72
2022-02-14 00:00:00	SD	39.24
2022-02-15 00:00:00	SD	40.66
2022-02-16 00:00:00	SD	39.59
2022-02-17 00:00:00	SD	40.47
2022-02-18 00:00:00	SD	39.43
2022-02-19 00:00:00	SD	40.35
2022-02-20 00:00:00	SD	40.85
2022-02-21 00:00:00	SD	40.24
2022-02-22 00:00:00	29.58	38.35
2022-02-23 00:00:00	38.94	38.31
2022-02-24 00:00:00	39.41	40.22
2022-02-25 00:00:00	40.12	40.74
2022-02-26 00:00:00	41.54	40.88
2022-02-27 00:00:00	41.43	41.27
2022-02-28 00:00:00	40.63	41.11
<b>Min</b>	<b>26.44</b>	<b>35.91</b>
<b>Max</b>	<b>41.54</b>	<b>41.27</b>
<b>AVG</b>	<b>34.60</b>	<b>39.57</b>

**2X660 MW KAWAI THERMAL POWER STATIONS**

<b>CONTINUOUS EMISSION MONITORING RESULTS</b>		
<b>Station: Stack Attached to Boiler 1 &amp; 2</b>		
<b>Report type: Mean &amp; Daily</b>		
<b>Time Base: 24 Hour</b>		
<b>Date (DD/MM/YY)</b>	<b>UNIT 1</b>	<b>Unit 2</b>
	<b>PM (mg/Nm<sup>3</sup>)</b>	
2022-03-01 00:00:00	41.82	40.89
2022-03-02 00:00:00	39.7	41.24
2022-03-03 00:00:00	34.95	39.64
2022-03-04 00:00:00	41.11	41.16
2022-03-05 00:00:00	39.33	42.26
2022-03-06 00:00:00	38.29	40.36
2022-03-07 00:00:00	40.83	39.2
2022-03-08 00:00:00	43.05	39.38
2022-03-09 00:00:00	42.18	40.8
2022-03-10 00:00:00	39.55	41.61
2022-03-11 00:00:00	39.58	SD
2022-03-12 00:00:00	40.24	SD
2022-03-13 00:00:00	40.85	22.38
2022-03-14 00:00:00	38.01	36.78
2022-03-15 00:00:00	38.81	36.86
2022-03-16 00:00:00	38.81	36.15
2022-03-17 00:00:00	37.58	36.18
2022-03-18 00:00:00	38.66	37.07
2022-03-19 00:00:00	37.77	36.43
2022-03-20 00:00:00	37.77	35.42
2022-03-21 00:00:00	37.2	36.32
2022-03-22 00:00:00	40.23	37.85
2022-03-23 00:00:00	41.91	39.82
2022-03-24 00:00:00	42.9	39.29
2022-03-25 00:00:00	42.57	38.97
2022-03-26 00:00:00	41.32	38.31
2022-03-27 00:00:00	40.74	37.81
2022-03-28 00:00:00	41.53	37.8
2022-03-29 00:00:00	41.84	37.74
2022-03-30 00:00:00	38.92	37.04
2022-03-31 00:00:00	38.58	36.8
<b>Min</b>	<b>34.95</b>	<b>22.38</b>
<b>Max</b>	<b>43.05</b>	<b>42.26</b>
<b>Avg</b>	<b>39.89</b>	<b>37.98</b>

**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.	Oct-2021	6.5 Meter	13.0 Meter	14.0 Meter
2.	Nov-2021	9.8 Meter	16.0 Meter	19.0 Meter
3.	Dec-2021	11.5 Meter	19.5 Meter	21.0 Meter
4.	Jan-2022	13.0 Meter	23.5 Meter	22.5 Meter
5.	Feb-2022	16.0 Meter	26.5 Meter	25.0 Meter
6.	Mar-2022	19.5 Meter	29.0 Meter	28.0 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)



## Power

Ref. No.: APRL/ENV/MOEF&CC/CAC/Q3/22

Date: 15.01.2022

To

**Additional Principal Chief Conservator of Forest (APCCF)  
Regional Office (Central Region)  
Ministry of Environment, Forest & Climate Change (MoEFCC)  
Kendriya Bhawan, 5<sup>th</sup> Floor, Sector 'H' Aliganj,  
Lucknow – 226 024, Uttar Pradesh**

**Sub: Advisory regarding implementation of Notification No. G.S.R. 02 (E) dated 2<sup>nd</sup> January 2014 for supply and use of coal with ash content for Kawai Thermal Powerplant-regarding.**

**Ref:** File No. L-11011/21/2014-IA, I (T), dated: 13.04.2015.

Dear Sir,

With reference to above subject matter, we are submitting herewith compliance of said notification.

The half – yearly compliance reports of fly ash management for environmental safeguards stipulated in the EC and Consent are being regularly submitted to both the Regional Offices of MoEF&CC, Lucknow as well as Rajasthan State Pollution Control Board (RSPCB). We are also submitting the half-yearly and annual reports of fly ash to Central Electricity Authority (CEA) since plant operation.

We are enclosing herewith the monthly as well as quarterly **Average ash content** in the coal used by our power plant during the period of **October 2021 to December 2021** as **Annexure - I**.

**Total Capacity of TPP: 2x660 (1320) MW**

This is for your kind information and record please.

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

**(R N Shukla)**

Encl.: As above

Adani Power Rajasthan Ltd  
Adani Corporate House  
Shantigram, S G Highway  
Ahmedabad 382 421  
Gujarat, India  
CIN: U40104GJ2008PLC052743

Tel +91 79 2555 4444  
Fax +91 79 2555 7177  
info@adani.com  
www.adanipower.com

**ADANI POWER RAJASTHAN LIMITED****ASH PERCENTAGE IN COAL**  
**(From October 2021 to December 2021)**

<b>Sl. No.</b>	<b>Month</b>	<b>Coal Consumption (MT)</b>	<b>Ash % in Coal</b>
<b>1.</b>	<b>October 2021</b>	279,961	33.99
<b>2.</b>	<b>November 2021</b>	391,378	32.70
<b>3.</b>	<b>December 2021</b>	465,808	29.17
<b>Quarterly Average (%)</b>		---	<b>31.58 %</b>

MT: Metric Tonne



## Power

Ref No.: APRL/ENV/MoEF/268/04/22  
Date: 18/04/2022

To,  
**Additional Principal Chief Conservator of Forest  
Regional Office (Central Region)  
Ministry of Environment, Forest & Climate Change  
Kendriya Bhawan, 5<sup>th</sup> Floor, Sector 'H' Aliganj,  
Lucknow – 226 024**

Kind Attn.: **Dr. A K Gupta, Joint Director**

**Sub: Advisory regarding implementation of Notification No. G.S.R. 02 (E) dated 2<sup>nd</sup> January 2014 for supply and use of Coal with Ash content – regarding**

Ref: File No. L-11011/21/2014-IA.I (T), dated: 13.04.2015.

Dear Sir,

With above subject matter, we are submitting herewith the compliance of said notification.

Ash content data regarding supply and use of coal with ash content not exceeding 34% in the Coal based Thermal Power Plant as per Notification No. G.S.R. 02 (E) dated 2<sup>nd</sup> January 2014.

We are enclosing herewith the monthly as well as quarterly **Average Ash Content** in the Coal used by our power plant during the period of **January'2022 to March'2022** as Annexure -I.

**Total Capacity of TPP: 1320 MW**

This is for your kind information & record please.

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

(R N Shukla)

Encl.: As above



**ADANI POWER RAJASTHAN LIMITED**

**Annexure - 1**

**ASH PERCENT IN COAL**

**(From January'2022 to March'2022)**

Month	Coal Consumption (MT)	Ash % in Coal
January - 2022	492231	31.13
February - 2022	323092	31.52
March - 2022	498200	32.43
<b>Quarterly Average:</b>		<b>31.72</b>



## Power

Ref.: APRL/ENV/MoEFCC/CPCB/FLYASH/294/22

Date: 29.04.2022

To,

**Additional Principal Chief Conservator of Forest (APCCF)  
Ministry of Environment, Forest & Climate Change  
Regional Office (Central Region)  
Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj,  
Lucknow-226024 (UP)**

**Sub: Submission of Annual Fly Ash implementation report for the period of April'2021 to March'2022 for Adani Power Rajasthan Ltd, Village Kawai, District Baran, Rajasthan.**

Dear Sir,

With reference to above subject, we are furnishing herewith Annual Fly Ash implementation report for the period of **April' 2021 to March' 2022**, in compliance of provision of 'Fly Ash Notification S.O.763 (E) Dated 14<sup>th</sup> September' 1999, amendment on 27<sup>th</sup> August 2003, 03<sup>rd</sup> November' 2009. The Fly Ash notification has been further amended in 2016 and 2021.

Power Plant Capacity: **1320 (2X660) MW.**

This is for your kind information & record please.

Thanking You

Yours faithfully,

**for Adani Power Rajasthan Limited**

  
**(R N Shukla)**

**Encl:** as above

**CC: Member Secretary  
Central Pollution control Board  
Parivesh Bhagwan, East Arjun Nagar  
New Delhi-110032.**

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

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

**Adani Power Rajasthan Ltd**  
Adani House  
Shantigram, S G Highway,  
Ahmedabad 382 421  
Gujarat, India  
CIN: U40100GJ2008PLC052743

Tel +91 79 2555 7555  
Fax +91 79 2555 7177  
info@adani.com  
www.adani.com

Registered Office: Adani House, Shantigram, S G Highway, Ahmedabad 382 421, Gujarat, India

**Fly Ash Notification S.O. 2804 (E), 3<sup>rd</sup> November, 2009 –**  
**Statutory Compliance Report for the period 01.04.2021 to 31.03.2022**

S. No.	Item	Reply
1	Name of Thermal Power Station	<b>Adani Power Rajasthan Limited</b>
2	Full address including District & Pin code	NH-90, Atru Road, Kawai, Tehsil Atru, Dist. Baran (Rajasthan) - 325219
3	E-mail address	santosh.singh1@adani.com
4	Name of the Nodal Officer (not below the rank of DGM / Dy. CE / or equivalent) dealing with ash/environment management and designation	Santosh Kumar Singh Sr. Vice President – AESG
5	Contact No.	079-25557289
6	Email:	santosh.singh1@adani.com
7	Total capacity of the Thermal Power Station (MW) along with unit-wise capacity break-up	1320 (2x 660) MW.

**A. Coal Consumption and Ash Generation in year 2021-2022 (in tonnes)**

8	Coal /Lignite Consumption	48559550 MT
9	Average ash content in coal (annual)	32.18
10	Bottom Ash Generation	302156 MT
11	Fly Ash Generation	1260354 MT
12	Total Ash Generation (10 + 11)	1562510 MT

**B. Ash utilization in year 2021-2022 (in tonnes)**

S. No.	Purpose for which ash is utilized	From ESP Dry Ash (1)	From Pond Ash (2)	From Bottom Ash (3)	Total (1+2+3)
13	Cement industry	1022481	0	0	1022481
14	Bricks/blocks/tiles and other ash-based products	0	363740	0	363740
15	Road and flyover embankments	0	0	0	0
16	Reclamation of low-lying area	0	178600	0	178600
17	Back filling of mines	0	0	0	0
18	Concrete/ mortar/ plaster	0	0	0	0
19	Agriculture	0	0	0	0
20	Exports	0	0	0	0
21	Others (please specify all avenues)	0	0	0	0
	<b>Total B (13 to 21)</b>	<b>1022481</b>	<b>542340</b>	<b>0</b>	<b>1564821</b>

**C. Unutilised ash of year 2021-22 and previous years**

22	Unutilised ash of year 2021-22 (in tonnes)	0.0 Total Ash utilization Percentage is 100.15% in FY-2021-22.
23	Unutilised ash pertaining to previous years i.e. up to 31.03.2021 (in Million tonnes)	0.152114 million tonnes up to 31.03.2021.
24	<b>Total unutilised ash up to 31.03.2022 (in Million tonnes)</b>	0.151248
	a. Quantity of Ash stored in Silos	0.003825
	b. Quantity of Ash stored in Ash Ponds	0.147423
	c. Quantity of Ash stored in any other manner (please specify type of storage and dry/wet phase)	No other mode for the storage

**D. Reasons for not achieving 100% ash utilisation-**

1. Not applicable
2. Not applicable
3. Not applicable

Achieved 100%. Total Ash Utilization Percentage is 100.15% in FY 2021-22.

Signature of Authorized person,  
**for Adani Power Rajasthan Limited**



**Name:** R N Shukla  
**Designation:** General Manager –  
Environment & Forest  
**Date:** 29.04.2022

**Greenbelt Details:**

Area (ha)	No. of Trees Planted	No. of Shrubs Planted
114.0	1,13,526	1,75,000

**PLANTED SPECIES IN AND AROUND PLANT PREMISES**

Sr. No.	Scientific Name	Common Name
<b>Tress</b>		
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
<b>Shrubs</b>		
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 (October 2021- March 2022)

Adani Power Rajasthan Limited, Kawai





adani

Growth  
with  
Goodness

Growth

With Goodness

For a **New Normal India**

# Overview of Kawai Site

At present we are working in 27 villages, 1 town, 13 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
- Chothonya
- 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

- Recognize to selected students of JNV Selection test 2020-21 by Station head at APRL.
- From 16th November onwards JNV coaching classes started at Atru and Kawai. And it will continue till selection test tentatively 30<sup>th</sup> April 2022.
  - 85 students from 24 schools taking benefits of coaching class and compete for JNVST.
  - Provide study kit contains- Bag, Guidebook, Registers, Compass box, Pens, Pencils, Eraser, Sharpener etc.
  - Regular classes and conduct weekly assessment for curriculum-based learning.
  - Digital classes and motivational classes conducted for coaching students.
  - Providing weekly nutritious refreshment for coaching students.
- Support to sports tournaments as organized in vicinity: Total 96 teams and 1400 players participated.
  - 17 and 19 year Girls Kabbadi tournament organized by Girls school Atru.
  - 17 and 19 year Boys Kabbadi tournament organized by Sr. sec. school Kharkhada Ramlothan.
  - 14 year Boys Soft ball and Volleyball tournament organized by Govt. Upper primary school Khedli bansla.
  - Provide support to players for state level games, 21 player selected from 4 surrounding schools.
  - Provide support to village level open cricket tournament at Kawai; Total 18 teams participated.
- As per the need Student Dual-desk and other material like- Rugs, Floormats, Fan, & White board distributed in 32 Govt. schools.
- 100 Computer system distributed to 22 nearby Government schools.
- Participate as a guest in nearby Government schools for Annual day program. Schools recognize and honor to Adani foundation in public event for ongoing support.

# Education



JNV selected students



Digital classes for coaching



JNV coaching @Atru



Sports tournament



Sports tournament



Dual desk support to schools



Computer distribution



Annual function @ school

# Education ( Success story: JNV selected students)

**Shubham Mahawar** residents of Kawai village and belongs to poor family. Shubham father Mr. Bhawani shankar Mahawar doing small business of stone supplier in Kawai. Shubham is intelligent and sharp mind in his class. 2 years back Mr. Bhawani shankar worried about education of his kid because he is not able to give him quality education due to low income and not enough knowledge about education system. All surrounding people suggest him to shift to Kota or Baran for better education. During our JNV coaching campaign / mobilization AF team meets with students of all schools. Shubham Mahawar share details with his father. His father willingly meets to us and understand all procedure and system of JAWAHAR NAVODAYA VIDYALAYA. He ready to take all formalities but thinking about the expenditure of coaching. Once we explain about our cost free JNV coaching classes. The all Mahawar family very glad and Shubham started our classes at Kawai center. Due to Covid19 scenario many time we provide e-content in mobile phone, they face difficulty but dedication and regular test give him confidence to perform better day by day. And finally he performs well in JNV selection test and secure his position. Now worry and tension removed from Mr. Bhawani shankar mahawar life. And his son get quality education at their very near school called Jawahar Navodaya Vidyalaya. Shubham is very excited and eagerly waiting for join his new school. The all family very happy and shown gratitude towards Adani foundation and recognize the efforts of his coaching teacher and team of Kawai CSR.



**Shailesh Meena** residents of Mukundpura village and belongs to poor Schedule tribe family. Shailesh father Mr. Bhupendra meena is engage into agriculture related work. Shailesh is bright mind student but handicapped. Due to this physically handicapped his family stress and thinking how to they provide him better quality education. Due to this reason Shailesh family not ready to send him away from village for study purpose. And in rural area they not found the quality education as they expecting. During our JNV coaching campaign / mobilization AF team meets with students of all schools. Shailesh meena showing interest and share details with his family. His father willingly meets to us and understand all procedure and system of JAWAHAR NAVODAYA VIDYALAYA. Once they understand all things they ready to send his kid to coaching to Kawai center that is 6 KM away from village. The main hurdle is send his kid to coaching every day. But Shailesh conveyance to his father and join Kawai coaching center. Due to Covid19 scenario many time we provide e-content in mobile phone, they face difficulty but dedication and regular test give him confidence to perform better day by day. And finally he performs well in JNV selection test and selected by Jawahar Navodaya Vidyalaya. Shailesh is very excited and impatiently waiting for join his new school. The all family very happy and shown gratitude towards Adani foundation and recognize the efforts of his coaching teacher and team of Kawai CSR.





# Adani Vidyalaya, Kawai

## Academic activities:

- The school has been reopened from 4<sup>th</sup> October, as per govt. guidelines. And taking all the precautionary measures every day like sanitizing, taking temperature, using mask and keeping social distancing.
- Periodic assessment and term examination conducted as per designed curriculum. Exams were conducted in offline mode.
- To inculcate the habit of reading and to improve the language skills, school took the initiative to provide children library books. Children have to write the summary of the book in a decorated notebook.
- Remedial classes have been planned: Everyday, last one hour taken to make the base of students strong.
- Board registration of Class-5 been done of all students.
- Parents teachers meeting were conducted in regular interval and discuss about performance and suggestions.
- On Result day Chatterjee madam and Chakraborty madam visit to school and issue the report card to students.

## Event celebration and extracurricular activities @ AVK:

- All National days, Occasion and Festivals celebrated @AVK like- Gandhi Jayanti, Vijayadashami, Diwali, Mathematics day, Christmas day, New year, Netaji Subhash Chandra Bose Week, Basant Panchami, National science day,
- School has organized Summer camp after the Term-2. It was opened for all the students. The attractions were- Zumba dance, Pot decoration, Fireless cooking, Calligraphy, Yoga, Rangoli, Games, Holi celebration, Drawing/Painting etc.
- Mini sports day was organized on the last day of the camp in which different sports took place.
- Station head sir and Chatterjee madam visited to school and visit the gallery as prepared during Summer camp.
- On various occasion Students made decorative articles, lanterns, diyas, bandanwar, greeting cards, Rangolis and many more from waste.
- AVK has taken initiative for teaching music & singing to short-listed students. Professional Online classical dance classes also arranged.
- English handwriting competition organized on 22nd January. Science Olympiad offline examination conducted @AVK.

## Trainings and Learning activities for teachers:

- Macmillan Education took an online session for teachers to explain the NEP(new education policy), ELPS and LSWR approach.
- Workshop was organized of the digital support from the Cambridge resources for teachers.
- Online Cyber awareness session conducted for students, teachers and parents.
- AVK students participated in Drawing & Poster making activity for Safety day. And Winners were awarded.
- Organized a field trip for AVK staff for team building and to create synergy for new session.

# Adani Vidyalaya, Kawai



Regular classes @AVK



Vijayadashmi celebration



National science day



Fireless cooking activity



Basant Panchami celebration



Guest visit to Summer camp



Online Dance classes



Result declared and PTM

# 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	Total	School & other camp	Blood sugar testing	Referred cases	Home visits	Awareness session
October	1970	1701	3671	9	18	2	3	3
November	1801	1818	3619	6	24	3	3	0
December	2550	2056	4606	11	25	2	5	4
January	2013	1818	3831	8	21	4	2	4
February	1817	1736	3553	6	12	0	2	2
March	1489	1292	2781	15	0	1	1	0
<b>Total</b>	<b>11640</b>	<b>10421</b>	<b>22061</b>	<b>55</b>	<b>100</b>	<b>12</b>	<b>16</b>	<b>13</b>

## Multi-speciality health camps:-

- ❖ In association with Health department Atru under Government scheme "MUKHYMANTRI NIROGI RAJASTHAN CHIRINJIVI SWASTHYA SHIVIR" organize health camps in all Atru block.
- ❖ We organized 7 Gram panchayat level multispeciality health Camp and 1 Block level Mega health camp.
- ❖ Total 3534 people treated in medical camps of various diseases.
- ❖ The service provided in the camps were various disciplines like:- Gynaecology, Skin, Eye, Paediatrics, Dental, Orthopaedics, Psychologist, Ayurvedic, ENT & General health.
- ❖ We also provided 48 type testing facilities & awareness about running Government schemes.



# Community Health



MHCU doorstep service



Awareness campaign



School camp



Home visit



Medical consultation



Registration for camp



Testing facility in camp



Eye checkup in camp

# Community Health (Case Study)

## Case Study

- Mrs. Nathi Bai is 85-year-old and living in Hathidilod. She is suffering from hypertension and weakness. She lives alone as she lost her husband long time back and not having children.
- Nathi Bai is regular beneficiary of our MHCU from last four year she is suffering from Hypertension and Weakness. She used to walk with the support of stick and comes to our site regularly for the medicines but due to weakness she was not able to walk and was not coming to the site from past two weeks. Then the MHCU team decided to visit her home so that her wellbeing can be taken off.
- Then find that due to weakness she was not able to walk and her B.P was also on higher side as she was not taking her medicines regularly from past two weeks. After the examination, Doctor prescribed her the regular B.P medicines and health tonic along with the iron tablets so that weakness can be recovered, and she can improve again.
- She informed that four years back she came to know about our MHCU free of cost treatment and she come to MHCU site and detailed 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 staff, she felt comfortable and shared her all the problems to the staff and treated by the Medical Consultant with suitable treatment compliance including free medicines, counselling, and regular health check-up. After availing regular treatment, she felt improvement and got relief in her health condition. Also, she was able to save the money which she use to spent on her treatment from the Private clinic.
- She is very happy and satisfied with our services.

## Testimonial

I am very happy that the Adani Foundation gives me the services at my home and think for me.

I am very thankful to Adani Foundation for provide free treatment and medicines are very helpful to people like me.



Mrs. Nathi Bai



# Community Health (Case Study)

## Case Study

- **Mr. Jamna Lal Ji yogi** is 74 years old. He is from Kachra Village but now he lives In Old age Home, Atru. he has a Son and a daughter. His son is a farmer and daughter got Married. There is no any one to take care of him in his family so that he stay in old age and His family are stay in Kachra village.
- Mr. yogi is fully depended on our MHCU services for primary treatment. he full fill his basic needs from Old age Pension scheme.
- He is suffering from Hypertension and Diabetes disease from last 4 years. Four year back his treatment going on from Government hospital, Atru but he did not take it regularly because he did not walk. He was feeling alone but a day he saw Our MHCU vehicle outside of Old age home and he knew about our free of cost treatment and services.
- He come to MHCU site and share all problems. Medical consultant investigate his report and prescribed medicine Amlodipine 5 mg, Glimepiride 1 mg and Metformin 500 mg.
- After taking regular treatment, his health has considerable improvement. He is very happy and satisfied with MHCU treatment.
- Now Mr. Jamna lal is very happy and thankful to Adani Foundation to give a chance to live a better life.

## Testimonial

I am very happy to get a treatment at old age home. MHCU team take care of me like My Family. I am very thankful to Adani Foundation for provide batter and doorstep treatment.



Mrs. Jamna Lal yogi

# Sustainable Livelihood

## PASHUDHAN: -

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

- ❖ 707 Cattle covered thru Artificial insemination in 2<sup>nd</sup> Half of 2021-22.
- ❖ 194 new calf born in 2<sup>nd</sup> Half of 2021-22.
- ❖ Calf rally at Nimoda village: COO Adani foundation and local Sarpanch were Chief guest and motivates to farmers.
- ❖ Fodder seeds distribution to 279 farmers.
- ❖ Feed supplementary – 215 Farmers benefited and Rs. 30840/- Community contribution received.
- ❖ Conduct 2-day training for ILD center incharge to do effective AI and reporting in software.
- ❖ BNH-10 fodder grass propagated in field for 10 selected farmer.
- ❖ Biogas ready for installation for 5 progressive farmers.

Sr. No.	Particular	Achievement till March 2022
1	Artificial Insemination	3489
2	Pregnant	1777
3	Calves	1123
4	Vaccination	7008

# Sustainable Livelihood



Female calf born



Calf rally at Nimoda



Artificial insemination



Artificial insemination



Cattle Feed Supplementary



Fodder Seeds Distribution



Training of ILD center incharge



Biogas for farmer



# Sustainable Livelihood

## **KRISHI KOUSHAL: -**

- Orchard development – 3200 fruit plant distributed to 60 farmers.
- Farmers training conducted total 153 farmer participated.
- Vegetable seed distribution – 20 farmers
- Beneficiary Sign board installation to 15 farm as well-developed Orchard.
- Mustard crop growing well and 20% yield increased; As we distributed the improved variety seed to 141 farmers.
- 15 Water tank constructed for nearby farmers towards proper irrigation of fruit plants and agriculture

## **Institution Building: –**

- Monthly meeting conducted at 12 villages for awareness on livestock management and agriculture practice.
- Total 72 monthly meetings conducted, and more than 1400 women participated.
- Training conducted for village facilitator to formation of Farmers producer organization and diary development.
- Expert from BAIF guided to women regarding FPO and solve other livelihood related query.
- 1 exposure visit conducted at *Maitri Mahila Mandal Dooni, Tonk* for FPO members to gather knowledge for diary development and FPO function.

# Sustainable Livelihood



Farmers training at Atru



Beneficiary Sign board



Improved variety Mustard



Water tank for irrigation



Monthly meeting @Dhara



Training conducted for VF



Exposure visit



Exposure visit @ Dooni tonk

# Sustainable Livelihood (Case Study)

## Case Study

**Mr. Giriraj suman** living at Kawai village in Baran district. He has having one cow and one buffalo for domestic milk consumptions. He said that agriculture & animal husbandry is major income source of his family. In this area all animals having non-describe breed which is giving around 04–05-liter milk daily. Mr. Giriraj is told that due to lack of awareness cattle rearers are not adopting Artificial Insemination service. He purchased one buffalo for meet out the milk requirement of his family.

He purchased a Murrah breed buffalo and buffalo given 07-to-08-liter milk daily but slowly- slowly production reduced, and buffalo not come on heat after one and half year.

One day dated 7.11.2020 employees from Adani foundation meet to him for family baseline survey. He shared the problem of his buffalo that the buffalo is not comes on heat from last one and half year and finally he decided to sell of buffalo on Rs. 10,000 to 15,000.

Team Adani foundation visited to his house on next day with Cattle Inseminator and diagnosis the problems of buffalo and provided mineral mixture and calcium. Next 03 days regular visited and regular follow up.

After 11 days of first visit date 18.11.2020 team AF received a call from Mr. Giriraj, He said that his buffalo is coming on heat. Our ILD center incharge visited to his home and inseminated to his buffalo. After 03 month, we visited to Mr. Giriraj home for pregnancy diagnosis of his buffalo, and we found pregnant. ILD incharge suggested to him for given the mineral mixture and proper feed supplementary. On dated 29.09.2021 Mr. Giriraj and his family is very happy to see that a healthy female calf born at his house. Within one hour he called to team Adani foundation and giving thanks for save his buffalo and support to family as financial because now his buffalo is an asset for his family and market rate is more than 50,000.

Now he aware to neighbors and villagers for take service from Adani foundation for rearing of cattle and appreciated to cattle breed improvement program.





# Community Infrastructure Development

## ➤ **Safety park development-**

- Safety park development at Jawahar Navodaya Vidyalaya Atru. And it is open for all schools and institutes for learn safety culture.

## ➤ **Construction of Model Aanganwadi at Nimoda village-**

- There is no proper place for Aanganwadi center community facilitates with real requirement; More than 663 people will get benefit.

## ➤ **Classroom construction at Govt. secondary school Haniheda-**

- We have taken this project for proper seating arrangement and promote quality education. More than 158 students will get benefit.

## ➤ **Construction of Crematorium at Salpura-**

- Due to unavailability of crematorium shed at Salpura people suffers a lot in tough time. With this project we support to community for funeral activity & support to their religious fillings. More than 770 people will get benefit.

## ➤ **Installation of 4 Borewell in nearby Villages-** Salpura, Barla, Dhara village and Jawahar Navoday Vidyalaya Atru.

- Borewell established in 4 location, and it will facilitate to more than 3072 people during summer session.

## ➤ **Water Pond Deepening & Embankment -**

- Under water conservation activity 5 villages- Baldevpura, Chhatrpura, Dhara, Nimoda, and Khedli gaddiyan will take benefit.
- Well develop natural place attract more people to visit and water table recharge of nearby villages.

## ➤ **Biodiversity park development work-**

- Supply and installation Solar power Fence Energizer machine set.
- Supply and saplings of 1000 plants- (300 Anola variety, 300 Guava variety & 400 Karanj variety).
- Supply farmyard (vermicompost) manure, Fertilizer, Super-phosphate, Urea, and Dry chemical powder.

## ➤ **Construction of CC Road in 3 CSR working Villages-** Baldevpura, Aton and Mukandpura village.

- This pathway facilitate to village community and improve village infrastructure; More than 2745 people will get benefit.

## ➤ **SWAGAT KAKSH (Room) construction at Police station Salpura-**

- Room construction work completed and handover to Police station Kawai.

# Community Infrastructure Development



Safety park @JNV Atru



Aanganwadi center @Nimoda



Classroom @Haniheda



Crematorium @Salpura



Pond Deepening -Embankment



Biodiversity park @Kunjer



CC road construction @Aton



Swagat Kaksh @Salpura



# SAKSHAM

## Trainings:

Sr. No.	Courses	Training ongoing	Training completed	Revenue generate
1	Self Employed Tailor	0	15	6000
2	Beauty Therapist	16	33	39966
3	Basic Functional English	0	2	1198
	<b>Total</b>	<b>16</b>	<b>50</b>	<b>47,164</b>

## Meeting and mobilization in nearby villages:

- ❖ Mobilization activity ongoing in vicinity of Adani Power Plant and Baran city.
- ❖ Meeting with female candidate for admission in SET and B&W course at Baran city.
- ❖ SAKSHAM center established in Baran city and start Beauty therapist course.
- ❖ COO Adani foundation Mr. G. Chandra Shekhar Gowda visited to ASD center and interact with trainees, asked how they feel after skilled and guide for better employment/ self-employment.
- ❖ Mobilization activity conducted during 8 medical camp in nearby villages.
- ❖ ASDC trainee and trainer participate in International Women's day event as organized at JNV Atru.
- ❖ Create livelihood opportunity for ASDC trainees; At shopping complex of APRL successfully running a selling corner where our trainees sale self made and stitched product.
- ❖ Our Beauty therapist trainee providing beauty services at Shopping complex APRL and getting livelihood.

# SAKSHAM



Self employed tailoring classes



Self employed tailoring classes



Demonstration of Hair style



Demonstration of Facial



Makeup demonstration activity



Beauty parlor services @ APRL



Mobilization @ Health camp



Visit of COO Adani foundation

# SAKSHAM (Success Story)

**Nirmala Sharma** is 33-year-old lady. She is a married and resident of Baran belongs to a middle-class family.

Her husband has a small business and earns around 10 thousand per month. She wants to do something to support her husband, but she wasn't skilled in any field. During mobilization she heard about the Adani Skill Development Beauty Therapist course. After discussing with her husband, she got registered for a Beauty Therapist course. She was very attentive during the course.

After completing the course, she started a small beauty parlor at her home after some time she started to earn some money. Her monthly income rising by providing beauty services at her home and by home visit. Today she earns 5000 rupees per month.

Nirmala giving credit to Adani Skill Development Center for showing the right path and guiding for respectable livelihood. She is most grateful for this life changing opportunity.





# SAKSHAM (Success Story)

**Rachana Sen** is a 21-year-old girl living in Baran Rajasthan. She is the most passionate and taciturn girl in her batch. She always tries to help and support her family for better livelihood.

There are seven members in her family. But due to not having enough skill and not having the proper platform as she desire. This journey was complete when she heard about Adani Skill Development Centre and took admission in the Beauty Therapist course.

Today she is supplementing her family's income by offering beauty treatment from home. Her initiative and enterprise have helped her to gain the respect of her relatives and community members.

After completing the course, she started to provide beauty services at her home after some time she started earning some money. Her monthly income started rising by providing beauty services at her home and by home visit. Today she earns more than 3000 rupees per month.

Rachana shared the views and said- Since I want to prove to my family that I can also contribute to family income. It was totally dedicated while learning this life skill. I am also fortunate to be part of the Adani skill development center that I can even achieve bigger things in life.



# SaHAJ

## “ SaHAJ” Sanitation and Health awareness joint-venture.

- Organized 41 small group meetings at village level for aware about menstrual hygiene and benefit of use sanitary pads.
- Total 2163 packet sale in last six month and spread awareness in villages.
- Organized one day training program on menstrual hygiene for our SaHAJ group women.
- Mrs. Pavitra Nagar (Senior Trainer, ICDS Baran): provide training and elaborate- What is menstruation, How to promote menstrual hygiene, Why use of sanitary napkins is necessary, What are the disadvantages of not using sanitary napkins, How to dispose of sanitary napkins, and How to communicate with the target group etc.
- COO Adani foundation Mr. G. Chandra Shekhar Gowda interact with SaHAJ volunteers & beneficiary and motivate them for better work.
- In SAHAJ project 5 ladies involve into manufacturing and packaging and 25 village facilitator working for awareness, marketing and selling of Sanitary pad.

# SaHAJ



Manufacturing of Sanitary pad



Manufacturing of Sanitary pad



Training program- SaHAJ group



Training program- SaHAJ group



Village level meeting



Village level meeting



Sanitary pad doorstep delivery



Sanitary pad doorstep delivery



# Visit for Monitoring and Review of CSR

- COO-Adani Foundation Sh. G. Chandra Shekhar Gowda Sir visited to Kawai on 12<sup>th</sup> & 13<sup>th</sup> October 2021 for review and monitoring of CSR programs.
- In 2 day visit, COO sir interact to 12 different CSR programs/ Beneficiary and 2 meetings:-
  - ✓ Attended the Calf rally and interact with different stakeholders at Nimoda village.
  - ✓ Attended Farmers meeting and motivate them for step-up with business plan.
  - ✓ Meeting with farmer success story Mr. Raghuveer at Dadwara village.
  - ✓ Visit to Model Aanganwadi and interact with community at Kharkhada Ramlothan.
  - ✓ Visit to Aamapura and Bamori village- Interact with orchard development success story Sajna bai and Deshraj.
  - ✓ Interaction with MHCU team and take feedback from community.
  - ✓ Visit to Kunjer grazing land and interact with community.
  - ✓ Visit to district hospital Baran and meeting with CMHO.
  - ✓ Attended a program at ASDC center- view exhibition, communicate with ASDC and SaHAJ beneficiary and motivate them for better work.
  - ✓ Meeting with Plant head for better planning and interaction with CSR team for better execution of programs.

# Visit for Monitoring and Review of CSR



Review of Pashudhan project



Farmers meeting at Atru



Interaction at Aanganwadi



Feedback of Health services



Visit to district hospital



Meeting at ASDC & SaHAJ center



Tree plantation at Kunjer



Group photo at SAKSHAM centre



# Social Impact and Evaluation study

- Conduct a study for Evaluation of Impact and Sustainability of CSR Activities of Kawai.
- Audit team visited to various sites and cover all the programs and surrounding which is required for study.
- Audit team interacted with many beneficiaries of all the programs of CSR and meeting with CSR team to collect necessary information.



Interaction with ASDC beneficiary



Visit to villages and communicate with farmers



Interaction with community at Kawai school



Discussion about health services in vicinity

# International women's day celebration

- International women's day event organized on 10<sup>th</sup> March at JNV Atru with all vertical women beneficiary of CSR.
- More than 300 women participated from all running CSR programs in vicinity villages.
- In this program we invite successful entrepreneur women "Meera Devi" from *Maitree mahila mandal Dooni, Tonk* for inspire and motivates to women stakeholders of our various CSR programs.
- Also invite to all success women of various filed like- CEO Zilla parishad, Officers of Saras diary, Teachers, Trainer etc. for share experience and motivates to village women.
- For the program Deputy director- Agriculture, Head O& M- Adani power, Officers of Saras diary, Principal of JNV were present as guest.
- Organize various games and recognize to winners. And provide cloth bag to all participants.



Gathering on Women's day event @ JNV



Meera devi motivates to women with her story



Awarded to beneficiary for their contribution



Women listening in event for more than 3 hours

# Award and Accolades

## ➤ **National CSR Award:-**

- Kunjer Biodiversity park recognize as Best environmental sustainability award by World CSR day and World sustainability.
- In organization category Adani power Rajasthan ltd. Recognized as Best environmental sustainability award.
- Mr. Dilip Acharya (Head HR- APRL) and Mr. Gopal Singh Deora (CSR Head) were attend the award ceremony and taken award at Bangalore.

## ➤ **BHAMASHA AWARD: - (Education)**

- 12 nearby Govt. schools recognize our support and invite us as chief guest and handover "BHAMASHA AWARD" in Annual day program in presence of Education department officials, local leaders, and villagers.
- BHAMASHA AWARD is prestigious award under category of Education. It is announced by Education department Rajasthan government.

## ➤ **Appreciation from Health department: -**

- Block CMHO recognized our efforts for provide support to organized 8 Mega medical camp under MUKHYMANTRI NIROGI RAJASTHAN CHIRANJEEVI YOJNA.
- Organized an event at CHC Kawai and Block CMHO handover appreciation certificate to Head CSR Adani foundation for ongoing support for betterment of health of surrounding people.



# Award and Accolades

## National Award for Excellence in CSR 2021

Best Environment Sustainability Award for Biodiversity Park, Kawai, Rajasthan



Best environmental sustainability award



Head HR & Head CSR attend the event @Bangalore



Bhamashah award @Kawai school



Bhamashah award @Aton school



Bhamashah award @Girls school Atru



Recognized by Block CMHO @CHC Kawai



Appreciation certificate for contribution in Health sector



BHAMASHAH Award from various Govt. schools









# Budget V/s Actual FY 2021-2022

Sr No	Activities	Cost Centre	Internal Order	Proposed Budget F.Y.2021-22			Expenses Up to March -2022 (in Lacks)	% of utilization	Remarks
				Capex	Opex	Total			
A.	General Management and Administration	35004401		0.00	29.35	29.35	26.78	91.24%	
B.	Education	35004000		0.00	17.00	17.00	14.96	88.00%	
C.	Community Health	35004101		0.00	114.93	114.93	103.68	90.21%	
D.	Sustainable Livelihood Development	35004301		0.00	49.85	49.85	44.07	88.40%	
E.	Community Infrastructure Development	35004201		0.00	144.05	144.05	137.03	95.13%	
	<b>Total Budget:</b>			<b>0.00</b>	<b>355.18</b>	<b>355.18</b>	<b>326.52</b>	<b>91.93%</b>	



Thank You



**adani****Power**

Ref: APRL/PK/GOVT/RSPCB/00538

Date: 26.09.2020

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

**Subject: Submission of Environmental Statement for the Financial Year 2019-20.**

**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 2019-20, 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**  
SPL-2A, Road No.6, Indraprasth Industrial Area,  
Kota-324005 (Rajasthan)

Encl : As above

Adani Power Rajasthan Ltd  
NH 90, Atru Road  
Village Kawai, Tehsili 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**  
**2019 – 2020**



**ADANI POWER RAJASTHAN LIMITED**

**Village: Kawai, Taluka: Atru**

**Baran, Rajasthan**

## ENVIRONMENTAL STATEMENT

### FORM V

(See Rule 14)

**Environmental Statement for the financial year (April 2019 to March 2020)**

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

### PART - A

- i) Name and address of the owner / occupier of the industry Operation or Process
  - Name : Mr. Arindam Chatterjee (Station Head)
  - Address : NH-90, Atru Road, Village Kawai,  
Tehsil Atru, Distt. Baran 325219 (Rajasthan)
- ii) Industry category
  - Primary-(STC Code)- Secondary-(STC Code) : Primary (Large Scale)
- iii) Production capacity-Units : 1320 MW (2 x 660MW) Power Generation
- iv) Year of establishment :  
**Unit#1** Commissioned on 28<sup>th</sup> May 2013  
**Unit#2** Commissioned on 31<sup>st</sup> December 2013  
(Consent to operate is valid up to 29.02.2024).
- v) Date of the last environmental statement submitted: **23.09.2019**

### PART B

Water and Raw Material Consumption:

1. Water consumption m<sup>3</sup>/d
  - a) Process : 936
  - b) Cooling : 54980
  - c) Domestic : 663

Name of Products	Process water consumption per unit of product output	
	During the previous financial year (2018-19)	During the current financial year (2019-20)
	(1)	(2)
Power	2.54 KL/MWh	2.56 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 (2018-19)	During the current financial year (2019-20)
(1) Coal	Power	570 gm/Kwhr	561 gm/Kwhr
(2) Fuel Oil	Power	0.08 ml/Kwhr	0.07 ml/kwhr

\*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 <sup>3</sup> )	Unit#1 : 2.11 TPD Unit#2 : 2.06 TPD	Unit#1 : 36.13 Unit#2 : 34.09	Within Limit specified in CTO

- **Water-** No discharge of waste water.

**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 (Kg)	
		During the previous financial year (2018-19)	During the current financial year (2019-20)
a)	From Process <ul style="list-style-type: none"> <li>• Used/Spent Oil</li> </ul>	<ul style="list-style-type: none"> <li>• 7.58 KL (Generated)</li> <li>• 8.72 KL (Sold Out)</li> <li>• 1.89 KL (Balance)</li> </ul>	<ul style="list-style-type: none"> <li>• 17.84 KL (Generated)</li> <li>• 12.22 KL (Sold Out)</li> <li>• 7.51 KL (Balance)</li> </ul>
	<ul style="list-style-type: none"> <li>• Discarded Containers</li> </ul>	<ul style="list-style-type: none"> <li>• 42 Nos. (Generated)</li> <li>• 42 (Sold Out)</li> <li>• 30 Nos. (Balance)</li> </ul>	<ul style="list-style-type: none"> <li>• 99 Nos. (Generated)</li> <li>• 60 (Sold Out)</li> <li>• 69 Nos. (Balance)</li> </ul>
b)	From pollution control facilities	NA	NA

**PART – E**

**Solid Wastes:**

Sr. No.	Solid Wastes	Total Quantity (Tons)	
		During the previous financial year (2018-19)	During the current financial year (2019-20)
a)	From Process (Bottom Ash)	0 (Laying in Ash Pond)	0 (Laying in Ash Pond)
b)	From pollution control facilities (Ash from ESP)	1027316 (Dispose to Cement & Brick Plant)	1330649 (Dispose to Cement & Brick Plant)
c)	Quantity recycled or re-utilized within the unit recycled or re-utilized	466558 (In reclamation of low laying area)	213831 (In reclamation of low laying area within 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 sold to authorized vender. (Please Refer Part - D for Hazardous waste generation and disposal)
  
- Fly Ash utilized by following Industries
  - Birla Corporation Ltd.
  - Heidelberg Cement India Ltd.
  - J.K.Cement Ltd, Nimbahera
  - Mangalam Cement Ltd.
  - Nuvoco Vistas Corp. Ltd.
  - Wonder Cement Ltd.
  - Shri Ram Cement Works
  - J.K.Cement Ltd. (Mangrol)
  - The India Cements Limited
  - ACC Limited
  - Ambuja Cement Ltd.
  - The India Cement Ltd.
  - Tsg Ashtech Movers Pvt. 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 M/s 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 Electro Static Precipitator (ESP).
- Chimney of 275m height is constructed.
- Other pollution control equipments 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.
- Remote calibration completed in Each Gaseous OCEMS
- Utilization of rain water collected during monsoon in Rain Water Harvesting Pond

## PART - H

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

- Installation of Flue Gas Desulphurization (FGD) unit to reduce SO<sub>2</sub> emission as per CPCB direction.
- Installation of Flow monitoring device at both flue cane of Unit-1 & 2.
- Installation of upgraded Electronic Data Display Board for Real time data display in Public domain.

## PART - I

### **Miscellaneous**

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

1. 102857 trees planted up to financial year 2019-20 with 90% survival.
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 80m height in both the flue cane of 275m Chimney.
5. Ambient noise levels is being monitored at 10 identified locations within the plant premises.
6. EMS as per ISO 14001:2015 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/MoEFCC on regular basis.
11. 5S Implementation for waste minimization
12. Integrated Management System has implemented.
13. Energy Management System has implemented.
14. MoEFCC, RSPCB approved third Party Environment Monitoring is being carried out at quarterly basis.

  
**Authorized Signatory**  
**(Adani Power Rajasthan Ltd.)**







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](http://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

<b><u>Expenditure for Environmental Protection &amp; CSR</u></b>		
(Fig. in Rs. Lacs)		
<b>Sr. No.</b>	<b>Particular</b>	<b>Expenditure from (2021-22)</b>
1.	Rural Development/CSR Activities (Education, community health, Sustainable Livelihood, community Infrastructure development etc.)	326.52
2.	Green belt Development (Horticulture)	32.41
3.	Legal, Consent fees	80.18
4.	Third party monitoring, Services and Equipment & Instruments maintenance, Communication cost.	15.21
5.	Insurance, training, and external environmental Management (IMS)	13.40
6.	Cost involved in emission treatment and disposal (AHP, ETP, CHP etc.)	572.00
<b>Total</b>		<b>772.85</b>



भारत सरकार

Government of India

वाणिज्य और उद्योग मंत्रालय

Ministry of Commerce &amp; Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो)

Petroleum &amp; 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 अनुदत 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 नक्शों 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

उप मुख्य विस्फोटक नियंत्रक  
जयपुर

यदि अनुज्ञप्ति परिसर इसमें उपाख्य 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.