adani

Power

Ref: APL/Tiroda/EMD/MoEFCC/EC/222/11/24
Date: 23/11/2024

To,
Additional Principal Chief Conservator of Forest (APCCF)
Ministry of Environment, Forest & Climate Change
Regional Office (WCZ), Ground Floor, East Wing,
New Secretariat Building, Civil Line,
Nagpur-440001 (MH).

Sub: **Six Monthly Compliance Status report of Environmental Clearance of Tiroda Thermal Power Plant for Phase- I & II along with Environmental Monitoring reports– Reg.**

Ref: Environmental Clearance letter J 13011/4/2008-IA.II (T) dated 29.05.2008 & EC Amendment letter no. J-13011/4/2008 –IA II (T) dated: 21/03/2012.
Letter No. J-13012/81/2008-1A-II (T) dated – 22.04.2010 & EC Amendment Letter no. J-13012/81/2008 - IA II (T) dated: 30/03/2012 & 13/03/2014.

Dear Sir,

With reference to the above subject, please find enclosed herewith Six-Monthly Environmental Clearance (EC) compliance status report along with environmental monitoring results like Ambient Air Quality, Stack Emission, Water Quality, Noise level, Soil, CAAQM, CEMS data, Met data, Greenbelt development details and CSR progress reports etc. for the period of **April'2024 to September'2024** in soft (**e-mail**).

This is for your kind information & record please.

Thanking you

Yours faithfully,
for **Adani Power Limited, Tiroda**

(R N Shukla)
Authorized Signatory

Encl: **As above**

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

The Regional Officer,
Maharashtra Pollution Control Board
Regional Office, 5th Floor
Udyog Bhawan, Civil Lines, Nagpur – 440001

Member Secretary,
Maharashtra Pollution Control Board
Kalpataru Point, 2nd – 4th floor, **Mumbai**–22

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SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCES (EC)

3300 (5x660) MW
TIRODA THERMAL POWER PLANT
(PHASE I & II)

At

TIRORA, DISTRICT GONDIA
MAHARASHTRA

Submitted to:

Integrated Regional Office, Nagpur
Ministry of Environment, Forest & Climate Change,
Central Pollution Control Board, New Delhi &
Maharashtra Pollution Control Board, Mumbai and
Regional Office, Nagpur

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Power

Submitted By:

Environment Management Department
Adani Power Limited
Plot NO: A -1, Tirora Growth Centre
MIDC, Tirora, Gondia – 441911 (M.H)

PERIOD: April' 2024 – September' 2024

CONTENT

1.0 Introduction

Tiroda Thermal Power Plant of Adani Power Limited has established 3300 (5x660) MW Coal-based Thermal Power Plant at Tiroda, District Gondia in Maharashtra in two phases as below:
Phase I: 2 x 660 MW
Phase II: 3 x 660 MW

The plant site is located at Tiroda Growth Centre of MIDC (Maharashtra Industrial Development Corporation) developed area near Tiroda, District Gondia in Maharashtra. The Villages, Gumadhawra, Khairbodi, Chikhali, Churdi, Bhiwapur, Kachewani and Mendipur, surround the site. The power plant is based on supercritical, energy efficient & environment friendly technology.

Tiroda Thermal Power Plant has been granted Environmental Clearances from Ministry of Environment & Forest, Consent to Establish & Consent to Operate from Maharashtra Pollution Control Board for Phase I & II (Unit 1, 2, 3, 4 & 5).
The Hon'ble NCLT vide its order dated 08.02.2023 sanctioning the scheme of amalgamation of Adani Power Maharashtra Limited (APML) with Adani Power Limited (APL). Subsequently, Environment Clearance for Phase - I & II were transferred from Adani Power Maharashtra Limited to Adani Power Limited vide F. No. J-13012/81/2008-IA.II (T) dated; 24th April - 2023. In compliance with statutory requirements, environmental quality monitoring is being done regularly at locations suggested by Sub- Regional Officer, MPCB, Bhandara. Also, three nos. of Continuous Ambient Air Quality Monitoring System have been established in three different locations inside the plant boundary as per wind rose and suggested by SRO, MPCB Bhandara. Also, 3rd party Lab (M/s Enviro Analyst & Engineers Pvt. Ltd, Mumbai) carried out environmental monitoring & analysis for the power plant.

Point wise compliance status of Environmental Clearance for Phase - I & II is furnished herewith.

Compliance status on Environmental Clearance

Phase-I: (2x660 MW) Tiroda Thermal Power Plant

Vide Letter No. J-13011/4/2008-1A-II (T) DATED 29.05.2008 &
Subsequent amendement vide Letter no. J-13011/4/2008-1A-II (T) DATED 21.03.2012 &
Transferred EC from APML to APL on 24.04.2023.

Sr. No.	Conditions	Compliance Status
(i)	The total land requirement for the project shall be restricted to 210 ha.	Complied. The project has undergone expansion. The total area has changed and the same has been approved by MoEF&CC. The total area required for all two phases are 565.84 ha.
(ii)	Sulphur and ash content in the coal to be used in the project shall not exceed 0.5 % and 29.57 % respectively.	Being Complied. Sulphur and ash content in the coal is being maintained.
(iii)	A bi-flue stack of 275 m height shall be provided with continuous online monitoring equipment's for SO_x, NO_x and Particulate matter. Exit velocity of flue gases shall not be less than 22 m/sec.	Bi-flue Stack containing two flues of phase-I of 275 meters is installed with On-line monitoring equipment for SO_2, NO_x & PM. Exit velocity of flue gas are more than 22m/sec.
(iv)	High efficiency Electrostatic Precipitator (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm^3.	Highly efficient Electro-Static Precipitators (ESPs) with designed efficiency of 99.97% have been installed for each boiler to meet particulate emission less than 50 mg/Nm^3. The monitoring report is enclosed as **Annexure – I & II.**
(v)	Space provision shall be kept for retrofitting of FGD, if required at a later date.	Noted. Space for installation of FGDs has been provided since construction stage. As per MoEFCC' Notification dated 05.09.2022, Tiroda TPP is falling under Category "C" Non-retiring TPP & the timelines for compliance of SO_2 emission is up to December - 2026. Accordingly, the work is under progress & shall be completed within the schedule.
(vi)	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.	Adequate air pollution control measures such as dust extraction system (bag filters followed by Cyclone) in the coal crusher and coal conveying transfer points (JNTs). Rain gun type dust suppression system in coal yard and dry fog type dust suppression system in belt conveyor have been provided.
(vii)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided and its utilization to the maximum extant shall be ensured. 100% fly ash utilization shall be ensured from 5th year onward. Unutilized fly ash shall be disposed-off in the ash pond in the form of High Concentrated Slurry and the bottom ash in conventional slurry mode.	Complied. 6 Nos of silos have been established for collection of dry fly ash for end users. Railway Rake/bulkers loading facility developed under the silos for bulk ash dispatch to cement manufacturing industries. Please Refer **Annexure – V** for detail of ash utilization & effort made to maximize ash utilization.
(viii)	Ash pond shall be lined with HDPE lining. Adequate safety measures shall also be implemented to protect the ash dyke from	Being complied. Well-designed ash dykes with LDPE lining have been established as per the guidelines of CPCB &

	getting breached. Guard drains shall be provided all along the periphery of the ash dyke to avoid contamination of soil and surface water in case of run-off.	SPCB. Adequate safety measures have been taken for any unforeseen incidents. Guard drains & guard pond established.
(ix)	Water requirement shall not exceed 36 MCM/year. No ground water shall be extracted for this power project, including during construction phase.	Complied. Water withdrawal from the river is well within the allocated quantity of water during the reporting period. Comprehensive water audit has been conducted by "Academy of Water Technology & Environment Management" Kolkata in technical collaboration Indian Institute of Social Welfare & Business Management, Kolkata. Average specific water consumption is 2.26 m^3/MWh for the period from April 2024 – September 2024. Against the norm of 3.5 m3/MWh
(x)	Closed cycle cooling system with cooling towers shall be provided. Cycle of concentration (COC) of at least 5.5 shall be adopted and the effluents treated as per the prescribed norms.	Being complied. Average CoC is 5.87 during the period.
(xi)	The treated effluents confirming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon for storm water. Arrangements shall be made that effluents and storm water do not get mixed.	All the effluent treated adequately & is being reused within the plant. The concept of "Zero Liquid Discharge" implemented except during monsoon period. Separate drainage network established for storm water.
(xii)	A sewage treatment plant shall be provided, and the treated sewage shall be used for raising green belt/plantation.	2x120 KLD of Sewage Treatment Plants have been installed and are under operational. Treated water being reused in green belt development.
(xiii)	Rainwater harvesting should be adopted. Central Ground water Authority / Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.	Rainwater Harvesting study was carried out & report submitted to Regional Director, Central Ground Water Board, Nagpur & Member Secretary-Central Ground Water Authority, New Delhi. We have constructed 3 Nos. of rainwater harvesting structures having capacity of 12m^3 and 01 rainwater harvesting pond of capacity 394m^3 within plant to store the rainwater for further uses. Around 619.5 m^3 of Rainfall was captured during reporting period. Rainwater harvesting details enclosed as **Annexure – VI.**
(xiv)	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Details of these measures along with location plant layout shall be submitted to Ministry as well as to the regional Office of the Ministry at Bhopal.	Adequate safety Control measures have been implemented to take preventive control measures. Fire hydrant and rain gun type water sprinklers installed in the coal yard. Details of control measures along with locations in the plant layout already submitted.
(xv)	Storage facilities for liquid fuel such as LDO to be used as auxiliary fuel in the project shall be made in the plant area where risk is minimum to the storage facilities. Adequate assessment of risk management shall be	Adequate storage & handling practices of LDO implemented as approved by Chief Controller of Explosive, Nagpur. Presently Low Sulphur containing LDO is being used. Disaster Management Plan and On-site Emergency Plan

	made in the Disaster management Plan for the same. Mock drills shall be conducted regularly as plan. Necessary clearance, as may be applicable to such storage under HSM Rules shall be obtained.	have been prepared & submitted to concern authorities. Mock drills are being conducted periodically to check effectiveness of control measures & preparedness of response team.
(xvi)	Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained, and periodic reports shall be furnished to the Regional Office of this Ministry.	Regular monitoring of ground water was carried out around ash pond area. Monitoring results are being submitted to Regional Officer, MoEF&CC and MPCB regularly. Last monitoring report enclosed as **Annexure – I.**
(xvii)	A green belt of adequate width and density shall be developed around the plant periphery covering at least 69.64 ha of project area preferably with local species.	Complied, Green belts with local species have been developed on 258 Ha. of land in around the plant periphery, & along the internal roads etc. so far 8,78,506 saplings were planted up to Sept - 24 including 1,65,324 saplings planted during FY 2024-25 in plant area. Around 3,22,194 sq.m area is also covered under the Green Carpet. An in-house nursery has been established to cater our sapling's requirements. The survival rate of trees maintained at more than 90%. Greenbelt details enclosed as **Annexure – VII.** In addition, we have also distributed 24310 saplings as part of our CSR efforts in neighboring villages during reporting period.
(xviii)	A plan for conservation of fauna reported in the study area shall be prepared in consultation with State Forests and Wildlife Department within 3 months and shall be implemented effectively.	Complied. Conservation plan of Fauna in the study area was prepared in consultation with State Forest dept. and submitted to Wildlife warden, Govt. of Maharashtra with compliance report. The Biodiversity Policy has been formulated to protect the local Flora & fauna. We are the member of India Business & Biodiversity Initiative (IBBI). . A detailed study on Biodiversity is being carried out by reputed agency.
(xix)	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	First Aid and sanitation facilities have been provided for the drivers and contract workers during the construction phase.
(xx)	Leq. of Noise levels emanating from gas and steam turbines shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear-muffs etc. shall be provided. Workers engaged in noisy areas such as steam & gas turbines etc. shall be periodically examined to maintain audiometric records and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.	Necessary actions have been taken care to maintain Ambient Noise levels within 75db(A) during plant operation. The personal protective equipment's have been provided to workers & employees working in noisy areas. Noise level monitoring is being carried out regularly and reports submitted to MoEF&CC, CPCB & MPCB. A complete medical checkup with audiometric test of workers & employees are being carried out regularly.
(xxi)	Regular monitoring of ground level concentration of SO_2, NOx, SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage these	Complied. Regular monitoring of PM_{10}, $PM_{2.5}$, SO_2 & NO_x as per the revised NAAQS-2009. Monitoring reports are

	levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports (six monthly) shall be submitted to the Regional Office of this Ministry.	being submitted to the MPCB monthly. Ground level concentrations of specified parameters are well within the limits. Monitoring stations have been established in consultation with the MPCB. Environmental Monitoring reports are enclosed as **Annexure –I & II.**
(xxii)	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 Forests at http://envfor.nic.in.	Complied. Copy of the same already submitted to your good office.
(xxiii)	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Environment Management Dept. is in place lead by General Manager & supported by qualified Environment Engineers, Chemist, Horticulturist and Ash utilization team for implementation & compliance of environmental standards. • Environmental Management System (Standard - ISO 14001:2015) implemented under Integrated Management System. • NABL Accredited Environmental Laboratory (ISO/IEC 17025:2017) established for monitoring & analysis of Ambient Air quality, Water/ wastewater, Stack emission etc.
(xxiv)	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry/Regional Office /CPCB/SPCB.	Complied, Six monthly compliance reports are being submitted regularly to MoEF&CC, CPCB & MPCB. The last compliance report for the period of Oct'23-Mar'24 was submitted vide our letter No. APL/Tiroda/EMD/MoEFCC/EC/282/ 05/24. dated 22.05.2024. Compliance reports are also available on www.adanipower.com.
(xxv)	Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring.	Complied. EIA & EMP reports have been submitted to the Regional Office of MoEF&CC. Additional information is also being submitted as required.

<table>
<tr><td>(xxvi)</td><td>Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These costs 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.</td><td>A separate fund has been allocated for Environmental Protection. The budgetary provisions for 2024–2025 are as follows: -
<table>
<tr><th>Sl.</th><th>Particulars</th><th>Cost (in Lac.)</th></tr>
<tr><td>1</td><td>Pollution control equipment O &M</td><td>1364</td></tr>
<tr><td>2</td><td>Pollution Monitoring, Study & analysis</td><td>277</td></tr>
<tr><td>3</td><td>Green belt Development</td><td>317</td></tr>
<tr><td>4</td><td>Rural Development/CSR</td><td>248</td></tr>
<tr><td>5</td><td>Legal & consent fees</td><td>388</td></tr>
<tr><td>6</td><td>Training & Awareness</td><td>4</td></tr>
<tr><td>7</td><td>Waste Management</td><td>11215</td></tr>
<tr><td>8</td><td>Establishment of Ash Utilization Research Park</td><td>70</td></tr>
<tr><td>9</td><td>Energy Conservation Initiatives</td><td>1555</td></tr>
<tr><td></td><td>Total</td><td>15438</td></tr>
</table></td></tr>
<tr><td>(xxvii)</td><td>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.</td><td>Complied.</td></tr>
<tr><td>(xxviii)</td><td>Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bhopal /the CPCB/the SPCB who would be monitoring the compliance of environmental status.</td><td>Noted.
Full cooperation always extended.</td></tr>
<tr><td>(xxix)</td><td>The project proponent shall upload the status of compliance of the conditions stipulated in the environmental clearance issued vide this Ministry's letter of even no. dated 30.03.2007, in its website and uploaded periodically and simultaneously send the same by e-mail to the Regional Office of the Ministry of Environment and Forests.</td><td>Complied
EC Compliance report is available on company web portal www.adanipower.com.
Copy of the same has also been submitted to the regional office of MoEF&CC, CPCB & MPPCB by emails.</td></tr>
<tr><td>(xxx)</td><td>Criteria pollutant levels including NOx, RSPM, (PM10 & PM2.5), Sox (from Stack & ambient air) shall be regularly monitored and results displayed in your website and also at the main gate of the power plant.</td><td>Complied.
Online monitoring data of Ambient air quality including PM_{10}, $PM_{2.5}$, SO_2 & NO_x. and Stack monitoring of PM, NOx, SO_2. being displayed at main Gate of the Plant.</td></tr>
</table>

Compliance Status of Environmental Clearance

Phase- II (3X660) MW Tiroda Thermal Power Plant

Vide Letter No. J-13011/4/2008-1A-II (T) DATED 29.05.2008 &
Subsequent amendement vide Letter no. J-13011/4/2008-1A-II (T) DATED 21.03.2012 &
EC Transfer from APML to APL on dated 24.04.2023.

Sr. No.	Conditions	Compliance Status
(i)	Only one unit of 1x660 MW shall be run on 100% domestic coal for which coal linkage from SECL is available and the other two units of 2x660 MW shall be run purely on imported coal, as per details in Para 2.	MoEFCC vide letter no. J-13012/81/2008-1A-II (T) dated 13.03.2014 has amended the condition for change of source of coal to indigenous Coal from subsidiary companies of "Coal India Limited" in place of Imported coal.
(ii)	Separate stacking arrangement shall be made for indigenous and imported coal.	Not Required as domestic coal is being used as per amended EC dated 13.03.2014.
(iii)	In case source of fuel supply is to be changed at a later stage for the 2 x 660 MW the project proponent shall come back to the ministry as the appraisal presently was done based on imported coal for 2 x 660 MW unit.	Complied. Obtained required amendment on 13.03.2014.
A	**Water & Wastewater Management**	
(iv)	No ground water shall be extracted for use in operation of the power plant even in lean season	Being Complied. We have already obtained permission from Water Resource Department (WRD) Govt. of Maharashtra for withdrawal of 70 MCM water for both phases from Wainganga River. The above quantity is adequate to meet the plant's requirement including lean season. Average specific water consumption is 2.26 m3/MWh for the period from April 2024 – September 2024 Against the norm of 3.5 m3/MWh
(v)	No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant	Complied There is no water body within plant premises.
(vi)	Minimum required environmental flow suggested by the Competent Authority of the State Govt. shall be maintained in the Channel / Rivers (as applicable) even in lean season.	Not Applicable Water allocation is from Dhapewada Irrigation Project, constructed and maintained by Vidarbha Irrigation Development Corporation. APL has no role in regulating the water flow downstream.
(vii)	Hydro-geological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground water quality and quantity is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken	Complied, Ground water quality is being monitored in and around the plant premises. Ground water level in nearby villages is also being monitored to know the seasonal fluctuations. CSIR – NEERI, Nagpur engaged to carry out Hydro-geological study & review.
(viii)	Closed cycle cooling system with induced draft cooling towers shall be provided and COC of at least 5.5 shall be adopted.	Complied Average CoC is 5.87 during the period.
(ix)	The treated effluent confirming to the prescribed standards only shall be re-circulated and reused within the plant.	Effluent treatment plant installed within the plant and treated water is being utilize/reuse within the

	There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluent and storm water do not get mixed.	premises to meet "Zero Liquid Discharge". Separate drains provided for trade effluent & storm water.
(x)	Effluent from the desalination plant shall be first treated in a guard pond before discharged, if applicable.	Not Applicable The desalination plant is not required
(xi)	A sewage treatment plant shall be provided (as applicable) and the treated sewage shall be used for raising greenbelt/plantation.	Complied. Sewage Treatment Plants have been installed and treated water is being reused for green belt development.
(xii)	Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.	Rainwater Harvesting study carried out & report submitted to Regional Director, Central Ground Water Board, Nagpur & Member Secretary, Central Ground Water Board, New Delhi. We have constructed rainwater harvesting structures having capacity 12 m^3 and 01 rainwater harvesting pond of capacity 394 m^3. Around 619.5 m3 of Rainfall was captured during reporting period. **Please refer to Annexure-VI**
(xiii)	Regular monitoring of ground water 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 the Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Being Complied. Regular monitoring of ground water quality including heavy metals is being carried out regularly in and around the project area. Piezometric wells have been established around the ash pond area. Records are being maintained and the same are submitted to the Regional Office of the Ministry at Nagpur. Please Refer **Annexure – I.**
B	**Air Pollution Control**	
(xiv)	Provision for installation of FGD shall be provided.	Noted. Space for installation of FGDs have been provided since construction stage. As per MoEF&CC' Notification dated 05.09.2022, Tiroda TPP is falling under Category "C" Non-retiring TPP & the timelines for compliance of SO_2 emission is up to December 2026. Accordingly, the work is under progress & will be installed within the schedule.
(xv)	High Efficiency Electrostatic Precipitator (ESPs) shall be installed to ensure that particulate emission does not exceed 50mg/ Nm^3.	ESP designed efficiency of 99.97% (ESPs of 10 fields) installed for each boiler to meet the norm for particulate emission of less than 50 mg/Nm^3.
(xvi)	Adequate dust extraction system such as cyclones /bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Complied. Adequate air pollution control measures such as dust extraction system (Cyclone followed by bag filters) in coal crushers and rain gun type dust suppression system in coal yard and dry fog type dust suppression system in the belt conveyor with insertable dust collector at transfer points have been installed to meet particulate matter emission within the norms.

(xvii)	Green Belt consisting of 3tiers plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width Shall be raised and adequate justification shall be submitted to the ministry. Tree density shall not be less than 2500 per ha with survival rate not less than 70%.	Complied, Green belts with local species have been developed on 258 Ha. of land in around the plant periphery, along the internal roads etc. so far 8,78,506 saplings were planted up to Sept - 24 including 1,65,324 saplings planted during FY 2024-25 in plant area. Around 3,22,194 sq.m area is also covered under the Green Carpet. An in-house nursery has been established to cater our sapling's requirements. The survival rate of trees maintained at more than 90%. Greenbelt details enclosed as **Annexure – VII.** In addition, we have also distributed 24310 saplings as part of our CSR efforts in neighboring villages during reporting period.
(xviii)	Noise level emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressor etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas.	Necessary actions have been taken care to maintain ambient noise levels within 75 db(A) during plant operation. The working personals provided with appropriate personal protective equipment and periodic audiometric check-up is being carried out and records are being maintained. Monitoring report is enclosed as **Annexure – I & II.**
C	**Fly Ash Management**	
(xix)	Utilization of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Fly ash is being utilised as per the Fly Ash Notification 2021 and amendments. We have extended facilities to maximise utilisation of ash. Monthly Ash generation and utilisation status has been updated in the CPCB Coal Ash Portal, and a six-monthly report has also been submitted to CEA. **Please see Annexure- V.**
(xx)	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. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed-off in low lying area.	Complied. 6 Nos of silos have been constructed for collection of dry fly ash for downstream user. Railway Rake/bulkers loading facility developed under silos for bulk ash dispatched to user, cement making units. Un-utilized ash disposed-off in ash pond through HCSD mode. Heavy metals are being analyzed in Bottom Ash and Ash Pond water , and reports enclosed as **Annexure-VIII**.
(xxi)	Ash pond shall be lined with HDP/LDP lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Complied. Well-designed Ash dyke with HDPE lining have been established as per guidelines of MoEF&CC, and CPCB. We have stabilized/reclaimed Ash Dyke-2 and developed greenbelt/ plantation. Please see the photographs in **Annexure -VII. Ash dykes stability test carried out by competent agency & also regular ash dyke visit is being done by inter dept. team.**

(xxii)	For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the Bottom and sides of the mined-out area are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.	Being Followed.
(xxiii)	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Regular monitoring of ground water quality including heavy metals is being carried out in and around the project area. Piezometric wells are established around the ash pond. Records are maintained and the same being submitted along with compliance report. Please refer **Annexure – I.** We have engaged CSIR – NEERI, Nagpur to carry out Fly Ash Leachability Study since 2019 up to 2022.
D	**Disaster Management**	
(xxiv)	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 Ministry as well as to the regional Office of the Ministry.	Adequate safety team with safety control measures is available in the plant site to take preventive control measures. Fire hydrant and rain gun type water sprinklers were established in the coal yard. Details of control measures and location within the plant layout have already been submitted to your good office.
(xxv)	Storage facilities for auxiliary liquid fuel such as LDO and / HFO/LSHS shall be made in the plant area in consultation with Department of Explosive, 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.	Adequate storage & handling practices of LDO implemented as approved by Chief Controller of Explosive, Nagpur. Presently Low Sulphur containing LDO is being used. Disaster Management Plan and On-site Emergency Plan have been prepared. Mock drills are being conducted periodically to check effectiveness of control measures & preparedness of response team.
E	**CSR/RCR Plan**	
(xxvi)	A good action plan for R & R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months from the date of the issue of this letter.	Approved R&R plan implemented. Indian Institute of Social Welfare and Business Management (IISWBM), Kolkata carried out R&R audit. The study report has been already submitted along with the EC compliance report.
(xxvii)	An amount of Rs. 66.0 Crores shall be earmarked as one-time capital cost for CSR programme. Subsequently a recurring expenditure of Rs. 13.20 Crore per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.	Under the CSR program Rs. 70.16 Crores has been incurred since inception (including Rs. 1.53 crores during FY 2023-24) and the budget provision of Rs 2.481 Crores for 2024-25 under Community Health promotion & facilitation, Sustainable Livelihood, Creating Rural Infrastructure, Promotion of Education, Skilled development, water conservation etc. During COVID 19 pandemic, supported to civil hospital by supply & installation of Oxygen Plant, others medical material and

		vaccination drives. CSR Progress report enclosed as **Annexure – IX.**
(xxviii)	While identifying CSR programme the company shall conduct need-based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruits bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self-employment and jobs. In addition, a special scheme for upliftment of SC/ST's and marginalized population in the study area out of CSR programme shall be formulated and submitted to the Ministry within six months along with firm commitment of implementation. The scheme shall have an in – built monitoring mechanism.	Need Base Assessment Study for CSR programs prepared, and report already submitted to MoEF&CC. Need Base plan implemented in nearby villages including individuals who are economically weak to undertake some economic activity that would help them to achieve sustainable livelihood and financial independence. We have established a Skill Development Center (ASDC) for skill development of SC/ST and marginalized populations from Gondia and Bhandara districts. As on date, a total of 3,409 candidates have undergone training at our facility. Among these candidates, 1516 were trained in domain-specific trades, while 2,620 received training in non-domain trades. It is noteworthy that all our trained candidates have achieved a 100% pass rate. Furthermore, the placement success rate for candidates trained in domain-specific trades consistently exceeds 90%. Details of CSR activities for the period of Apr'24 – Sep'24 enclosed as **Annexure- X.**
F	**General**	
(xxix)	Additional soil for leveling of the proposed site shall be generated within the site (to the extent possible) so that natural drainage system of the area is protected and improved.	Complied No natural drain disturbed due to plant activities.
(xxx)	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	First Aid and sanitation facilities were provided for the drivers and contract workers during the construction period.
(xxxi)	Provision shall be made for the housing of construction labour 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 structures to be removed after the completion of the project.	Labour hutments have been established with all required facilities & infrastructure during construction phase.
(xxxii)	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	Complied. Copy of the same already submitted to your good office with compliance report.

	Website of the Ministry of Environment & Forests at http://envfor.nic.in.	
(xxxiii)	A copy of clearance letter shall be sent by the proponent to concern panchayat, Zila parisad/municipal corporation, urban local body and the local NG, 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 EC and other required documents have been provided to Zila Parishad & Gram Panchayat.
(xxxiv)	A separate environment management cell with qualified staff shall be setup for implementation of the stipulated safeguards.	A separate Environment Management Dept. is in place lead by the General Manager & supported by qualified Env. Engineers, Chemist, Horticulturist and Ash utilization team for implementation of environmental safeguards - Environmental Management System (Standard: ISO 14001:2015) implemented under Integrated Management System. - NABL Accredited Env. Laboratory (ISO/IEC 17025 :2017) established to monitor & analyses Ambient Air, quality Wastewater, Stack emission etc.
(xxxv)	The proponent shall upload the status of compliance of stipulated EC conditions, including the results of monitoring data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MoEF, the respective zone of CPCB & the SPCB. The criteria pollutant level namely; SPM, RSPM (PM10, PM2.5), SO2 and NOx (ambient level and stack emission) shall be displayed at the convenient location near the main gate of the company in the public domain.	Complied, Six monthly compliance reports are being submitted regularly to MoEF&CC, CPCB & MPCB. The last compliance report was submitted vide our letter No. APL/Tiroda/EMD/MoEFCC/EC/282/05/24 dated 22.05.2024. Compliance reports are also updated and available on www.adanipower.com Online monitoring data of Ambient air quality including PM_{10}, $PM_{2.5}$, SO_2 & NO_x. and Stack monitoring of PM, NO_x, SO_2. being displayed at main Gate of the Plant.
(xxxvi)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB	Complied, Six monthly compliance reports submitted regularly to the MoEFCC, CPCB & MPCB in soft by email. The last compliance report was submitted vide letter No. APL/Tiroda/EMD/MoEFCC/EC/282/05/24 dated 22.05.2024.
(xxxvii)	The environment 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 Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail	Environmental statement of FY 2023 – 24 has been submitted to MPCB on 27.09.2024. Please refer **Annexure -XII.**

<table>
<tr><td>(xxxviii)</td><td>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 Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment 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 Forests.</td><td>Six monthly Environmental Clearance compliance status reports are regularly submitted to MoEFCC, CPCB & SPCB. The same is sent by email also.
Compliance status is also uploaded on https://parivesh.nic.in. and on company website www.adanipower.com.</td></tr>
<tr><td>(xxxix)</td><td>Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the 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.</td><td>Complied.
EIA & EMP reports have been submitted to the Regional office of MoEF&CC. Additional information also being submitted as required.
Compliance reports are available on https://parivesh.nic.in.</td></tr>
<tr><td>(xi)</td><td>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</td><td>A separate fund has been allocated for Environmental Protection. The budgetary provisions for 2024–2025 are as follows: -
<table>
<tr><th>Sl.</th><th>Particulars</th><th>Cost (in Lac.)</th></tr>
<tr><td>1</td><td>Pollution control equipment O &M</td><td>1364</td></tr>
<tr><td>2</td><td>Pollution Monitoring, Study & analysis</td><td>277</td></tr>
<tr><td>3</td><td>Green belt Development</td><td>317</td></tr>
<tr><td>4</td><td>Rural Development/CSR</td><td>248</td></tr>
<tr><td>5</td><td>Legal & consent fees</td><td>388</td></tr>
<tr><td>6</td><td>Training & Awareness</td><td>4</td></tr>
<tr><td>7</td><td>Waste Management</td><td>11215</td></tr>
<tr><td>8</td><td>Establishment of Ash Utilization Research Park</td><td>70</td></tr>
<tr><td>9</td><td>Energy Conservation Initiatives</td><td>1555</td></tr>
<tr><td></td><td>Total</td><td>15438</td></tr>
</table></td></tr>
<tr><td>(xii)</td><td>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</td><td>Complied.</td></tr>
</table>

(xiii)	Full cooperation shall be extended to the Scientists/Officers from the Ministry / Regional Office of the Ministry at Bangalore / CPCB/ SPCB who would be monitoring the compliance of environmental status.	Noted. Full cooperation always extended.
Additional Conditions (EC Amendment)		
(xiv)	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.	Complied Coal is being transported through Rail and unloaded within plant premises at Wagon Tipplers & Track Hopper.
(xv)	Avenue plantation of 2/3 rows all along the road shall be carried out by the project proponent at its own expense.	Thick Plantation has been done all around the Plant boundary.
(xvi)	Periodic maintenance of the road shall be done by the project proponent at its own expense and shall also facilitate the traffic control on the road.	Complied. All internal roads are black topped or concreated and being maintained.
(xvii)	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 quantity at any point of time, fresh reference shall be made to the Ministry for suitable amendments to environmental clearance condition wherever necessary.	We are using washed coal from SECL and blended with raw coal. We have also installed Real time Coal Ash Analyzers to monitor ash content.. Quarterly Ash content report is being submitted to MoEF&CC regional office. During the reporting period, the average ash content for Qtr.1 is 33.53%, Qtr.2 is 32.29%.
(xlvii)	A long-term study of radio activity and heavy metals content on coal to be used shall be carried out through a reputed institute. Thereafter, mechanism for an in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Being Complied. We have carried out testing of radioactive analysis in coal from Board of Radiation & Isotope Technology (BRIT), Dept. of Atomic Energy, Govt. of India, Mumbai . We have also done Heavy metal analysis in coal from Atomic Minerals Directorate for Exploration and Research, Dept. of Atomic Energy, Govt. of India, Hyderabad.
(xviii)	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 panels installed at the roof top of Administrative Building to cater domestic power requirement. In addition to above, solar streetlights have been installed along the ash dyke area. Under CSR activities, we have installed more than 200 solar street- lights in nearby villages.
(xix)	Mercury emission from the stack shall also be monitored on periodic basis.	Being complied. Mercury emission from the stack is being monitored & reports are being submitted. Mercury monitoring report is enclosed as **Annexure – I.**
(l)	Fugitive emission shall be controlled to prevent impact on agricultural or non-agricultural land.	To control fugitive emission, Rain gun type water sprinkling system has been installed in coal yard. All coal conveying belts conveyors are covered and fog type dust suppression system provided. Adequate water sprinkling arrangements have been made in wagon tipplers and track hoopers to mitigate dust emission during coal un-loading by rail. Closed coal conveyor belts have been established. Cyclones

		followed by bag filters are provided at each coal transfers points (JNT's). Additionally, mobile water sprinklers are deployed at CHP area to suppress fugitive dust while movement of vehicles.
(li)	Source sustainability study of water requirement shall be carried out by an institute of repute. The study shall also specify the source of water for meeting the requirement during lean season. The report shall be submitted to the Regional Office of the Ministry within six months.	VIDC has developed & operates Dhapewada Barrage on River Wainganga for water supply. However, we have undergone source sustainability study of River Wainganga by "Academy of Water Technology Environ Management" Kolkata in technical collaboration Indian Institute of Social Welfare and Business Management – Kolkata and CSIR–CGCRI, Kolkata. The final report has already been submitted along with previous compliance report.
(lii)	Fly ash shall not be used for agricultural purpose. No mine void filling will be undertaken as on 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 repute 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.	Fly Ash is being utilized as per Fly ash Notification. CSIR – NEERI, Nagpur engaged for carry out Fly Ash leachability Study, Bioaccumulation and Magnification study. Details of the same were submitted to Ministry with previous compliance report.
(liv)	Three tire green belt shall be developed all around Ash Pond over and above the Green Belt around the Plant Boundary.	A thick plantation/green belt has been developed around the Ash Pond area. Our efforts are being made to develop more & more greenery inside the plant premises. Closed dyke also covered with soil layer & dense green belts. Please refer **Annexure - VII**
(lv)	Social audit for the CSR Scheme shall be carried out periodically by reputed university or an institution as per the CSR guidelines of Government of India and Details to be submitted to MoEF besides putting it on company's website.	Social Audit has been carried out by Indian Institute of Social Welfare & Business Management, **University of Kolkata.** Study report already submitted to your good office along with EC compliance report.
(lvi)	An Environmental Cell shall 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 ensured that the head of the Cell shall directly report to 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.	A separate Environment Management Dept. is in place lead by the General Manager & supported by qualified Env. Engineers, Chemist, Horticulturist and Ash utilization team for implementation of environmental safeguards - Environmental Management System (Standard ISO 14001:2015) implemented under Integrated Management System. - NABL Accredited Env. Laboratory (ISO/IEC 17025:2017) established to monitor & analyses Ambient Air Quality, Water/wastewater, Stack emission monitoring etc.

(vii)	Monitoring of surface water quantity and quality shall also be regularly conducted, and record maintained. The monitoring 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.	Monitoring of surface water and ground water quality including heavy metals is being done on a regular basis and records maintained Surface and ground water analysis report is enclosed as **Annexure - 1.**
(iviii)	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 Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliances of environmental clearance conditions and shall also be sent to the respective Regional Offices of the Ministry by e-mail.	Environmental statement of FY 2023 – 24 has been submitted to MPCB on 27.09.2024. Please refer **Annexure -XII** for Environmental Statement.
(iix)	The project proponent shall formulate a well laid Corporate Environment Policy and identify and designate responsible officers at all levels of its hierarchy stipulated in this clearance letter and other applicable environment laws and regulations.	We have implemented ISO 14001:2015 under Integrated Management System, which consists of Environment, Health & Safety, Quality and Energy Management Systems. We have also formulated a Corporate Policy as per the requirements of the Integrated Management System (IMS). Biodiversity Conservation Policy has already been framed and incorporated into the existing IMS policy. We are members of the Indian Biodiversity Business Initiative (IBBI) as initiated by MoEF&CC. IMS is Integrated with International Finance Corporation (IFC) Performance and complies with IFC standards on Environmental Management. We are pleased to inform you that use of "Single Use Plastics" have been completely restricted in the plant premises. We have also integrated Water Efficiency Management, Business Continuity Management, Asset Management System & IRBC with the IMS system in FY 2021–22.

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Annexure I

SIX MONTHLY ENVIRONMENTAL MONITORING REPORT

FOR
The Period of Apr. 2024-Sept.2024

of

ADANI POWER LIMITED
Tirora, Growth Center,
MIDC, Gondia – 441 911

Prepared by

Recognised by MoEF (GOI). F. No. LB/99/7/2021-INST LAB-HO-CPCB-HO/Pvt./1020 dated. 30.8.2024
NABET Accredited and ISO 9001: 2000Certified Organisation

Head Office: B-1003, Enviro House, 10 Flr. Western Edge II , W.E. Highway, Borivali (E), Mumbai-400 066

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Foreword

The protection of environment plays a crucial role in maintaining the local environment quality for any industry, throughout their production, hence compliance of the statutory requirements becomes very important to conserve the ecological balance within and surrounding the plant area. Therefore, environment protection is becoming a prerequisite for sustainable development. In line with this requirement, the management of ***Adani Power Ltd****. has adopted a corporate responsibility of development and top priority is given for environment protection.*

In order to comply with the Environment protection act, to fulfill statutory requirement and to be in tune with Environmental Preservation and sustainable development ***Adani Power Ltd.****, has retained* ***Enviro Analysts and Engineers Pvt. Ltd.*** *as Environment Consultants and for various Environmental issues related to their Power Plant.*

This report presents the Environmental Status for the period ***Apr.2024-Sept. 2024*** *as a compliance to the statutory requirements.*

The co-operation extended by the Staff and Management of Adani Power Ltd. during the work execution period is gratefully acknowledged.

For **ENVIRO ANALYSTS & ENGINEERS PVT. LTD.**

Authorized Signatory

Table of Contents

LIST OF TABLES:

LIST OF FIGURES:

LIST OF ANNEXURES:

Chapter – 1

Introduction

&

Scope of work

1.0 INTRODUCTION.

Tiroda Thermal Power unit is a part of Adani Power Limited (APL) has established 3300 MW (5x660) Coal-based Thermal Power Plant at Tiroda, District Gondia in Maharashtra in two phases as below:

Phase I: 2 x 660 MW

Phase II: 3 x 660 MW

1.1 Scope of Work.

The scope of work includes the data generation for various environmental components viz Meteorology, Air, Noise, Water, Stack, Effluent and soil of Adani Power Limited, Tirora.

To monitor the environmental parameters and data analysis in the vicinity of the power plant of 5x660MW at MIDC Area Tiroda, APL awarded the service to M/s Enviro Analysts & Engineers Pvt. Ltd. (EAEPL), Mumbai.

The present report incorporates data of various Environmental parameters for APR.2024-SEPT.2024

Chapter – 2

Details of sampling Locations

&

Methodology for sampling and analytical procedures

2.0 DETAILS OF SAMPLING LOCATIONS.

The details of sampling location w. r. t. Air, Water and Noise quality around the power plant are shown in the Sampling location Map as depicted in Figure.2.1

2.1 Meteorology and Ambient Air Quality.

Meteorological data was collected at one station concurrently with the ambient air quality monitoring. The weather station was placed on the roof top at a height of 10m. Wind speed, wind direction, relative humidity and temperature & Rainfall were recorded at hourly intervals contineously.

The sampling locations of Ambient Air Quality in the Power plant premises covering upwind and down wind direction . To assess the effect of industrial activity of power plant on the air, environmental parameters like Particulate Matter-PM_{10}, Particulate Matter-$PM_{2.5}$, Sulphur Dioxide-SO_2, Nitrogen Dioxide –NO_2 were monitored Details of the sampling locations with respect to the plant site are given below in **Table-2.1** .

Table 2.1 Ambient Air Quality Monitoring Location

Code	Name of the monitoring Station	Distance from plant boundry (km)	Direction with respect to plant	Environmental Setting	Remarks
A1	**Near AWRS**	Within Plant	-	Within Plant	Industrial area
A2	**Near Brick Plant**	Within Plant	-	Within Plant	Industrial area
A3	**Near China colony**	Within Plant	-	Within Plant	Industrial area

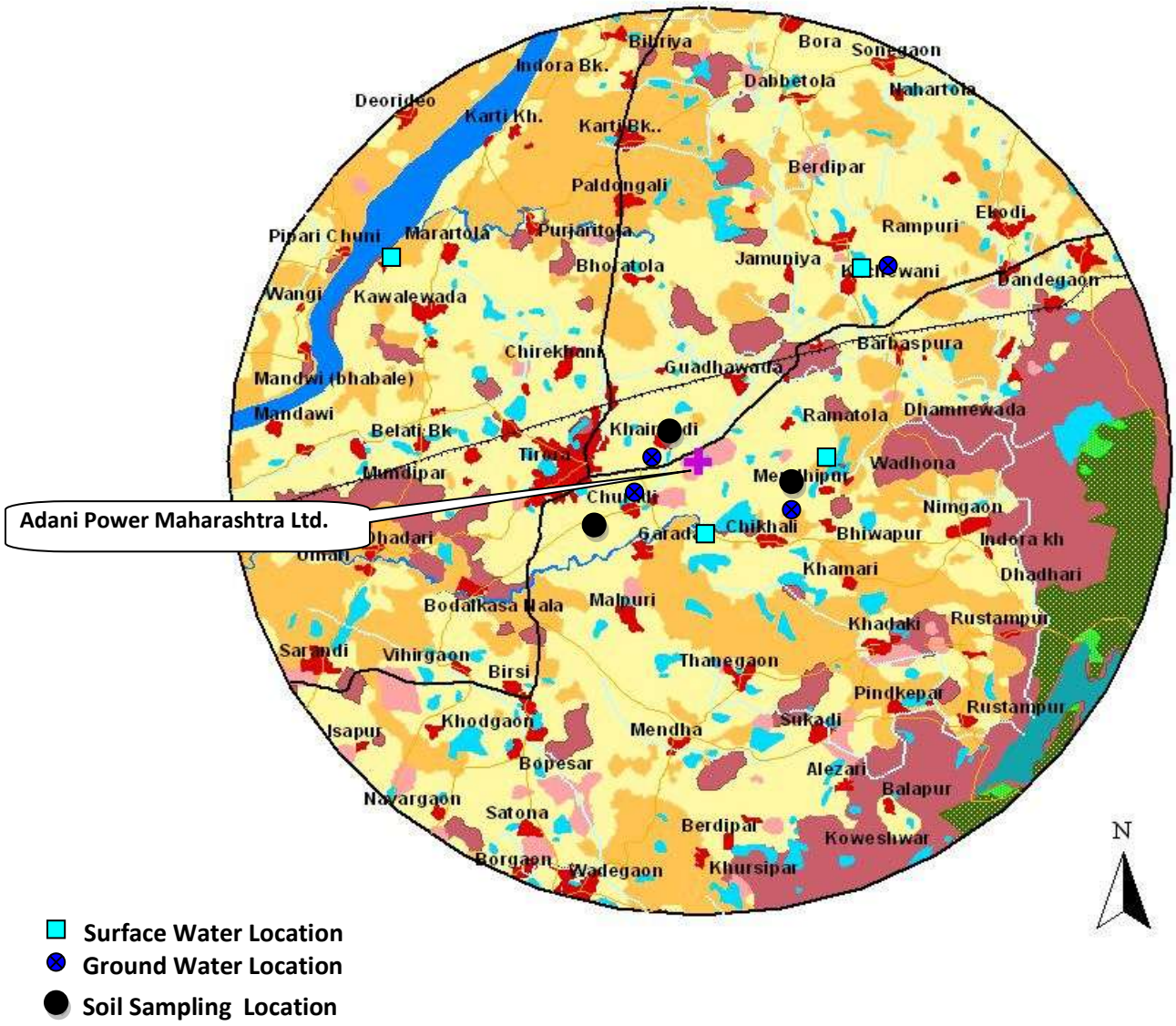


Figure : 2.1 SAMPLING LOCATIONS MAP

2.2 Water Quality

Water samples were collected at various locations within the area of 10 Km radius from the plant to assess the Physico-Chemical quality of Surface and Ground Quality water. Samples were collected as per the standard procedures. On site Parameters like Temperature, Electrical Conductivity, pH and Dissolved Oxygen were analyzed at-site using portable water analysis kit. Samples were collected by taking suitable precautions for preparation and transportation, particularly using sterilized bottles for bacteriological analysis. The details of the sampling locations are given in **Table-2.2** and **Figure.2.1** as depicted.

Water samples were collected on quarterly basis from 8 locations (Ground water 4, Surface water-5 Analytical methods mentioned in IS: 3025 and Standard Methods published by APHA were followed.

TABLE-2.2 WATER SAMPLING LOCATIONS

Code	Name of the monitoring Station	Distance from plant boundry (km)	Direction respect to plant	Source
Surface Water				
SW1	Wainganga River Water (Upstream)	7.0	NW	River
SW2	Wainganga River Water (Downstream)	11.2	W	River
SW3	Mendipur Pond Water	2.0	SE	Pond
SW4	Garada Village Nalah water	3.0	SSW	Nalah water
SW5	Kachewani Pond water	3.0	NE	Pond water
Ground Water				
GW1	Kachewani Hand Pump	3.2	NE	Bore well
GW2	Mendipur Hand Pump	2.5	SE	Bore well
GW3	Garada Hand Pump	3.2	SW	Bore well
GW4	Chikhali Hand Pump	2.0	S	Bore well
Waste Water				
WW1	Cooling Tower Blow Down water Unit-1			In Plant
WW2	Cooling Tower Blow Down water Unit-2			In Plant
WW3	Cooling Tower Blow Down water Unit-3			In Plant
WW4	Cooling Tower Blow Down water Unit-4			In Plant
WW5	Cooling Tower Blow Down water Unit-5			In Plant
WW6	Boiler Blow down Water Unit-3			In Plant
Piezometric Well water				
P1	Near AWRPH			In Plant
P2	B/H Ash dyke -1			In Plant
P3	Near Raw Water pump house -02			In Plant

2.3 Noise Level:

Noise level at following in plant location and Buffer zone location were recorded by APL for the period of APR.2024-SEPT.2024. Location details are given in Table-2.3. and as depicted in Figure.2.1

TABLE: 2.3 NOISE LEVEL LOCATIONS FOR THE PERIOD OF Apr.2024- Sept.2024

Code	Location	Location type	Remarks
NL- 1	Inside the plant	Near Shanti Niketan I, II & III	Industrial
NL- 2		Near Labour Hutment	Industrial
NL- 3		Near Store Area	Industrial
NL- 4		Gate No.1	Industrial
NL- 5		Gate No.2	Industrial
NL- 6		Gate No.3	Industrial
NL-7		Near OHC	Industrial
NL-8		Railway Siding	Industrial
NL-9		Near Reservoir 2	Industrial
NL-10		Near Ash Water Recovery Pump House	Industrial
NL-11		In China Colony	Industrial

2.4 Soil Quality:

Soil Samples collected at 3 location around the plant zone on the seasonal basis for the period of Apr.2024-Sept. 2024 Location details are given in **Table-2.4**. and as depicted in **Figure.2.1**

TABLE: 2.4 SOIL SAMPLING LOCATIONS

FOR THE PERIOD OF APR.2024-SEPT.2024

Code	Location	Location type	Remarks
S1	Buffer Zone	Garada Village	Agricultural Field
S2		Mendipur Village	Agricultural Field
S3		Churadi Village	Agricultural Field

2.5 Methodology of Monitoring

2.5.1 Instruments Used

Samples were collected at '*Ambient Air'* monitoring locations' using standard *Fine dust sampler &* RDS sampler for monitoring PM_{10}, $PM_{2.5}$, SO_2, NO_2, concentrations and analyzed as per *USEPA / IS* methods in APL Laboratories at Tiroda site

Also Continuous Ambient Air Monitoring station installed (CAAQMS) at APL make Tyledyne and Met One instrument approved by USEPA.
On site Micro-meteorological data for wind direction, wind Speed, Temp, Relative humidity and Rainfall collected from APL.

Ground water, Surface water & Effluent water were analyzed for onsite parameters likeTemperature, Electrical Conductivity, pH and Dissolved Oxygen were analyzed on-site using portable water analysis kit. Samples are collected, preserved and sent for further analysis to Enviro Analysts & Engineers Pvt. Ltd, where other parameters like total hardness, chlorides, sulphate etc and heavy metals are analyzed as per requirements IS 3025/APHA methods.

Soil samples were analyzed for physical, chemical and heavy metal concentrations, using analytical methods.

Noise was measured at site locations using a noise level meter to determine sound levels in a scale as dB (A) This is suitable for audible range of 20 to 20,000 Hz for human being. Sound level monitoring done by APL.
Stack Monitoring kit having sensor probe was used to monitor stack data like Flue gas velocity, Volumetric flow of flue gas, Temperature of flue gas, Moisture content and other parameters like SPM, SO_2, NO_2 make by ECOTECH

2.5.2 Method of Analysis

Air samples were analyzed as per standard methods specified by Central Pollution Control Board (CPCB), EPA & IS method.

2.5.2.1 Meteorology

Micro-meteorological data was observed for wind direction and speed using wind vane and anemometer using an automatic met logger. The data was recorded at 1 hour interval. Wind

speed & wind direction, Temperature, Rain fall, Relative humidity were recorded by Weather Monitoring Station by APL.

2.5.2.2 Ambient Air Quality (AAQ)

Sampling was carried out at each station during the stipulated study period using pre-calibrated Respirable Dust Samplers and Fine Dust Sampler in each of the stations by APL.
Earmarked samples were collected for Particulate Matter-PM_{10}, Particulate Matter-$PM_{2.5}$, SO_2 and NO_2 for 24 hourly.
The baseline data of air environment is generated for the parameters namely: Particulate Matter-PM_{10}, Particulate Matter-$PM_{2.5}$, Sulphur Dioxide SO_2, and Nitrogen Dioxie NO_2 in APLT.

2.5.2.3 Stack Monitoring

Stack emissions were analyzed with the help of stack Kit (ECOTECH Stack Kit & Prob set, quarterly basis at Boiler Stack situated in plant. Height of the Boiler Stack was noted as, 275 m and I.D. 7.4m.Flue gas, Velocity, Temperature, Volume & Qty, Moisture Content, PM, SO_2, NO_2, Hg were analyzed. The values obtained were then compared vis-a-vis with the standards prescribed by CPCB.
Iso-kinetic stack monitoring was conducted as per standard method IS 11255 (Part-3) specified in Emission Regulation Act Part to determine PM, SO_2 and NO_2, Data was collected and analysis was done for other parameters like Flue gas Velocity, Temperature, Volumetric flow rate, Moisture contents.

2.5.2.4 Water/Waste Water Quality

Water/Waste water samples were collected for physico-chemical and bacteriological parameters taking suitable Precautions. Temperature, pH, Dissolved Oxygen and Electrical conductivity were measured in the field while collecting the samples. Sterilized bottles were used to collect samples for bacteriological analysis, stored in ice and transported to the Laboratory.

Ground and surface water samples were analysed as per IS: 10500 and Waste Water samples were analysed as per IS: 3025. The analytical methods mentioned in IS: 3025 and Standard

Methods published by APHA were followed. MPN Index of coli forms was found as per standard methods (IS: 1622).

2.5.2.5 Noise Level

Noise is defined as unwanted sound that creates interferences in speech, communication, causes annoyance, disturbance in work concentration and sleep, thus deteriorating the quality of Noise environment. In the present study, Noise monitoring has been conducted regularly by APLT Since loudness of sound is the important parameter to assess the effects of particular activities on human being, hence noise level is measured for noise environment assessment. Hourly Sound Pressure level (SPL) was recorded with Sound Level Meter for 24 hours.

2.6 Analytical Procedures

2.6.1 Meteorology

The data obtained from field is used to as certain the wind percentage frequencies in the sixteen directions for wind speeds using Beaufort's scale in the range of 0-1.8, 1.8-3.6, 3.6 – 7.2, 7.2 – 14.4, 14.4 – 28.8 and >28.8 kmph. Average wind roses at twenty four hourly are prepared from the data collected. Temperature, Relative Humidity is monitoring by Automatic Weather Monitor (AWS - 10W Rave Innovation) and Rain fall by using Rain Gauge of AWS -10W.

2.6.2 Ambient Air Quality

Whatman GF/A & PTFE filter paper was used in Respirable dust sampler RSPM and FDS and weighed in Mettler electronic balance and computed as per standard methods.

Ambient Air samples were analyzed for SO_2 concentration levels by using Improved West-Gaeke method using spectrophotometer (HACH DR 5000) at a wavelength of 560 nm. NO2 conc. levels were estimated using Jacob and Hocheiser modified (Na-As) method using spectrophotometer (HACH DR 5000) at a wavelength of 540 nm

Sampling and Analytical Techniques

The techniques used for ambient air quality monitoring and minimum detectable levels are given in **Table-2.5**

TABLE- 2.5 (TECHNIQUES USED FOR AMBIENT AIR QUALITY MONITORING)

Sr. No.	Parameter	Technique	Technical protocol	Minimum detectable limit (µg/m³)
1	PM10	Respirable Dust Sampler (Gravimetric Method)	IS-5182 (Part-IV)	5.0
2	PM2.5	Fine Respirable Dust Sampler (Gravimetric Method)	IS-5182 (Part-IV)	5.0
3	Sulphur dioxide	Improved West & Gaeke Method	IS-5182 (Part-II)	4.0
4	Nitrogen dioxide	Modified Jacob & Hochheiser Method	IS-5182 (Part-VI)	4.0

Chapter – 3

DATA ANALYSIS

3.0 DATA ANALYSIS

Environmental monitoring for the period of Apr.2024 - Sept.2024 consisted of collection and analysis of meteorological parameters, ambient air quality and ground water and surface water quality at different locations within study area selected for carrying out environmental monitoring around the plant site.

3.1 Meteorology

Meteorological data was collected by APL on hourly basis for wind speed, Wind direction, temperature and relative humidity continuously. Total Rain fall on monthly basis during the period of Apr. 2024-Sept.2024 was measured and recorded and reported in the Environmental report.

Wind Pattern for the period APR.2024 - SEPT.2024.

The data recorded during the study period was analyzed and the daily maximum, minimum and total of all the parameters were observed. The summary of all the meteorological observations is given in **Table-3.1**.

TABLE- 3.1 METEOROLOGICAL DATA MONITORED AT SITE

(for the period of APR.2024-SEPT.2024)

Month	Temperature (°C)		Relative Humidity (%)		Rainfall (mm)
	Max	Min	Max	Min	(Total)
Apr. 2024	44.0	18.7	94.3	17.6	76.8
May 2024	48.4	20.5	92.6	13.0	29.6
Jun. 2024	47.4	24.7	95.6	20.1	50.0
Jul. 2024	38.3	23.4	100	49.2	736.4
Aug. 2024	38.3	23.4	95.6	43.0	512.6
Sept. 2024	38.1	23.1	95.0	43.3	290.0

Temperature

The Temperature for the month of APR.2024-SEPT.2024 was found to be within range of 18.7°C – 48.4°C.

Relative Humidity

The average relative humidity for the month of APR.2024-SEPT.2024 was found to be within range of 13.0-100%.

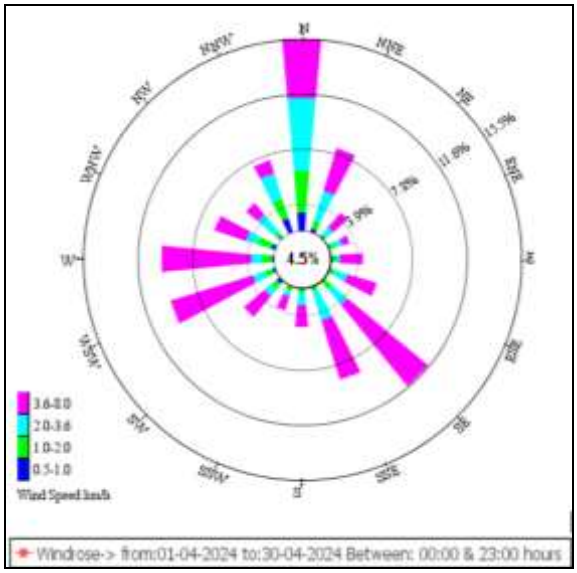
Rain Fall

Total Rain fall found the period of APR.2024-SEPT.2024 was 1695.4mm

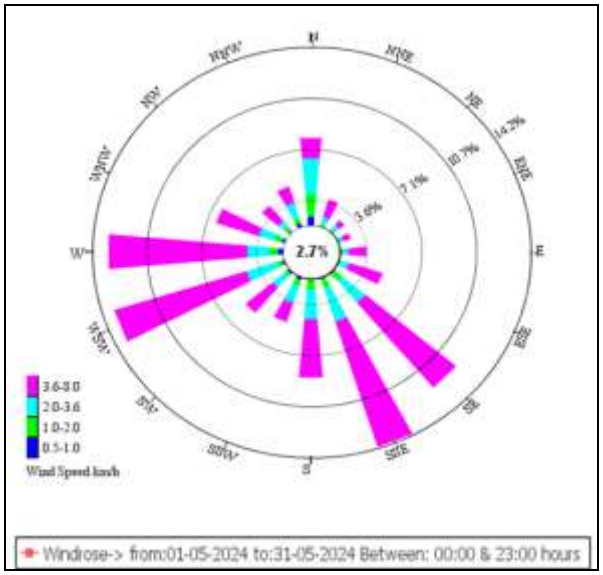
Wind Speed/Direction

The wind speed and direction data collected during the period of APR.2024-SEPT.2024. The wind roses plot using the collected data for APR.2024-SEPT.2024 is given in **Figure-3.1**

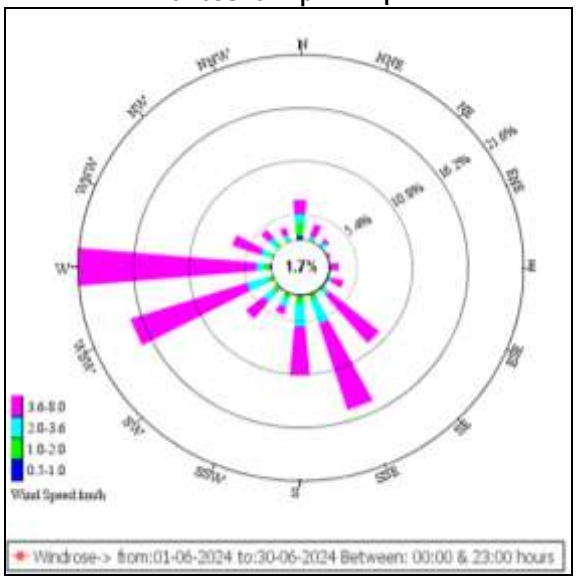
The first predominant wind direction during APR.2024-SEPT.2024 was W. The calm condition ranges from 1.7 to 19.3%.



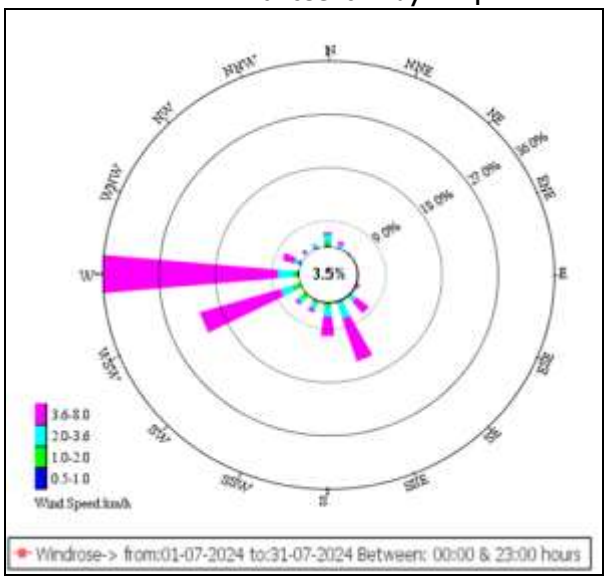
Wind rose for Apr. 2024



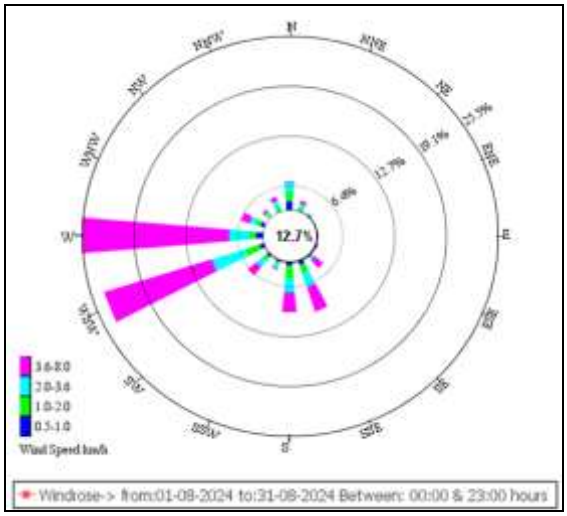
Wind rose for May 2024



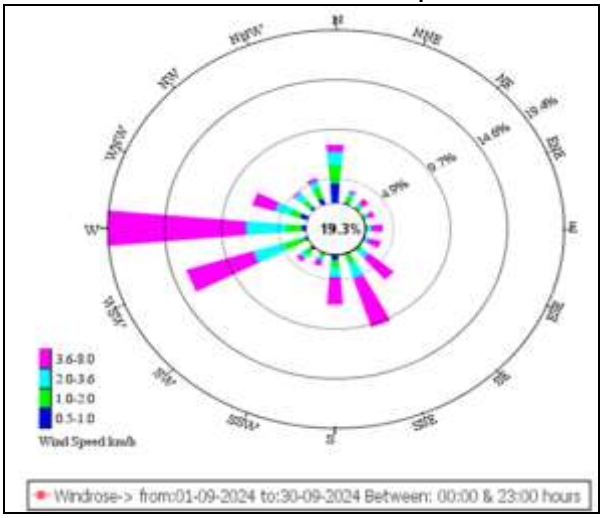
Wind rose for Jun. 2024



Wind rose for Jul. 2024



Wind rose for Aug. 2024



Wind rose for Sept. 2024

FIGURE-3.1 SITE SPECIFIC WINDROSE FOR APR.2024 - SEPT.2024

3.2 Ambient Air Quality

Ambient air quality has been carried out within the plant for the period of APR.2024 - SEPT.2024. PM_{10}, $PM_{2.5}$, SO_2 & NO_2, sampling at all the locations is done for 24 hours average twice a week by APL. The values obtained were then compared vis-a-vis the standards prescribed by CPCB for Industrial/ Rural / Residential uses.

3.2.1 Presentation of Results.

The summary of Ambient Air Quality monitoring results for the period of APR.2024-SEPT.2024 are presented in detail in **Table 3.2** for Inside plant area. 98^{th} percentile; maximum and minimum values etc have been computed from the collected raw data for all the AAQ monitoring station. The data has been compared with the standards prescribed by Central Pollution Control Board (CPCB)/NAAQ for residential and rural zone.

Particulate Matter-PM10

The minimum and maximum concentrations during APR.2024-SEPT.2024 in the plant area location for Particulate Matter-PM_{10} were recorded as 21.2 µg/m^3 and 83.2 µg/m^3 respectively. The minimum concentration was recorded at Near Chaina Colony (A1) and maximum concentration at Near Brick Plant (A2).

Particulate Matter-$PM_{2.5}$

The minimum and maximum concentrations in the plant area location for $PM_{2.5}$ were recorded as 12.6µg/m^3 and 47.3 µg/m^3 respectively. The minimum at Near Brick Plant (A2) and Maximum concentration was recorded at Near AWRS (A1).

Sulphur Dioxide (SO_2)

The minimum and maximum SO_2 concentrations in the plant area location were recorded as 3.3µg/m^3 and 23.8 µg/m^3 respectively. The minimum and maximum concentration was recorded at Near Chaina Colony (A3) respectively.

Nitrogen Dioxide (NO_2)

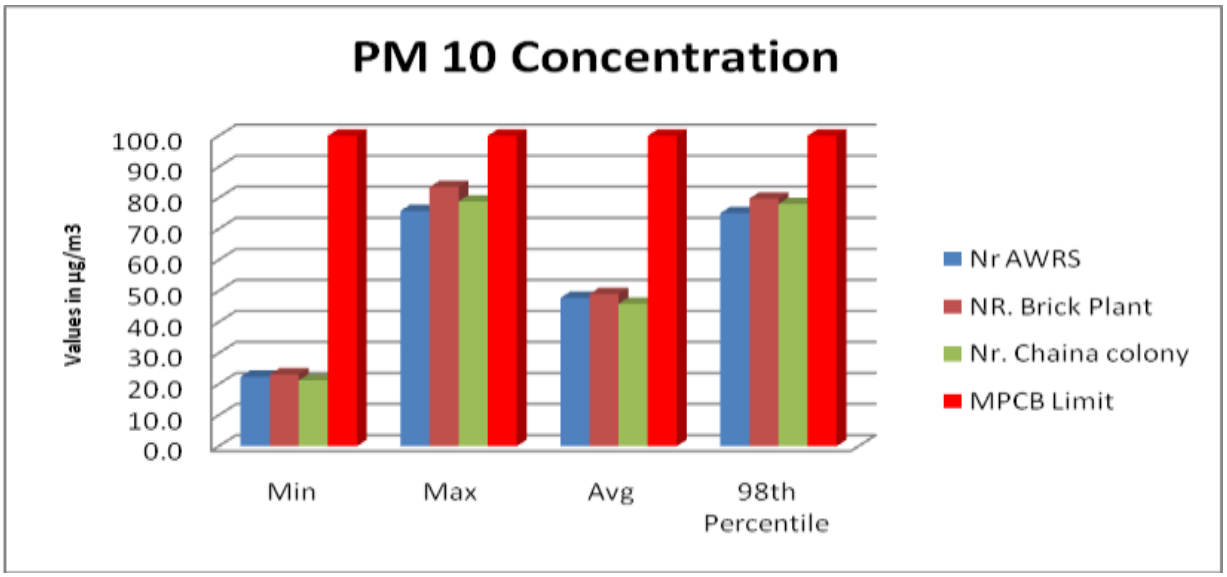
The minimum and maximum NO_2 concentrations in the plant area location were recorded as 8.4 µg/m³ and 31.8 µg/m³ respectively. The minimum and maximum concentration was recorded at Near Chaina Colony (A3) respectively.

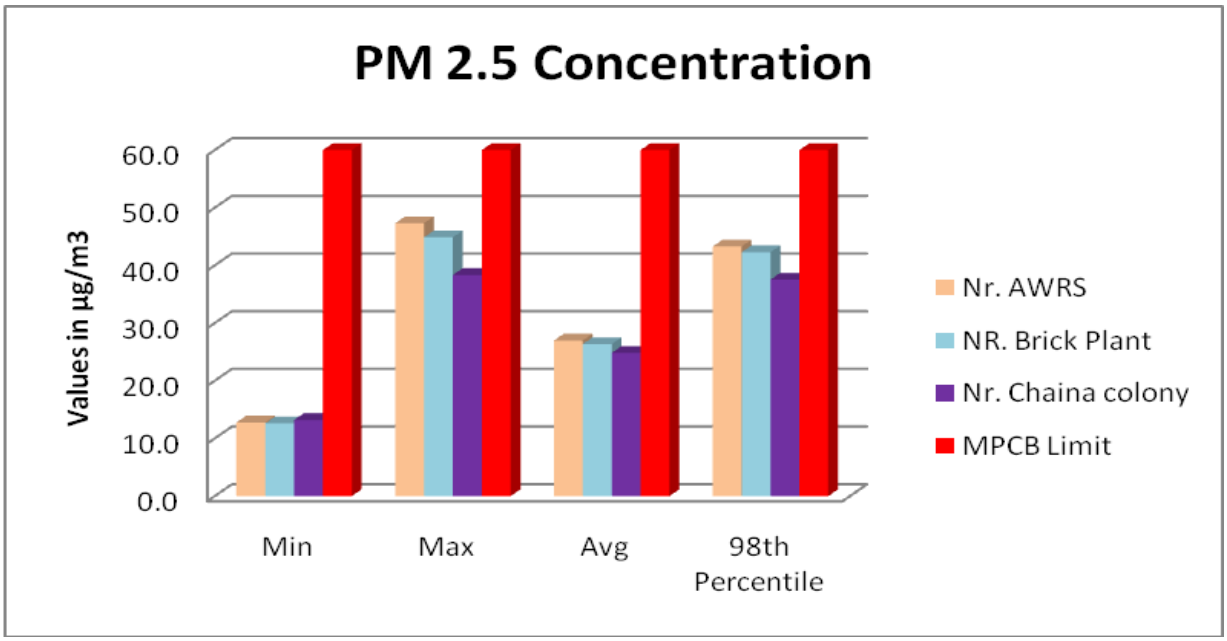
TABLE- 3.2 SUMMARY OF AMBIENT AIR QUALITY RESULT

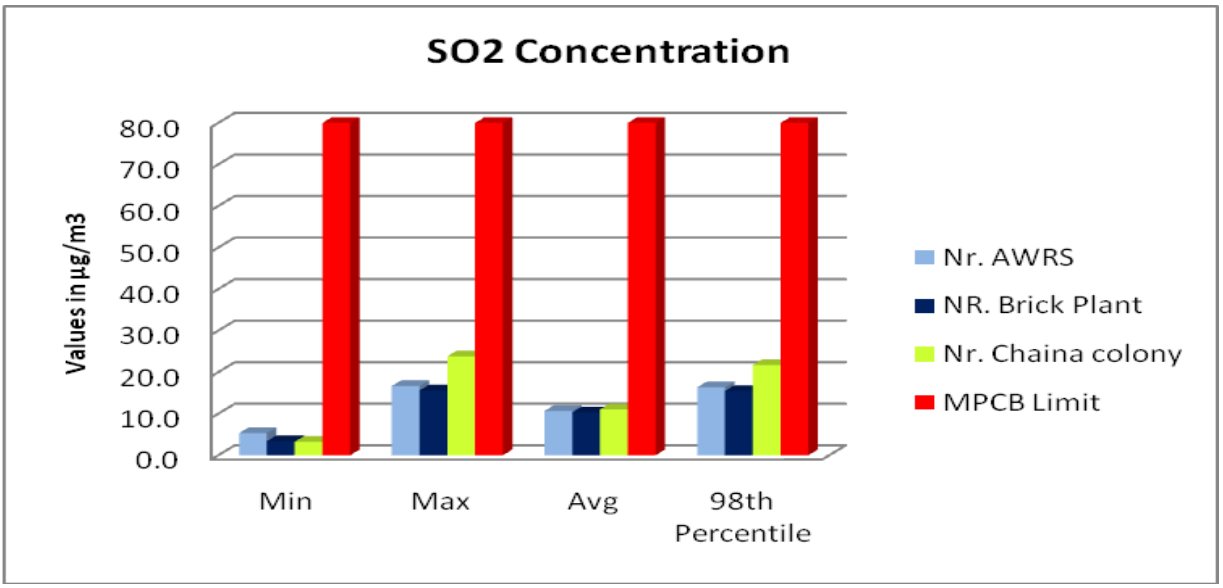
(Inside Plant Premises)
for the period of Apr. 2024- Sept. 2024

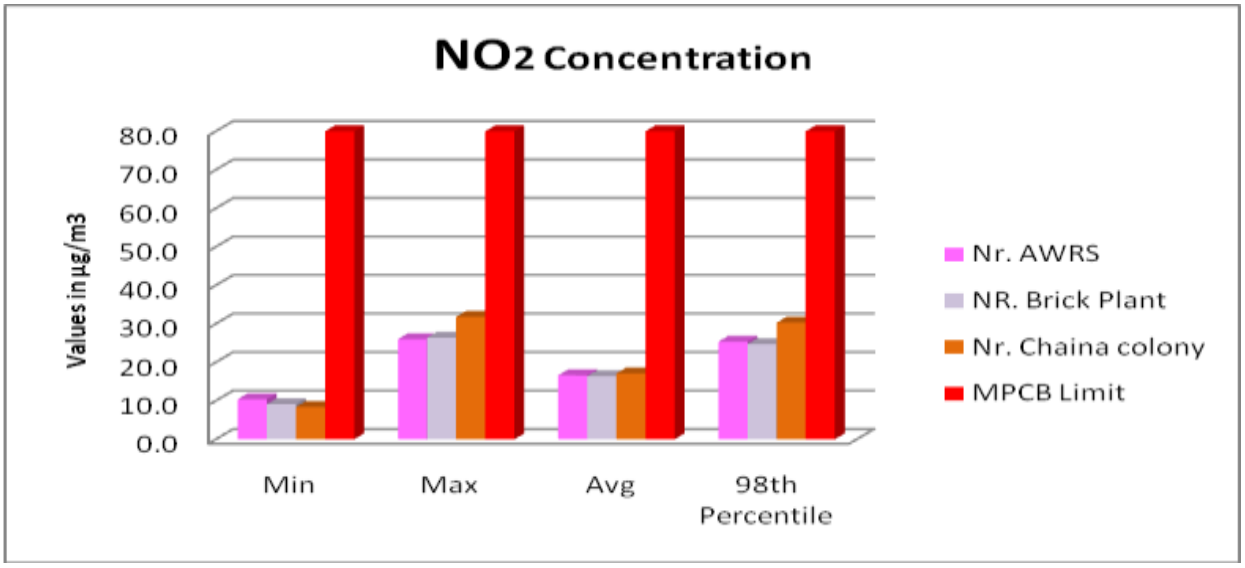
All values are µg/m3

Location	PM_{10}				$PM_{2.5}$				SO_2				NO_2			
	Min	Max	Avg	98% tile	Min	Max	Avg	98% tile	Min	Max	Avg.	98% tile	Min	Max	Avg.	98% tile
Near AWRS	22.4	75.8	47.8	75.1	12.8	47.3	27.0	43.3	5.3	16.7	10.7	16.4	10.4	26.0	16.6	25.3
Near Brick Plant	23.1	83.5	49.0	79.8	12.6	44.9	26.3	42.3	3.4	15.6	10.3	15.5	9.1	26.4	16.4	24.7
Near Chaina colony	21.2	78.9	45.9	78.0	13.2	38.3	24.8	37.5	3.3	23.8	11.1	21.7	8.4	31.8	17.1	30.3
MPCB Limit	100				60				80				80			


PM 10 Concentration
Values in µg/m3
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Min
Max
Avg
98th Percentile
Nr AWRS
NR. Brick Plant
Nr. Chaina colony
MPCB Limit


PM 2.5 Concentration
Values in µg/m3
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Min
Max
Avg
98th Percentile
Nr. AWRS
NR. Brick Plant
Nr. Chaina colony
MPCB Limit


SO2 Concentration
Values in µg/m3
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Min
Max
Avg
98th Percentile
Nr. AWRS
NR. Brick Plant
Nr. Chaina colony
MPCB Limit


NO2 Concentration
Values in µg/m3
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Min
Max
Avg
98th Percentile
Nr. AWRS
NR. Brick Plant
Nr. Chaina colony
MPCB Limit

3.3 Stack Monitoring.

Stack monitoring is done with the help of stack Kit (ECOTECH Stack Kit) & Prob set, once in a quarter at Boiler Stack 1 to 5 situated in plant. Height of the Boiler Stack was noted as, 275m and I.D. 7.4m.Flue gas, Velocity, Temperature, Volume & Qty, PM, SO_2, NO_x, Hg are analysed. The values obtained are then compared vis-a-vis with the standards prescribed by CPCB.

3.3.1 Presentation of Results.

The Stack analysis results for the period of APR.2024-SEPT.2024 are presented in detail for various parameters like Flue gas, Velocity, Temperature, Volume & Qty, SPM, SO_2, NOx, Hg values etc computed from the collected raw data for the Stack monitoring station. The summary of these results is presented below. The data has been compared with the standards prescribed by Central Pollution Control Board (CPCB)/MPCB

TABLE- 3.3 Stack Analysis Report for the period of Apr. 2024 - Sept.-2024

Power Plant (Unit-1 to Unit 5)

PARAMETERS	CONCENTRATION									
	Unit # 1		Unit # 2		Unit # 3		Unit # 4		Unit # 5	
Date of Sampling	Jun. 2024	Sept. 2024	Jun. 2024	Sept. 2024	Jun. 2024	Sept. 2024	Jun. 2024	Sept. 2024	Jun. 2024	Sept. 2024
Diameter of Stack (M)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Height of Stack (M)	275	275	275	275	275	275	275	275	275	275
Temp. of exit gas (°C)	121	127	119	133	118	123	119	127	118	133
Velocity of exit gas (m/sec)	23.14	22.43	22.84	22.17	24.06	24.40	23.61	22.70	23.95	22.54
Flow of exit gas at stack temp. & Press. (m3/hr.)	3580955.73	3471081.98	3534530.20	3430846.52	3723327.34	3775942.94	3653689.05	3512864.95	3706304.65	3488104.67
Flow of exit gas at NTP(Nm3/hr.)	2573016.66	2456658.27	2552616.07	2392297.17	2695841.36	2699417.80	2638671.86	2486230.17	2683516.23	2432222.74
PM (mg/Nm3)	32.7	30.9	42.2	38.3	35.9	32.8	40.3	34.7	38.6	41.4
Total dust emission (kg/hr.)	84.14	75.91	107.72	91.62	96.78	88.54	106.34	86.27	103.6	100.69
SO2 (mg/Nm3)	912.5	934.6	887.7	961.8	862.2	844.7	846.6	914.2	828.8	877.6
SO2 (kg/hr.)	2347.87	2295.99	2265.96	2300.91	2324.35	2280.20	2233.90	2272.91	2224.1	2134.52
SO2 (TPD)	56.35	55.10	54.39	55.22	55.78	54.72	53.61	54.55	53.38	51.23
NOx (mg/Nm3)	304.6	309.7	288.3	294.4	306.6	282.5	310.2	298.8	297.3	305.4
Mercury (mg/Nm3)	0.0151	0.0156	0.0155	0.0138	0.0143	0.0158	0.0161	0.0155	0.0155	0.0148

Method : **PM:** IS 11255 (Part-1) 1985 (Reaffirmed 2019) **SO2** : IS 11255 (Part-II) 1985 (Reaffirmed 2019) **NOx:** IS 11255 (Part-7) 2017,
Mercury: IS : 3025 (Part II) 2019

Note: Values of PM, SO_2 and NOx based on 6% O_2 corrected.

3.4 Water Quality

Ground waters were collected at 4 locations and Surface water at 5 locations within the 10 km radial distance of power plant were analyzed as per IS 10500 to assess the quality of water for portability.

Presentation of Results

The results of the water quality monitored in the period of APR.2024-SEPT.2024, that of four surface water and four ground water samples and seven drinking water samples. The surface water quality results are given in **Table-3.4,** the results of ground water quality is given in **Table-3.5** and the results of Waste water quality are given in **Table-3.6** the findings are discussed below.

3.4.1 Ground Water Quality.

Most of the villages in the Nearby plant area have hand pumps, as most of the residents of these area use of this water for drinking and other domestic uses.

The analysis results indicate that the pH ranges from 7.66 to 8.10 the maximum pH observed at Chikhali Village(GW4) and Minimum pH were observed at Mendipur Village (GW2) which is well within the specified standard of 6.5 to 8.5.

Total hardness was observed to be ranging from 278 to 634 mg/l. The maximum hardness 634 mg/l was recorded at Kachewani Village (GW1) and the minimum hardness of 278 mg/l was recorded at Mendipur village(GW2), Which is well within the specified standard of 200 (600) mg/l.

Chlorides were found to be in the range of 58 mg/l to 274.4mg/l, the maximum concentration of chlorides was observed at Garada Village (GW3) and the minimum concentration of chlorides was observed at Mendipur Village(GW2)

Sulphates were found to be in the range of 35.3 mg/l to 195.5 mg/l. The maximum value observed at Garada Village (GW3) and the minimum value observed at Mendipur Village(GW2).
The values of Chlorides and sulphate are acceptable limits.

The analysis results indicate all parameters including bacteriological and heavy metal parameters are well within the drinking water standards.

3.4.2 Surface Water Quality.

The analysis results indicate that the pH values in the range of 7.62 to 7.84 the minimum and maximum value was observed at Wainganga River up stream and Kachiwani Pond water respectively which is well within the specified standard of 6.5 to 8.5.

TDS was observed in the range of 108mg/l to 532 mg/l, the maximum TDS value was observed at Garada Nalah where as minimum value was observed in Wainganga River Up stream Water, where as TDS is within Desirable limits.

Chlorides and Sulphates were found to be in the range of 9.8 to 33.7 mg/l and 6.7 to 27.5 mg/l respectively. It is observed that value of chlorides and Sulphates are well within acceptable limits. It is evident from the above values that all the parameters are found to comply with the requirements of IS: 10500 specification of surface water except bacteriological parameters. The surface water quality does not indicate any industrial contamination.

Heavy metals concentrations for metals like Arsenic (As), Mercury (Hg), Lead (Pb), Cadmium (Cd), Chromium (Cr) and Copper (Cu) were found to be within the acceptable limits.

3.4.3 Waste Water Quality

Waste water samples were also collected from Cooling Tower Blodown of unit 1 to 5 and Boiler-Blow down collected of Unit 3 in the Jun. 2024, Analytical methods mentioned in IS: 3025 and Standard Methods published by APHA were followed. The summary of waste water quality collected on quarterly basis for the period of APR.2024-SEPT.2024 are given in **Table-3.6**

3.4.4 Piezo-Metric water

There were 3 Pizo meteric monitoried for water level and collected water samples were analyzed as per IS: 3025 and Standard Methods published by APHA were followed. The summary of Piezo-metric water quality collected on quarterly basis for the period of APR.2024-SEPT.2024 are given in **Table-3.7**

3.5 Noise Level:

Noise level was measured by APL in basic units of dB(A) at eleven location inside the plant (industrial Area) during day time and Night time for 24Hrs.

Noise level was found within the acceptable limits during daytime as well as night time for all locations with reference to CPCB standard limits for Industrial area and Residential area.

Noise levels at following locations were recorded for the period of APR.2024-SEPT.2024 on monthly basis. The summary of Noise Level is given in **Table-3.8**

3.6 Soil Quality

Soil samples were collected at 3 locations within the 10 km radial distance of power plant were analyzed as per IS:2720 . The analysis results given in **Table-3.9.**

TABLE- 3.4 SURFACE WATER QUALITY

SW1: Wainganga River Water (Up Stream)

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	**Apparent Colour**	Hazen units	5 (15)	1.8	2.0
2	**Odour**	-	Agreeable	Agreeable	Agreeable
3	**Taste**	-	Agreeable	-	-
4	**Turbidity NTU**	NTU	1(5)	1.2	1.5
5	**Total Dissolved Solid**	mg / l	500 (2000)	160	108
6	**Electrical Conductivity**	µS/cm	-	259	176
7	**Total Alkalinity**	mg / l	200 (600)	136	95
8	**pH Value** at 25°C	-	6.5 to 8.5	7.70	7.62
9	**Total Hardness ($CaCO_3$)**	mg / l	200 (600)	108	74
10	**Calcium (as Ca)**	mg / l	75 (200)	30.0	24.2
11	**Magnesium (as Mg)**	mg / l	30 (100)	8.02	3.3
12	**Copper as(Cu)**	mg / l	0.05(1.5)	< 0.01	< 0.01
13	**Iron (as Fe)**	mg / l	0.3	0.065	0.057
14	**Manganese as (Mn)**	mg / l	0.1(0.3)	< 0.01	< 0.01
15	**Chlorides (as Cl)**	mg / l	250(1000)	10.9	9.8
16	**Sulphate (as SO_4)**	mg / l	200 (400)	9.2	6.7
17	**Nitrates (as NO_3)**	mg / l	45	2.30	2.10
18	**Fluoride (as F)**	mg / l	1.0 (1.5)	0.35	0.27
19	**Phenolic Compounds**	mg / l	0.001	BDL	BDL
20	**Mercury as (Hg)**	mg / l	0.001	< 0.0005	< 0.0005
21	**Cadmium as (Cd)**	mg / l	0.003	< 0.001	< 0.001
22	**Selenium as (Se)**	mg / l	0.01	< 0.001	< 0.001
23	**Arsenic as (As)**	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	**Cyanide as (CN)**	mg / l	0.05	< 0.005	< 0.005
25	**Lead as (Pb)**	mg / l	0.01	< 0.001	< 0.001
26	**Zinc as (Zn)**	mg / l	5 (15)	0.117	0.10
27	**Total Chromium as (Cr)**	mg / l	0.05	< 0.03	< 0.03
28	**Mineral Oil**	mg / l	0.05	< 0.01	< 0.01
29	**Free Residual Chlorine**	mg / l	0.2 (1.0)	Nil	Nil
30	**Total Coliform**	MPN/100 ml	Absent	>16	>16
31	**E. Coli**	Nos./100 ml	Absent	> 16	>16

Note : Standards limit given as Acceptable Limit (Permissible Limit)

SW2: Wainganga River Water (Down Stream)

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	**Apparent Colour**	Hazen units	5 (15)	1.5	2.2
2	**Odour**	-	Agreeable	Agreeable	Agreeable
3	**Taste**	-	Agreeable	-	-
4	**Turbidity NTU**	NTU	1(5)	1.2	1.7
5	**Total Dissolved Solid**	mg / l	500 (2000)	164	118
6	**Electrical Conductivity**	µS/cm	-	266	192
7	**Total Alkalinity**	mg / l	200 (600)	138	94
8	**pH Value** at 25°C	-	6.5 to 8.5	7.78	7.70
9	**Total Hardness ($CaCO_3$)**	mg / l	200 (600)	110	82
10	**Calcium (as Ca)**	mg / l	75 (200)	31.5	26.5
11	**Magnesium (as Mg)**	mg / l	30 (100)	7.60	3.8
12	**Copper as(Cu)**	mg / l	0.05(1.5)	< 0.01	< 0.01
13	**Iron (as Fe)**	mg / l	0.3	0.069	0.061
14	**Manganese as (Mn)**	mg / l	0.1(0.3)	< 0.01	< 0.01
15	**Chlorides (as Cl)**	mg / l	250(1000)	11.3	10.2
16	**Sulphate (as SO_4)**	mg / l	200 (400)	9.8	7.1
17	**Nitrates (as NO_3)**	mg / l	45	2.35	2.15
18	**Fluoride (as F)**	mg / l	1.0 (1.5)	0.35	0.31
19	**Phenolic Compounds**	mg / l	0.001	BDL	BDL
20	**Mercury as (Hg)**	mg / l	0.001	< 0.0005	< 0.0005
21	**Cadmium as (Cd)**	mg / l	0.003	< 0.001	< 0.001
22	**Selenium as (Se)**	mg / l	0.01	< 0.001	< 0.001
23	**Arsenic as (As)**	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	**Cyanide as (CN)**	mg / l	0.05	< 0.005	< 0.005
25	**Lead as (Pb)**	mg / l	0.01	< 0.001	< 0.001
26	**Zinc as (Zn)**	mg / l	5 (15)	0.110	0.102
27	**Total Chromium as (Cr)**	mg / l	0.05	< 0.03	< 0.03
28	**Mineral Oil**	mg / l	0.05	< 0.01	< 0.01
29	**Free Residual Chlorine**	mg / l	0.2 (1.0)	Nil	Nil
30	**Total Coliform**	MPN/100 ml	Absent	>16	>16
31	**E. Coli**	Nos./100 ml	Absent	> 16	>16

Note : Standards limit given as Acceptable Limit (Permissible Limit)

SW3: Mendipur Pond Water

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	**Apparent Colour**	Hazen units	5 (15)	2.2	2.0
2	**Odour**	-	Agreeable	Agreeable	Agreeable
3	**Taste**	-	Agreeable	-	-
4	**Turbidity NTU**	NTU	1(5)	1.7	1.2
5	**Total Dissolved Solid**	mg / l	500 (2000)	260	194
6	**Electrical Conductivity**	µS/cm	-	418	316
7	**Total Alkalinity**	mg / l	200 (600)	152	138
8	**pH Value** at 25°C	-	6.5 to 8.5	7.80	7.75
9	**Total Hardness ($CaCO_3$)**	mg / l	200 (600)	180	142
10	**Calcium (as Ca)**	mg / l	75 (200)	41.2	36.6
11	**Magnesium (as Mg)**	mg / l	30 (100)	18.7	12.3
12	**Copper as(Cu)**	mg / l	0.05(1.5)	< 0.01	< 0.01
13	**Iron (as Fe)**	mg / l	0.3	0.079	0.065
14	**Manganese as (Mn)**	mg / l	0.1(0.3)	0.013	0.010
15	**Chlorides (as Cl)**	mg / l	250(1000)	17.8	12.4
16	**Sulphate (as SO_4)**	mg / l	200 (400)	14.1	10.6
17	**Nitrates (as NO_3)**	mg / l	45	6.10	5.7
18	**Fluoride (as F)**	mg / l	1.0 (1.5)	0.60	0.48
19	**Phenolic Compounds**	mg / l	0.001	BDL	BDL
20	**Mercury as (Hg)**	mg / l	0.001	< 0.0005	< 0.0005
21	**Cadmium as (Cd)**	mg / l	0.003	< 0.001	< 0.001
22	**Selenium as (Se)**	mg / l	0.01	< 0.001	< 0.001
23	**Arsenic as (As)**	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	**Cyanide as (CN)**	mg / l	0.05	< 0.005	< 0.005
25	**Lead as (Pb)**	mg / l	0.01	< 0.001	< 0.001
26	**Zinc as (Zn)**	mg / l	5 (15)	0.16	0.12
27	**Total Chromium as (Cr)**	mg / l	0.05	< 0.03	< 0.03
28	**Mineral Oil**	mg / l	0.05	< 0.01	< 0.01
29	**Free Residual Chlorine**	mg / l	0.2 (1.0)	Nil	Nil
30	**Total Coliform**	MPN/100 ml	Absent	> 16	> 16
31	**E. Coli**	Nos./100 ml	Absent	> 16	> 16

Note : Standards limit given as Acceptable Limit (Permissible Limit)

SW4: Garada Village Nalah water

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	Apparent Colour	Hazen units	5 (15)	2.2	1.7
2	Odour	-	Agreeable	Agreeable	Agreeable
3	Taste	-	Agreeable	-	-
4	Turbidity NTU	NTU	1(5)	1.5	1.2
5	Total Dissolved Solid	mg / l	500 (2000)	532	496
6	Electrical Conductivity	µS/cm	-	858	802
7	Total Alkalinity	mg / l	200 (600)	180	172
8	pH Value at 25°C	-	6.5 to 8.5	7.82	7.78
9	Total Hardness ($CaCO_3$)	mg / l	200 (600)	238	212
10	Calcium (as Ca)	mg / l	75 (200)	63.0	60.8
11	Magnesium (as Mg)	mg / l	30 (100)	19.56	14.58
12	Copper as(Cu)	mg / l	0.05(1.5)	< 0.01	< 0.01
13	Iron (as Fe)	mg / l	0.3	0.091	0.086
14	Manganese as (Mn)	mg / l	0.1(0.3)	< 0.01	< 0.01
15	Chlorides (as Cl)	mg / l	250(1000)	33.7	29.6
16	Sulphate (as SO_4)	mg / l	200 (400)	27.5	22.3
17	Nitrates (as NO_3)	mg / l	45	5.50	3.85
18	Fluoride (as F)	mg / l	1.0 (1.5)	0.65	0.60
19	Phenolic Compounds	mg / l	0.001	BDL	BDL
20	Mercury as (Hg)	mg / l	0.001	< 0.0005	< 0.0005
21	Cadmium as (Cd)	mg / l	0.003	< 0.001	< 0.001
22	Selenium as (Se)	mg / l	0.01	< 0.001	< 0.001
23	Arsenic as (As)	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	Cyanide as (CN)	mg / l	0.05	< 0.005	< 0.005
25	Lead as (Pb)	mg / l	0.01	< 0.001	< 0.001
26	Zinc as (Zn)	mg / l	5 (15)	0.23	0.16
27	Total Chromium as (Cr)	mg / l	0.05	< 0.03	< 0.03
28	Mineral Oil	mg / l	0.05	< 0.01	< 0.01
29	Free Residual Chlorine	mg / l	0.2 (1.0)	Nil	Nil
30	Total Coliform	MPN/100 ml	Absent	> 16	> 16
31	E. Coli	Nos./100 ml	Absent	> 16	> 16

Note : Standards limit given as Acceptable Limit (Permissible Limit)

SW5: Kachewani Pond water

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	Apparent Colour	Hazen units	5 (15)	2.2	1.8
2	Odour	-	Agreeable	Agreeable	Agreeable
3	Taste	-	Agreeable	-	-
4	Turbidity NTU	NTU	1(5)	1.5	1.3
5	Total Dissolved Solid	mg / l	500 (2000)	260	204
6	Electrical Conductivity	µS/cm	-	419	332
7	Total Alkalinity	mg / l	200 (600)	160	152
8	pH Value at 25°C	-	6.5 to 8.5	7.84	7.76
9	Total Hardness ($CaCO_3$)	mg / l	200 (600)	180	162
10	Calcium (as Ca)	mg / l	75 (200)	48.5	44.7
11	Magnesium (as Mg)	mg / l	30 (100)	14.3	12.2
12	Copper as(Cu)	mg / l	0.05(1.5)	< 0.01	< 0.01
13	Iron (as Fe)	mg / l	0.3	0.081	0.073
14	Manganese as (Mn)	mg / l	0.1(0.3)	< 0.01	< 0.01
15	Chlorides (as Cl)	mg / l	250(1000)	19.2	15.8
16	Sulphate (as SO_4)	mg / l	200 (400)	13.7	11.4
17	Nitrates (as NO_3)	mg / l	45	4.55	3.80
18	Fluoride (as F)	mg / l	1.0 (1.5)	0.61	0.56
19	Phenolic Compounds	mg / l	0.001	BDL	BDL
20	Mercury as (Hg)	mg / l	0.001	< 0.0005	< 0.0005
21	Cadmium as (Cd)	mg / l	0.003	< 0.001	< 0.001
22	Selenium as (Se)	mg / l	0.01	< 0.001	< 0.001
23	Arsenic as (As)	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	Cyanide as (CN)	mg / l	0.05	< 0.005	< 0.005
25	Lead as (Pb)	mg / l	0.01	< 0.001	< 0.001
26	Zinc as (Zn)	mg / l	5 (15)	0.13	0.11
27	Total Chromium as (Cr)	mg / l	0.05	< 0.03	< 0.03
28	Mineral Oil	mg / l	0.05	< 0.01	< 0.01
29	Free Residual Chlorine	mg / l	0.2 (1.0)	Nil	Nil
30	Total Coliform	MPN/100 ml	Absent	> 16	> 16
31	E.Coli	Nos./100 ml	Absent	> 16	> 16

Note : Standards limit given as Acceptable Limit (Permissible Limit)

TABLE- 3.5 GROUND WATER REPORT

Monitoring Date: 21.06.2024

STATIC WATER LEVEL OF OPEN WELL						
Name of village	**Plinth Height (m)**	**Diameter (m)**	**Water level from G.L. (m)**	**Shape**	**Total Depth of well from G.L (m)**	**Landmark**
Mendipur	0.85	1.45	8.30	Round	11.00	**Near Vitoba Ahinshak Suryavanshi Residence**
Khairbori	1.10	1.83	7.90	Round	10.10	**Near Hanuman Temple, Durga Temple**
Churadi	1.20	2.60	9.20	Round	11.60	**Near Primary School**
Kachewani	1.5	4.80	11.10	Round	12.30	**Opp. ZP. school**

Monitoring Date: 21.09.2024

STATIC WATER LEVEL OF OPEN WELL						
Name of village	**Plinth Height (m)**	**Diameter (m)**	**Water level from G.L. (m)**	**Shape**	**Total Depth of well from G.L (m)**	**Landmark**
Mendipur	0.85	1.45	1.80	Round	10.7	**Near Vitoba Ahinshak Suryavanshi Residence**
Garada	1.00	3.70	5.60	Round	12.0	**Near Shiv mandir**
Churdi	1.20	2.60	3.0	Round	11.60	**Near Primary School**
Kachewani	1.5	4.80	2.80	Round	12.30	**Opp. ZP. school**

GROUND WATER QUALITY

GW1: Kachewani Hand Pump water

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	Apparent Colour	Hazen units	5 (15)	0.1	0.1
2	Odour	-	Agreeable	Agreeable	Agreeable
3	Taste	-	Agreeable	Agreeable	Agreeable
4	Turbidity NTU	NTU	1(5)	0.1	0.1
5	Total Dissolved Solid	mg / l	500 (2000)	958	1180
6	Electrical Conductivity	µS/cm	-	1546	1902
7	Total Alkalinity	mg / l	200 (600)	232	248
8	pH Value at 25°C	-	6.5 to 8.5	7.80	7.92
9	Total Hardness ($CaCO_3$)	mg / l	200 (600)	510	634
10	Calcium (as Ca)	mg / l	75 (200)	94.2	114.2
11	Magnesium (as Mg)	mg / l	30 (100)	64.1	84.7
12	Copper as(Cu)	mg / l	0.05(1.5)	< 0.01	< 0.01
13	Iron (as Fe)	mg / l	0.3	0.26	0.28
14	Manganese as (Mn)	mg / l	0.1(0.3)	0.015	0.020
15	Chlorides (as Cl)	mg / l	250(1000)	218.6	232.2
16	Sulphate (as SO_4)	mg / l	200 (400)	151.5	180.3
17	Nitrates (as NO_3)	mg / l	45	4.10	4.55
18	Fluoride (as F)	mg / l	1.0 (1.5)	0.86	0.85
19	Phenolic Compounds	mg / l	0.001	BDL	BDL
20	Mercury as (Hg)	mg / l	0.001	< 0.0005	< 0.0005
21	Cadmium as (Cd)	mg / l	0.003	< 0.001	< 0.001
22	Selenium as (Se)	mg / l	0.01	< 0.001	< 0.001
23	Arsenic as (As)	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	Cyanide as (CN)	mg / l	0.05	< 0.005	< 0.005
25	Lead as (Pb)	mg / l	0.01	< 0.001	< 0.001
26	Zinc as (Zn)	mg / l	5 (15)	0.95	1.02
27	Total Chromium as (Cr)	mg / l	0.05	< 0.03	< 0.03
28	Mineral Oil	mg / l	0.05	< 0.01	< 0.01
29	Free Residual Chlorine	mg / l	0.2 (1.0)	< 0.1	< 0.1
30	Total Coliform	MPN/100 ml	Absent	Absent	Absent
31	E. Coli	Nos./100 ml	Absent	Absent	Absent

Note : Standards limit given as Acceptable Limit (Permissible Limit)

GW2: Mendipur Hand Pump water

Sr. No.	Test Parameters	Unit	As per IS 10500 :2012	Results	
				Jun.2024	Sept. 2024
1	Apparent Colour	Hazen units	5 (15)	0.1	0.1
2	Odour	-	Agreeable	Agreeable	Agreeable
3	Taste	-	Agreeable	Agreeable	Agreeable
4	Turbidity NTU	NTU	1(5)	0.1	0.1
5	Total Dissolved Solid	mg / l	500 (2000)	574	528
6	Electrical Conductivity	µS/cm	-	930	850
7	Total Alkalinity	mg / l	200 (600)	206	194
8	pH Value at 25°C	-	6.5 to 8.5	7.74	7.66
9	Total Hardness ($CaCO_3$)	mg / l	200 (600)	290	278
10	Calcium (as Ca)	mg / l	75 (200)	74.2	71.8
11	Magnesium (as Mg)	mg / l	30 (100)	25.40	23.9
12	Copper as(Cu)	mg / l	0.05(1.5)	< 0.01	< 0.01
13	Iron (as Fe)	mg / l	0.3	0.120	0.10
14	Manganese as (Mn)	mg / l	0.1(0.3)	< 0.01	< 0.01
15	Chlorides (as Cl)	mg / l	250(1000)	61.2	58
16	Sulphate (as SO_4)	mg / l	200 (400)	37.7	35.3
17	Nitrates (as NO_3)	mg / l	45	3.20	2.90
18	Fluoride (as F)	mg / l	1.0 (1.5)	0.82	0.76
19	Phenolic Compounds	mg / l	0.001	BDL	BDL
20	Mercury as (Hg)	mg / l	0.001	< 0.0005	< 0.0005
21	Cadmium as (Cd)	mg / l	0.003	< 0.001	< 0.001
22	Selenium as (Se)	mg / l	0.01	< 0.001	< 0.001
23	Arsenic as (As)	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	Cyanide as (CN)	mg / l	0.05	< 0.005	< 0.005
25	Lead as (Pb)	mg / l	0.01	< 0.001	< 0.001
26	Zinc as (Zn)	mg / l	5 (15)	0.40	0.432
27	Total Chromium as (Cr)	mg / l	0.05	< 0.03	< 0.03
28	Mineral Oil	mg / l	0.05	< 0.01	< 0.01
29	Free Residual Chlorine	mg / l	0.2 (1.0)	< 0.1	< 0.1
30	Total Coliform	MPN/100 ml	Absent	Absent	Absent
31	E.Coli	Nos./100 ml	Absent	Absent	Absent

Note : Standards limit given as Acceptable Limit (Permissible Limit)

GW3: Garada Hand Pump water

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	**Apparent Colour**	Hazen units	5 (15)	0.1	0.1
2	**Odour**	-	Agreeable	Agreeable	Agreeable
3	**Taste**	-	Agreeable	Agreeable	Agreeable
4	**Turbidity NTU**	NTU	1(5)	0.1	0.1
5	**Total Dissolved Solid**	mg / l	500 (2000)	924	1094
6	**Electrical Conductivity**	µS/cm	-	1492	1770
7	**Total Alkalinity**	mg / l	200 (600)	240	242
8	**pH Value** at 25°C	-	6.5 to 8.5	7.85	7.88
9	**Total Hardness ($CaCO_3$)**	mg / l	200 (600)	452	510
10	**Calcium (as Ca)**	mg / l	75 (200)	91.0	94.2
11	**Magnesium (as Mg)**	mg / l	30 (100)	54.5	66.7
12	**Copper as(Cu)**	mg / l	0.05(1.5)	< 0.01	< 0.01
13	**Iron (as Fe)**	mg / l	0.3	0.163	0.172
14	**Manganese as (Mn)**	mg / l	0.1(0.3)	< 0.01	< 0.01
15	**Chlorides (as Cl)**	mg / l	250(1000)	244.7	274.4
16	**Sulphate (as SO_4)**	mg / l	200 (400)	180.2	195.5
17	**Nitrates (as NO_3)**	mg / l	45	4.55	4.20
18	**Fluoride (as F)**	mg / l	1.0 (1.5)	0.90	0.85
19	**Phenolic Compounds**	mg / l	0.001	BDL	BDL
20	**Mercury as (Hg)**	mg / l	0.001	< 0.0005	< 0.0005
21	**Cadmium as (Cd)**	mg / l	0.003	< 0.001	< 0.001
22	**Selenium as (Se)**	mg / l	0.01	< 0.001	< 0.001
23	**Arsenic as (As)**	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	**Cyanide as (CN)**	mg / l	0.05	< 0.005	< 0.005
25	**Lead as (Pb)**	mg / l	0.01	< 0.001	< 0.001
26	**Zinc as (Zn)**	mg / l	5 (15)	0.92	1.05
27	**Total Chromium as (Cr)**	mg / l	0.05	< 0.03	< 0.03
28	**Mineral Oil**	mg / l	0.05	< 0.01	< 0.01
29	**Free Residual Chlorine**	mg / l	0.2 (1.0)	< 0.1	< 0.1
30	**Total Coliform**	MPN/100 ml	Absent	Absent	Absent
31	**E. Coli**	Nos./100 ml	Absent	Absent	Absent

Note : Standards limit given as Acceptable Limit (Permissible Limit)

GW4: Chikhali Hand Pump water

Sr. No.	Test Parameters	Unit	As per IS 10500 : 2012	Results	
				Jun.2024	Sept. 2024
1	Apparent Colour	Hazen units	5 (15)	0.1	0.1
2	Odour	-	Agreeable	Agreeable	Agreeable
3	Taste	-	Agreeable	Agreeable	Agreeable
4	Turbidity NTU	NTU	1(5)	0.1	0.1
5	Total Dissolved Solid	mg / l	500 (2000)	860	812
6	Electrical Conductivity	µS/cm	-	1390	1310
7	Total Alkalinity	mg / l	200 (600)	232	214
8	pH Value at 25oC	-	6.5 to 8.5	8.10	7.85
9	Total Hardness ($CaCO_3$)	mg / l	200 (600)	406	384
10	Calcium (as Ca)	mg / l	75 (200)	92.0	89.0
11	Magnesium (as Mg)	mg / l	30 (100)	42.8	39.2
12	Copper as(Cu)	mg / l	0.05(1.5)	< 0.01	< 0.01
13	Iron (as Fe)	mg / l	0.3	0.20	0.17
14	Manganese as (Mn)	mg / l	0.1(0.3)	< 0.01	< 0.01
15	Chlorides (as Cl)	mg / l	250(1000)	214.4	202.6
16	Sulphate (as SO_4)	mg / l	200 (400)	146.2	127.3
17	Nitrates (as NO_3)	mg / l	45	4.05	3.65
18	Fluoride (as F)	mg / l	1.0 (1.5)	0.88	0.80
19	Phenolic Compounds	mg / l	0.001	BDL	BDL
20	Mercury as (Hg)	mg / l	0.001	< 0.0005	< 0.0005
21	Cadmium as (Cd)	mg / l	0.003	< 0.001	< 0.001
22	Selenium as (Se)	mg / l	0.01	< 0.001	< 0.001
23	Arsenic as (As)	mg / l	0.01 (0.05)	< 0.01	< 0.01
24	Cyanide as (CN)	mg / l	0.05	< 0.005	< 0.005
25	Lead as (Pb)	mg / l	0.01	< 0.001	< 0.001
26	Zinc as (Zn)	mg / l	5 (15)	0.97	0.85
27	Total Chromium as (Cr)	mg / l	0.05	< 0.03	< 0.03
28	Mineral Oil	mg / l	0.05	< 0.01	< 0.01
29	Free Residual Chlorine	mg / l	0.2 (1.0)	< 0.1	< 0.1
30	Total Coliform	MPN/100 ml	Absent	Absent	Absent
31	E. Coli	Nos./100 ml	Absent	Absent	Absent

Note : Standards limit given as Acceptable Limit (Permissible Limit)

TABLE- 3.6 WASTE WATER QUALITY (APR.2024-SEPT.2024)

Sample Category : Unit-1- Cooling Tower Blow Down water (WW-1)

Sr. No.	Parameters	Unit	MPCB Limit	Results	
				Jun.2024	Sept. 2024
1.	Free Available Chlorine	mg / l	0.5	0.25	0.27
2.	Zinc as (Zn)	mg / l	1.0	0.12	0.14
3.	Total Chromium as (Cr)	mg / l	0.2	0.014	0.012
4.	Phosphate as (PO_4)	mg/ l	5.0	1.24	1.28

Sample Category : Unit-2- Cooling Tower Blow Down water (WW-2)

Sr. No.	Parameters	Unit	MPCB Limit	Results	
				Jun.2024	Sept. 2024
1.	Free Available Chlorine	mg / l	0.5	0.27	0.25
2.	Zinc as (Zn)	mg / l	1.0	0.15	0.12
3.	Total Chromium as (Cr)	mg / l	0.2	0.018	0.015
4.	Phosphate as (PO_4)	mg/ l	5.0	1.35	1.31

Sample Category : Unit-3- Cooling Tower Blow Down water (WW-3)

Sr. No.	Parameters	Unit	MPCB Limit	Results	
				Jun.2024	Sept. 2024
1.	Free Available Chlorine	mg / l	0.5	0.22	0.30
2.	Zinc as (Zn)	mg / l	1.0	0.11	0.16
3.	Total Chromium as (Cr)	mg / l	0.2	0.015	0.013
4.	Phosphate as (PO_4)	mg/ l	5.0	1.31	1.37

Sample Category : Unit-4-Cooling Tower Blow Down water (WW-4)

Sr. No.	Parameters	Unit	MPCB Limit	Results	
				Jun.2024	Sept. 2024
1.	Free Available Chlorine	mg / l	0.5	0.25	0.22
2.	Zinc as (Zn)	mg / l	1.0	0.13	0.11
3.	Total Chromium as (Cr)	mg / l	0.2	0.015	0.013
4.	Phosphate as (PO_4)	mg/ l	5.0	1.37	1.28

Sample Category : Unit-5- Cooling Tower Blow Down water (WW-5)

Sr. No.	Parameters	Unit	MPCB Limit	Results	
				Jun.2024	Sept. 2024
1.	Free Available Chlorine	mg / l	0.5	0.27	0.24
2.	Zinc as (Zn)	mg / l	1.0	0.15	0.13
3.	Total Chromium as (Cr)	mg / l	0.2	0.014	0.011
4.	Phosphate as (PO_4)	mg/ l	5.0	1.36	1.31

Sample Category : ETP Water Sampling Date : 21.09.2024

Sr. No.	Parameters	Measurement Unit	Method	Result	MPCB Standards
1	pH Value at 25°C	-	IS : 3025 (Part 11)-1983	7.74 at 250C	5.5-9.0
2	TSS	mg / l	IS : 3025 (Part 17) 1984	16	100
3	TDS	mg / l	IS : 3025 (Part 16)-1984	254	2100
4	COD	mg / l	IS : 2488 (Part 5) -1976	37.2	250
5	BOD at 27°C for 3 days	mg / l	IS : 3025 (Part 44) -1993	6.6	30
6	Oil & Grease	mg / l	IS : 3025 (Part 39)-1991	< 4	10
7	Copper as(Cu)	mg / l	IS : 3025 (Part II)-2004	< 0.010	-
8	Iron (as Fe)	mg / l	IS : 3025 (Part II)-2004	0.15	-
9	Manganese as (Mn)	mg / l	IS : 3025 (Part II)-2004	0.035	-
10	Mercury as (Hg)	mg / l	IS : 3025 (Part II)-2004	< 0.001	-
11	Cadmium as (Cd)	mg / l	IS : 3025 (Part II)-2004	< 0.001	-
12	Selenium as (Se)	mg / l	IS : 3025 (Part II)-2004	0.013	-
13	Arsenic as (As)	mg / l	IS : 3025 (Part II)-2004	< 0.01	-
14	Cyanide as (CN)	mg / l	IS : 3025 (Part 27)-1986	< 0.005	-
15	Lead as (Pb)	mg / l	IS : 3025 (Part II)-2004	< 0.001	-
16	Zinc as (Zn)	mg / l	IS : 3025 (Part II)-2004	1.87	-
17	Total Chromium as (Cr)	mg / l	IS :3025(Part 52)-2003	0.012	-

TEST RESULT

Sample Category : Unit 3- Boiler Blow Down Water (WW6)

Sr. No.	Test Parameters	Unit	MPCB Limit	Results
				Jun. 2024
1.	TSS	mg / l	100	20
2.	Oil & Grease	mg / l	20	< 4
3.	Copper (as Cu)	mg / l	1	0.15
4.	Iron (as Fe)	mg / l	1	0.091

TABLE- 3.7 Piezo-metric well water Report

Monitoring Date: 21.06.2024

STATIC WATER LEVEL OF PIZO. WELL				
Name of village	Water level from B.G.L. (m)	Total Depth of Piezo well from G.L (m)	Total Depth of Piezo well with Casing (m)	Landmark
Piezo well (P1)	4.50	18.6	19.8	Near AWRPH
Piezo well (P2)	4.10	20.0	21.0	B/H Ash dyke -1
Piezo well (P3)	4.30	20.0	20.7	Near Raw Water pump house -02

Piezo-metric well water Analysis Report

Sampling Date: 21.06.2024

Sr. No.	Test Parameters	Unit	As per IS : 10500 : 2012	Piezo well (P1) Near AWRPH	Piezo well (P2) B/H Ash dyke -1	Piezo -well (P3) Near Rawwater pump house -02
1	pH		6.5 to 8.5	7.84	7.86	7.80
2	TSS	mg / l	100	42	52	40
3	Total Dissolved Solid	mg / l	500 (2000)	730	762	702
4	Electrical Conductivity	µS/cm	-	1180	1226	1134
5	Copper as(Cu)	mg / l	0.05 (1.5)	< 0.01	< 0.01	< 0.01
6	Iron (as Fe)	mg / l	0.3 (1.0)	0.188	0.205	0.141
7	Manganese as (Mn)	mg / l	0.1 (0.3)	0.071	0.074	0.065
8	Mercury as (Hg)	mg / l	0.001	< 0.0005	< 0.0005	< 0.0005
9	Cadmium as (Cd)	mg / l	0.01	0.0033	0.0028	0.0025
10	Selenium as (Se)	mg / l	0.01	0.0018	0.0021	0.0015
11	Arsenic as (As)	mg / l	0.05	0.016	0.019	0.0117
12	Cyanide as (CN)	mg / l	0.05	< 0.005	< 0.005	< 0.005
13	Lead as (Pb)	mg / l	0.05	0.00133	0.0014	0.0016
14	Zinc as (Zn)	mg / l	5 (15)	1.95	1.88	1.91
15	Total Chromium as (Cr)	mg / l	0.05	< 0.010	< 0.010	< 0.010
16	Oil & Grease	mg / l	10	< 4	< 4	< 4

TABLE- 3.8 Noise Level (Within Plant area)

SL. NO.	LOCATION	RESULT (dBA)					
		DAY					
		Apr. 2024	May 2024	Jun. 2024	Jul. 2024	Aug. 2024	Sept. 2024
1	**Near Shanti Niketan I, II & III**	57.7	61.4	63.3	60.6	61.1	60.4
2	**Near Labour Hutment**	63.2	64.6	65.7	68.0	63.7	63.0
3	**Near Store Area**	55.2	59.6	62.6	64.4	64.7	62.8
4	**Gate No.1**	57.8	55.7	52.4	50.9	52.0	50.0
5	**Gate No.2**	64.7	63.8	65.9	63.5	65.8	61.2
6	**Gate No.3**	62.4	62.4	62.4	62.4	62.4	62.4
7	**Near OHC**	46.2	46.0	45.6	62.6	59.1	54.5
8	**Railway Siding**	65.2	65.2	64.5	66.6	63.1	60.9
9	**Near Reservoir 2**	52.9	51.7	54.5	52.8	51.8	50.5
10	**Near Ash Water Recovery Pump House**	63.5	63.5	65.4	66.3	65.2	64.0
11	**In China Colony**	41.2	39.1	38.7	39.8	38.8	37.1
CPCB Standards							
Industrial Area		**75**					

SL. NO.	LOCATION	RESULT (dBA)					
		NIGHT					
		Apr. 2024	May 2024	Jun. 2024	Jul. 2024	Aug. 2024	Sept. 2024
1	Near Shanti Niketan I II & III	46.4	45.9	45.4	45.4	48.7	46.5
2	Near Labour Hutment	54.6	55.5	55.2	55.2	53.0	52.3
3	Near Store Area	51.6	52.7	52.6	52.6	55.4	54.1
4	Gate No.1	44.8	43.4	43.5	43.5	47.7	45.1
5	Gate No.2	55.6	54.3	54.6	54.6	55.2	53.0
6	Gate No.3	57.1	54.5	55.1	55.1	58.2	56.1
7	Near OHC	42.4	43.0	42.1	42.1	37.3	36.2
8	Railway Siding	55.8	55.0	54.3	54.3	53.0	51.1
9	Near Reservoir 2	46.5	45.2	45.2	45.2	41.4	40.2
10	Near Ash Water Recovery Pump House	53.4	54.1	52.3	52.3	56.1	54.0
11	In China Colony	36.2	35.0	35.2	35.2	33.5	31.6
CPCB Standards							
Industrial Area		70					

TABLE- 3.9 SOIL ANALYSIS as Per IS 2720 for (Jun.2024)

Sr. No.	Test Parameters	Unit	Garada Village	Mendipur Village	Churdi Village
1	**pH**	-	7.83	7.70	7.76
2	**E. Conductivity**	µs/cm	514	494	520
3	**Nitrogen as N**	Kg/ha	1078	810	936
4	**Phosphorus as P_2O_5**	Kg/ha	83.2	72.3	67.7
5	**Potassium as K**	Kg/ha	80.4	68.1	48.3
6	**Calcium (as Ca)**	Kg/ha	4.12	4.07	4.71
7	**Magnesium (as Mg)**	Kg/ha	1.60	1.13	1.08
8	**Total Organic Carbon**	%	0.640	0.590	0.647
9	**Iron as Fe**	Kg/ha	2.41	2.22	2.27
10	**Boron as B**	Kg/ha	1.31	1.12	1.18
11	**Natural Moisture Content**	%	6.8	6.7	6.0
12	**Field Capacity**	%	6.3	6.4	6.6
13	**Wilting Coefficient**	%	0.71	0.67	0.63
14	**Available Water Storage Capacity**	%	0.68	0.66	0.67
15	**Bulk Density**	gm/cc	1.36	1.37	1.36
16	**Grain size Distribution :** **a) Sand**	%	26.6	31.3	33.3
	b) Silt	%	34.7	34.8	32.8
	c) Clay	%	38.7	33.9	33.9
17	**Cation Exchange Capacity**	meq/100gm	33.4	32.2	34.2
18	**Biological Status:**				
	a) Total Heterotrophy	CFU	56.1 $x10^3$/gm	28.8 $x10^3$/gm	40.6 $x10^3$/gm
	b) Azetobacter	CFU	62.4 $x10^3$/gm	60.2 $x10^3$/gm	57.3 $x10^3$/gm
	c) Actinomycetes	CFU	44.7 $x10^2$/gm	52.5 $x10^2$/gm	71.1 $x10^3$/gm
	d) Yeast	CFU	163.5 $x10^2$/gm	158.7 $x10^2$/gm	162 $x10^2$/gm

Annexure I - On site Meteorological Data for APR.2024-SEPT.2024

Apr. 2024

Date	Wind Direction (Blowing From)	Wind Speed (Km/hr)		Temperature (°C)			Humidity (%)			Barometric Pressure (mBar)	Rainfall (mm)
		Max.	Avg.	Max	Min	Avg.	Max	Min	Avg	(Average)	
01-Apr-24	ENE	41.7	5.8	39.9	25.5	32.6	69.2	22.6	42.9	983.5	0.0
02-Apr-24	ENE	42.0	4.9	40.8	22.5	32.7	67.7	18.1	35.4	982.4	0.0
03-Apr-24	ENE	31.9	4.4	42.3	23.9	33.7	57.3	17.6	34.2	983.2	0.0
04-Apr-24	ENE	24.7	3.0	42.7	26.0	34.2	61.5	19.1	37.0	983.4	0.0
05-Apr-24	ENE	31.4	3.2	42.7	24.6	33.8	61.7	20.0	35.5	983.2	0.0
06-Apr-24	S	29.9	2.8	42.4	25.7	33.7	55.2	19.8	33.4	982.7	0.0
07-Apr-24	S	34.6	3.7	35.1	24.8	28.8	62.3	27.9	42.9	983.3	0.4
08-Apr-24	NW	40.8	8.7	35.4	23.7	28.6	65.2	35.6	52.4	985.4	0.0
09-Apr-24	NW	62.7	7.8	36.0	20.6	28.9	92.6	34.4	52.1	986.5	9.4
10-Apr-24	E	59.8	5.5	37.4	18.7	27.3	93.3	34.7	62.5	986.3	13.0
11-Apr-24	NW	63.0	6.7	32.8	19.0	23.5	93.1	42.9	75.6	987.7	9.0
12-Apr-24	NW	37.0	4.5	35.1	21.3	26.5	94.3	35.9	66.5	986.9	3.6
13-Apr-24	NW	40.8	5.3	34.9	21.3	26.6	89.2	41.9	67.4	986.2	1.6
14-Apr-24	NW	33.3	4.2	38.4	22.1	30.0	86.7	35.9	59.0	986.1	0.0
15-Apr-24	S	48.9	3.6	41.1	25.3	31.9	78.4	29.4	52.8	985.8	0.0
16-Apr-24	S	63.0	4.3	42.5	25.0	31.2	75.2	28.0	54.5	984.3	0.4
17-Apr-24	S	26.2	3.0	43.2	24.5	33.7	80.9	23.5	46.9	983.2	0.0
18-Apr-24	S	29.9	3.4	44.0	26.5	34.7	59.1	19.5	36.8	982.7	0.0
19-Apr-24	E	43.0	3.8	44.0	24.8	34.7	73.6	20.3	39.5	980.6	0.0
20-Apr-24	S	36.8	3.6	42.9	27.6	35.1	57.1	21.5	37.2	980.5	0.0
21-Apr-24	S	33.6	3.4	43.2	27.3	35.0	63.6	20.4	36.6	981.8	0.0
22-Apr-24	NW	56.1	4.6	32.7	23.1	25.3	88.8	32.6	76.4	983.6	4.2
23-Apr-24	S	63.0	5.7	38.3	19.4	28.8	92.4	35.4	63.7	983.0	22.2
24-Apr-24	E	55.3	3.9	40.4	22.1	29.9	88.6	33.4	60.7	981.4	0.0
25-Apr-24	E	45.0	3.5	41.9	24.4	32.8	76.3	26.9	47.0	982.4	0.0
26-Apr-24	S	56.6	3.9	37.7	26.7	31.2	59.8	34.7	48.6	982.1	0.0
27-Apr-24	S	55.8	3.8	42.0	23.1	32.9	77.4	26.5	47.2	982.8	8.4
28-Apr-24	NW	63.0	5.2	37.2	23.6	30.2	83.5	35.3	56.9	983.1	2.4
29-Apr-24	E	36.8	4.1	40.0	23.8	32.7	86.3	31.6	54.9	983.3	0.0
30-Apr-24	NNW	63.0	3.9	42.4	23.7	33.7	89.0	30.0	53.8	980.8	2.2

May 2024

Date	Wind Direction (Blowing From)	Wind Speed (Km/hr)		Temperature (°C)			Humidity (%)			Barometric Pressure (mBar)	Rainfall (mm)
		Max.	Avg.	Max	Min	Avg.	Max	Min	Avg	(Average)	
01-May-24	E	30.4	5.0	41.2	24.8	33.3	78.2	19.3	42.1	978.3	0.0
02-May-24	S	25.7	3.1	42.4	23.3	33.0	67.6	13.8	33.5	979.6	0.0
03-May-24	S	28.4	3.1	42.9	22.2	32.9	60.2	13.0	30.6	981.3	0.0
04-May-24	E	25.9	3.2	43.5	23.7	33.7	52.3	15.6	31.3	981.5	0.0
05-May-24	ENE	25.4	3.4	45.9	23.1	34.1	70.4	14.5	37.4	979.0	0.0
06-May-24	E	41.0	4.9	44.2	29.3	36.2	56.9	21.5	34.6	980.0	0.0
07-May-24	NNW	62.7	9.4	39.4	20.5	30.6	89.3	38.2	54.8	981.5	13.8
08-May-24	NW	40.8	8.7	35.4	23.7	28.6	65.2	35.6	52.4	985.4	0.0
09-May-24	NW	62.7	7.8	36.0	20.6	28.9	92.6	34.4	52.1	986.5	9.4
10-May-24	NEN	55.3	7.0	38.4	22.3	30.8	81.9	42.6	62.1	982.6	3.4
11-May-24	NNW	31.9	5.1	41.0	26.6	33.5	77.0	31.2	52.5	983.1	0.0
12-May-24	NNW	55.6	7.2	41.5	23.4	33.0	81.5	32.5	51.7	983.5	3.0
13-May-24	ENE	31.1	4.7	39.0	24.5	30.5	80.8	37.5	60.8	984.2	0.0
14-May-24	S	34.6	3.8	41.5	25.1	33	79.9	29.7	50.8	983.8	0.0
15-May-24	ESE	37.5	4.8	41.2	25.0	32.6	70.6	28.8	46.6	984.5	0.0
16-May-24	ENE	43.2	4.9	41.5	26.8	33.3	66.0	32.1	48.2	984.0	0.0
17-May-24	ENE	35.8	5.3	36.6	27.0	30.3	73.8	46.0	61.9	983.5	0.0
18-May-24	NNW	26.2	5.2	39.1	25.5	31.9	76.9	38.3	57.2	981.5	0.0
19-May-24	E	37.8	5.2	41.3	26.7	33.3	74.2	28.4	53.7	979.3	0.0
20-May-24	NNW	31.9	5.2	41.3	28.2	34.6	70.4	35.0	51.9	979.2	0.0
21-May-24	NW	52.9	5.8	42.7	27.9	34.5	67.7	26.3	49.8	978.9	0.0
22-May-24	E	61.5	7.9	43.0	29.1	34.0	60.7	33.7	48.0	978.6	0.0
23-May-24	E	28.2	3.9	43.1	26.4	34.4	72.7	30.3	49.4	976.7	0.0
24-May-24	NW	34.1	6.3	44.9	29.9	36.5	65.2	26.3	45.8	974.8	0.0
25-May-24	NW	28.7	5.0	43.9	29.7	35.7	61.1	30.9	47.9	974.6	0.0
26-May-24	ENE	47.7	3.9	47.1	30.0	36.9	70.1	18.2	45.2	973.3	0.0
27-May-24	N	29.6	3.8	47.9	29.1	37.6	58.9	19.0	38.5	971.9	0.0
28-May-24	NNW	63.0	6.6	47.5	30.8	36.8	54.3	19.4	40.6	972.4	0.0
29-May-24	E	41.2	4.8	46.2	28.9	37.5	64.0	20.3	38.7	973.9	0.0
30-May-24	ENE	33.1	4.0	48.4	31.0	38.5	49.8	18.5	34.0	975.9	0.0
31-May-24	ESE	38.0	3.8	47.8	31.4	38.6	55.2	17.6	34.8	977.0	0

Jun. 2024

Date	Wind Direction (Blowing From)	Wind Speed (Km/hr)		Temperature (°C)			Humidity (%)			Barometric Pressure (mBar)	Rainfall (mm)
		Max.	Avg.	Max	Min	Avg.	Max	Min	Avg	(Average)	
01-Jun-24	S	38.5	4.4	47.4	29.9	38.7	55.9	20.1	33.8	977.5	0.0
02-Jun-24	S	42.2	4.9	43.5	31.8	36.7	59.5	24.0	37.5	978.9	0.0
03-Jun-24	E	58.0	8.5	41.9	29.1	34.3	65.5	31.7	47.8	980.2	0.0
04-Jun-24	E	35.1	5.6	41.3	28.8	34.8	62.6	32.7	48.4	980.1	0.0
05-Jun-24	NNW	37.8	5.8	43.1	28.8	35.5	66.0	28.7	46.4	980.5	0.8
06-Jun-24	N	58.8	5.4	44.4	29.6	35.3	59.8	28.5	46.6	980.6	0.0
07-Jun-24	ENE	52.9	6.2	44.2	28.6	35.1	67.0	29.1	49.2	979.5	0.0
08-Jun-24	NNW	56.1	5.9	43.2	29.2	34.1	67.4	29.8	51.3	978.6	0.2
09-Jun-24	NW	48.9	6.1	42.4	29.5	34.7	64.5	32.8	48.8	978.0	0.0
10-Jun-24	NNW	36.3	5.3	43.5	29.3	35.4	63.9	29.5	46.9	978.0	0.0
11-Jun-24	ESE	47.2	3.7	44.8	28.3	35.4	70.2	27.3	46.7	977.8	0.0
12-Jun-24	ENE	61.8	6.6	41.1	27.7	33.3	72.1	35.0	54.9	979.4	0.0
13-Jun-24	E	29.1	6.9	41.5	30.2	34.8	68.0	31.3	50.0	978.4	0.0
14-Jun-24	E	50.4	7.3	43.0	29.2	35	63.7	29.7	46.8	977.8	0.0
15-Jun-24	SW	38.3	6.0	44.2	27.8	34.4	74.9	28.2	51.6	977.7	0.6
16-Jun-24	SSW	38.8	3.4	43.7	29.7	34.6	69.9	30.6	52.3	978.6	0.0
17-Jun-24	E	59	7.2	42.7	27.9	32.4	74.9	34.2	58.6	979.1	1.0
18-Jun-24	E	53.6	8.6	40.1	26.5	31.0	80.9	39.3	64.5	978.2	0.0
19-Jun-24	E	60.5	7.4	37.6	25.9	29.1	87.9	47.0	72.5	976.6	1.8
20-Jun-24	ENE	43.2	5.5	36.5	25.9	29.6	88.7	46.9	72.1	976.4	0.0
21-Jun-24	E	43.7	7.1	38.8	24.8	29.4	95.6	43.5	75.3	976.5	22.6
22-Jun-24	E	25.2	4.3	34.6	24.7	27.9	95.9	56.8	82.8	975.6	4.2
23-Jun-24	NNW	26.2	3.3	36.7	26.3	29.0	93.5	52.9	80.7	975.2	8.6
24-Jun-24	NNW	32.1	5.3	37.7	26.5	30.7	90.7	47.6	71.2	974.9	0.0
25-Jun-24	S	32.6	4.3	40.1	28.1	32.8	78.9	42.6	62.9	974.3	0.0
26-Jun-24	N	43.7	6.7	42.0	29.2	34.1	72.5	36.9	57.0	974.2	0.0
27-Jun-24	NW	61.0	7.4	39.4	27.6	30.9	88.7	42.6	72.4	975.6	5.0
28-Jun-24	E	36.3	6.0	31.7	26.2	28.2	93.1	69.6	83.8	976.2	0.6
29-Jun-24	W	44.0	7.6	32.4	26.9	29.2	88.1	63.1	76.3	976.9	0.8
30-Jun-24	W	58.0	7.7	34.3	24.9	28.6	90.5	60.4	79.3	977.4	3.8

Jul. 2024

Date	Wind Direction (Blowing From)	Wind Speed (Km/hr)		Temperature (°C)			Humidity (%)			Barometric Pressure (mBar)	Rainfall (mm)
		Max.	Avg.	Max	Min	Avg.	Max	Min	Avg	(Average)	
01-Jul-24	ENE	63.0	7.6	31.4	25.4	28.4	91.7	66.9	78.6	976.6	0.0
02-Jul-24	E	49.6	9.2	31.6	25.2	28.4	90.5	62.7	74.1	975.6	0.4
03-Jul-24	E	54.3	6.7	35.5	25.0	28.8	91.0	50.7	75.2	976.3	1.2
04-Jul-24	E	41.5	6.3	32.3	24.0	27.9	98.3	67.8	83.0	977.3	48.0
05-Jul-24	E	59.8	8.0	35.6	23.4	28.0	98.8	55.5	82.0	976.0	50.4
06-Jul-24	NNW	53.4	5.2	36.1	24.4	28.7	94.5	53.7	80.2	975.1	13.6
07-Jul-24	E	33.1	4.7	33.6	24.6	28.1	98.0	62.0	84.5	976.7	49.6
08-Jul-24	E	34.6	3.4	37.8	25.6	29.9	96.1	51.0	78.7	976.5	12.4
09-Jul-24	NNW	59.8	4.2	37.3	24.8	30.2	94.4	49.2	72.9	977.7	12.0
10-Jul-24	NNW	24.2	5.8	36.6	25.2	28.5	95.3	55.8	83.2	978.4	0.4
11-Jul-24	NNW	24.5	3.6	31.8	25.1	28.4	104.9	72.4	84.5	977.0	19.2
12-Jul-24	E	54.8	5.8	36.8	24.9	28.1	95.6	53.6	85.5	975.6	28.6
13-Jul-24	E	39.3	6.3	33.1	26.0	27.8	95.6	64.9	87.2	974.6	4.4
14-Jul-24	E	38.5	4.8	36.0	25.6	29	94.6	53.4	81.2	973.3	0.4
15-Jul-24	NNW	29.9	3.1	37.3	26.2	28.7	94.1	54.4	84.6	973.1	18.8
16-Jul-24	NW	47.4	3.7	36.4	26.7	29.7	95.0	53.9	81.8	973.5	0.2
17-Jul-24	NNW	55.3	4.3	36.2	25.3	28.5	94.8	56.7	84.0	974.4	5.4
18-Jul-24	E	28.2	3.7	38.2	24.9	30.1	95.6	50.7	78.4	974.4	0.2
19-Jul-24	E	54.3	4.4	38.3	25.1	29.9	94.1	50.5	81.0	972.6	29.2
20-Jul-24	E	42.2	7.6	31.4	25.5	27.6	98.7	72.6	90.2	971.9	100.2
21-Jul-24	E	40.3	7.4	32.8	24.9	27.4	97.9	69.6	89.6	972.2	28.4
22-Jul-24	E	47.4	12.3	29.3	25.5	26.6	98.2	78.3	92.6	973.9	53.0
23-Jul-24	E	41.7	9.6	27.1	25.3	26.1	97.1	85.1	91.5	974.8	13.8
24-Jul-24	E	42.5	11.6	26.3	24.4	25.2	97.1	88.5	93.6	972.3	15.2
25-Jul-24	E	42.7	9.0	28.6	24.6	26.1	97.7	81.7	90.6	971.1	8.8
26-Jul-24	ENE	35.6	8.7	27.6	25.2	26.2	94.4	83.0	90.2	972.0	3.0
27-Jul-24	E	47.4	11.4	27.5	24.8	25.9	101.3	86.3	92.7	971.9	26.6
28-Jul-24	E	40.0	6.3	26.4	23.9	25.1	105.2	93.0	101.8	970.1	162.2
29-Jul-24	ENE	36.1	4.8	28.5	23.9	25.8	105.1	82.0	93.8	972.9	8.4
30-Jul-24	ENE	24.5	3.3	34.7	25.2	28.5	97.8	60.4	83.9	976.5	11.2
31-Jul-24	E	30.1	6.1	30.6	26.2	27.5	95.9	67.2	84.2	977.3	11.2

Aug. 2024

Date	Wind Direction (Blowing From)	Wind Speed (Km/hr)		Temperature (°C)			Humidity (%)			Barometric Pressure (mBar)	Rainfall (mm)
		Max.	Avg.	Max	Min	Avg.	Max	Min	Avg	(Average)	
01-Aug-24	E	40.0	7.7	28.0	24.0	26.0	95.3	77.6	85.8	976.4	67.6
02-Aug-24	E	45.4	8.9	28.5	24.3	25.7	93.2	74.6	85.3	975.9	11.2
03-Aug-24	E	44.7	7.3	26.4	23.9	25.3	91.4	80.7	86.9	976.7	17.0
04-Aug-24	ENE	58.3	5.6	28.9	23.9	26.1	89.2	71.6	82.3	977.5	10.4
05-Aug-24	E	35.6	5.9	32.8	24.9	28.2	87.0	57.5	74.6	979.9	0.4
06-Aug-24	E	39.0	6.2	34.2	23.4	28.3	88.6	50.4	75.3	978.7	45.8
07-Aug-24	E	27.2	4.6	29.9	24.0	25.6	95.6	67.9	87.2	977.7	53.2
08-Aug-24	E	38.0	6.8	28.6	24.6	25.9	95.9	70.0	88.3	977.6	1.2
09-Aug-24	E	34.6	2.3	31.5	25.8	28.0	86.0	62.3	74.5	979.9	0.4
10-Aug-24	E	54.1	8.3	33.1	24.4	26.7	87.1	54.8	75.7	979.8	0.0
11-Aug-24	ENE	37.8	5.3	33.3	24.1	26.9	89.0	56.4	78.7	978.3	6.0
12-Aug-24	E	32.6	6.3	33.7	25.4	28.7	86.4	54.9	72.1	978.6	0.0
13-Aug-24	E	34.1	2.3	36.2	26.1	30.2	85.3	48.4	70.1	979.5	0.0
14-Aug-24	ENE	22.0	1.2	34.4	24.4	28	89.9	56.7	80.2	979.7	28.2
15-Aug-24	E	25.7	2.3	34.6	25.5	27.4	95.8	55.0	80.7	978.8	0.0
16-Aug-24	NNW	47.7	1.9	36.9	23.8	27.5	88.2	48.1	78.3	978.4	96.8
17-Aug-24	E	26.7	3.3	32.5	25.2	27.9	95.1	60.3	79.7	979.6	8.6
18-Aug-24	S	27.2	2.4	33.9	26.2	29.3	89.6	55.9	74.3	980.3	0.0
19-Aug-24	SE	43.7	2.0	38.3	25.7	30.5	88.4	43.0	70.5	979.3	0.0
20-Aug-24	N	25.9	3.6	35.4	25.3	29.9	85.4	51.4	69.7	979.2	0.0
21-Aug-24	NNW	59.0	3.4	34.6	26.0	29.3	84.9	54.6	74.6	980.2	19.8
22-Aug-24	NNW	29.1	2.9	35.1	25.7	27.9	86.0	55.9	79.6	979.9	6.6
23-Aug-24	E	46.9	4.6	34.2	24.1	28.1	87.3	51.7	74.5	979.5	13.4
24-Aug-24	ENE	33.6	5.6	29.7	24.0	25.6	87.7	67.4	82.4	977.0	28.2
25-Aug-24	ENE	42.7	5.0	27.9	23.6	25.2	88.4	70.7	82.6	975.9	16.8
26-Aug-24	ENE	40.0	4.5	33.1	24.9	27.6	86.8	55.9	73.4	976.3	0.4
27-Aug-24	NNW	38.3	5.0	34.7	25.7	29.1	80.3	48.9	67.7	978.9	0.0
28-Aug-24	ENE	32.9	4.6	35.4	25.5	29.6	83.4	48.0	67.7	979.6	0.0
29-Aug-24	S	26.7	2.4	37.0	25.5	29.4	81.9	44.3	68.8	978.7	0.4
30-Aug-24	S	32.4	2.2	34.5	25.4	27.9	85.1	53.2	75.6	978.5	13.6
31-Aug-24	S	61.3	2.6	36.9	24.8	28.3	88.1	49.8	76.3	977.1	66.6

Sept. 2024

Date	Wind Direction (Blowing From)	Wind Speed (Km/hr)		Temperature (°C)			Humidity (%)			Barometric Pressure (mBar)	Rainfall (mm)
		Max.	Avg.	Max	Min	Avg.	Max	Min	Avg	(Average)	
01-Sep-24	S	54.8	3.8	35.5	25.6	29.8	88.7	49.4	71.7	975.6	1.6
02-Sep-24	W	31.6	4.1	33.6	25.2	28.5	85.9	57.4	74.1	975.9	15.4
03-Sep-24	NW	30.4	3.7	33.9	25.3	28.9	84.8	52.0	71.1	978.3	0.0
04-Sep-24	E	55.6	3.7	37.2	25.1	29.1	85.7	45.2	73.1	977.6	18.4
05-Sep-24	E	43.5	2.3	35.2	24.5	27.9	85.0	52.6	76.2	975.9	15.6
06-Sep-24	N	25.2	2.2	36.0	24.6	28.6	87.9	49.2	74.6	977.9	1.2
07-Sep-24	E	18.8	1.9	36.4	25.8	29.0	86.3	51.0	74.3	978.2	0.8
08-Sep-24	E	58.8	4.1	36.6	25.3	29.1	87.0	49.6	73.5	977.9	0.0
09-Sep-24	E	33.6	3.5	36.2	25.7	28.9	87.7	48.0	75.7	974.5	8.2
10-Sep-24	E	56.3	11.9	27.3	24.1	25.7	95.0	77.2	87.4	972.5	121.8
11-Sep-24	ENE	44.2	6.4	31.9	25.5	27.7	85.1	61.6	76.0	975.2	0.0
12-Sep-24	ENE	37.8	4.8	33.9	25.2	27.9	83.1	54.0	73.8	978.5	1.8
13-Sep-24	ENE	34.1	5.2	33.7	24.8	27.4	87.5	53.4	75.6	979.3	3.8
14-Sep-24	E	33.3	2.8	34.6	23.1	27	87.2	50.2	75.6	978.8	18.2
15-Sep-24	ENE	48.4	2.5	34.1	23.1	27.6	85.7	48.7	70.1	978.5	0.6
16-Sep-24	ENE	35.8	2.9	35.1	23.1	27.6	86.3	47.8	71.3	978.8	20.2
17-Sep-24	E	53.6	8.9	29.8	23.4	26.2	86.4	63.1	75.9	977.3	5.8
18-Sep-24	ENE	32.4	4.2	33.9	23.7	27.5	84.2	47.8	70.8	977.9	0.8
19-Sep-24	E	20.3	0.6	36.1	24.0	29.6	85.7	44.5	67.5	979.8	0.0
20-Sep-24	S	29.1	0.8	37.9	25.4	29.8	84.0	43.6	69.0	979.8	0.0
21-Sep-24	S	24.2	1.1	37.7	25.1	30.6	86.2	43.3	68.3	980.2	0.0
22-Sep-24	NW	45.9	3.5	38.1	24.3	29.4	86.1	45.7	70.8	979.4	13.8
23-Sep-24	NW	24.2	1.9	37.5	24.4	30.1	85.7	45.7	69.6	979.1	0.0
24-Sep-24	NW	35.6	4.0	28.9	25.7	27.1	83.6	64.1	75.9	978.1	0.0
25-Sep-24	SSE	24.5	1.2	29.7	24.9	26.8	85.6	70.8	79.9	977.0	3.8
26-Sep-24	S	34.1	2.4	35.5	24.6	27.3	88.4	51.1	79.0	976.4	3.6
27-Sep-24	NNW	35.3	6.8	32.5	24.9	27.7	89.9	59.6	77.9	978.4	34.6
28-Sep-24	N	37.8	8.7	34.2	26.1	28.7	81.0	52.1	71.4	981.3	0.0
29-Sep-24	NNW	27.2	4.3	36.8	25.6	29.9	83.2	47.4	68.9	983.1	0.0
30-Sep-24	E	33.3	3.7	35.6	25.9	30.0	85.5	49.7	71.3	983.1	0.0

Annexure -II

Manual Ambient Air Quality Data
(In-House Monitoring)

Sampling Station/ Location		AAQ 1 : Near AWRS				AAQ - 2 : Near Brick Plant				AAQ -3 : China Colony			
Sampling Date	Analysis Starting Date	Parameters				Parameters				Parameters			
		PM 10	PM 2.5	SO2	NOx	PM 10	PM 2.5	SO2	NOx	PM 10	PM 2.5	SO2	NOx
		µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3	µg/m3
01.04.2024	02.04.2024	62.0	35.4	12.1	17.0	64.5	33.2	11.1	16.3	65.0	34.5	9.6	12.6
05.04.2024	06.04.2024	53.8	32.7	9.0	14.1	58.1	27.7	9.5	14.1	62.3	33.8	7.2	12.7
08.04.2024	09.04.2024	43.8	24.8	11.6	14.9	49.8	24.4	11.6	14.9	46.8	24.6	7.0	15.6
12.04.2024	13.04.2024	34.8	19.8	10.2	15.0	56.8	28.8	10.2	15.0	42.9	23.7	9.7	14.5
15.04.2024	16.04.2024	58.9	34.3	10.0	12.2	62.0	34.4	10.0	12.2	62.1	28.5	7.9	13.2
19.04.2024	20.04.2024	64.7	37.7	9.9	12.0	63.5	35.5	9.9	15.3	61.6	31.8	10.4	12.3
22.04.2024	23.04.2024	34.9	20.9	10.2	15.6	37.2	22.4	10.2	15.6	40.9	21.2	8.7	11.4
26.04.2024	27.04.2024	60.1	34.9	9.7	13.8	57.9	30.6	9.7	13.8	56.4	26.0	9.9	16.1
29.04.2024	30.04.2024	55.7	28.8	10.6	13.6	68.6	35.5	10.6	13.6	57.6	27.1	10.7	13.9
03.05.2024	04.05.2024	58.5	27.2	7.7	13.7	71.7	30.2	8.2	13.0	54.4	37.5	8.9	16.3
06.05.2024	07.05.2024	75.2	35.2	9.2	15.0	79.8	29.9	8.5	14.7	56.5	32.0	8.7	13.3
10.05.2024	11.05.2024	47.6	32.6	10.6	14.3	63.4	18.6	12.6	18.5	55.3	26.2	21.8	26.4
13.05.2024	14.05.2024	63.5	36.4	14.5	19.5	60.4	17.1	9.2	24.7	65.5	29.9	16.8	30.3
17.05.2024	18.05.2024	67.5	17.7	8.1	16.0	67.4	34.1	10.5	16.7	59.9	38.3	23.8	31.8
20.05.2024	21.05.2024	52.4	23.9	9.9	12.0	65.4	36.3	8.9	12.0	77.7	33.6	9.9	12.3
24.05.2024	25.05.2024	66.0	12.8	9.2	11.1	79.3	30.1	9.7	11.7	78.0	35.6	9.7	13.9
27.05.2024	28.05.2024	32.3	26.5	9.4	14.1	61.0	26.5	10.2	13.0	78.9	29.3	10.5	14.5
30.05.2024	31.05.2024	56.9	17.6	11.1	13.6	64.7	39.7	10.1	12.9	67.6	27.3	10.7	12.6
03.06.2024	04.06.2024	59.0	30.0	8.8	14.3	60.8	35.1	7.9	12.4	68.7	21.2	7.2	13.2
07.06.2024	08.06.2024	54.4	36.6	9.7	15.6	71.1	37.0	7.7	13.6	63.0	32.0	8.2	12.6
10.06.2024	11.06.2024	69.5	33.2	11.6	15.0	53.8	41.3	12.1	16.9	71.5	37.4	10.5	16.6
14.06.2024	15.06.2024	70.4	38.9	12.6	18.9	74.0	44.9	6.8	16.3	73.0	35.8	13.0	19.8
17.06.2024	18.06.2024	69.8	43.4	9.1	17.6	83.5	42.3	11.1	17.7	61.6	27.1	16.4	18.0
21.06.2024	22.06.2024	34.8	18.3	10.1	12.2	51.0	36.3	8.7	11.7	27.6	25.9	10.5	13.0
24.06.2024	25.06.2024	75.8	47.3	9.6	12.7	33.8	20.0	9.9	10.2	37.3	29.3	11.0	15.8
28.06.2024	29.06.2024	55.8	37.9	8.7	13.4	35.2	21.7	10.6	13.9	22.8	18.2	8.3	11.5
01.07.2024	02.07.2024	45.0	33.9	11.2	18.5	48.1	25.7	7.6	11.2	37.7	21.7	8.1	9.5
05.07.2024	06.07.2024	43.0	27.0	14.0	18.9	38.4	26.4	11.6	14.3	22.4	19.0	10.6	13.8
08.07.2024	09.07.2024	34.1	26.8	9.7	20.1	30.4	22.5	13.1	20.8	29.6	28.1	13.9	17.9
12.07.2024	13.07.2024	32.4	20.1	8.7	15.6	41.5	23.5	13.5	22.1	21.2	14.1	12.6	15.0
15.07.2024	16.07.2024	42.1	28.9	6.8	10.7	44.2	22.7	5.3	9.1	36.8	26.0	3.3	8.4
19.07.2024	20.07.2024	41.2	27.2	10.7	16.3	45.7	24.0	12.6	14.3	29.2	25.6	7.0	16.1
22.07.2024	23.07.2024	26.1	17.8	14.0	19.5	34.9	21.3	8.2	11.7	30.3	16.8	7.8	13.2
26.07.2024	27.07.2024	44.2	28.4	7.7	13.2	34.3	17.4	11.1	17.6	33.9	23.4	10.2	19.1
29.07.2024	30.07.2024	48.4	39.6	14.6	20.4	37.6	24.5	9.1	16.3	32.0	27.9	9.2	15.6
2.08.2024	3.08.2024	37.8	20.4	11.1	17.6	34.4	22.5	6.8	14.3	35.8	16.7	11.6	18.6
5.08.2024	6.08.2024	32.2	18.5	12.1	19.5	28.6	18.6	7.3	13.0	31.6	19.0	14.0	21.0
9.08.2024	10.08.2024	39.6	21.4	16.7	23.1	32.9	20.1	15.1	23.8	30.5	13.6	18.1	28.2
12.08.2024	13.08.2024	27.1	16.4	5.8	15.6	29.2	16.5	8.2	18.9	23.8	15.1	7.7	17.4
16.08.2024	17.08.2024	22.4	15.4	9.1	16.3	37.2	17.7	6.8	19.5	32.0	18.2	9.3	13.1
19.08.2024	20.08.2024	40.4	27.8	5.3	10.4	33.8	23.1	3.4	9.1	23.8	15.2	4.4	13.2
23.08.2024	24.08.2024	39.8	23.0	11.6	21.0	34.6	22.6	12.6	21.0	35.5	19.2	12.6	22.2
26.08.2024	27.08.2024	47.8	29.8	15.0	25.4	36.6	20.9	14.0	23.4	27.1	15.0	14.1	24.0
30.08.2024	31.08.2024	46.4	24.2	13.6	20.4	31.9	24.7	14.5	24.7	48.3	28.8	16.0	24.6
02.09.2024	03.09.2024	37.9	17.2	10.6	20.1	33.9	18.7	15.6	26.4	34.6	18.2	12.6	22.9
06.09.2024	07.09.2024	33.1	15.6	11.5	20.8	34.7	18.1	12.1	22.7	39.9	21.6	14.2	25.5
09.09.2024	10.09.2024	26.3	14.0	7.7	15.6	24.0	12.6	8.4	18.2	28.7	15.6	8.0	15.2
13.09.2024	14.09.2024	38.3	23.2	11.6	20.4	40.2	19.8	10.7	16.3	35.7	18.5	11.1	16.8
16.09.2024	17.09.2024	29.5	14.9	9.1	16.3	23.1	16.3	8.6	13.6	28.9	13.2	9.8	15.1
20.09.2024	21.09.2024	54.5	28.6	16.4	26.0	51.6	24.0	15.5	24.7	48.4	23.5	15.4	23.9
23.09.2024	24.09.2024	46.3	26.7	14.0	21.4	46.5	27.8	14.5	21.5	44.3	22.2	13.5	21.0
27.09.2024	28.09.2024	50.3	31.8	13.8	23.0	47.6	24.3	15.0	24.1	48.7	26.4	13.0	24.5
Max		**75.8**	**47.3**	**16.7**	**26.0**	**83.5**	**44.9**	**15.6**	**26.4**	**78.9**	**38.3**	**23.8**	**31.8**
Min		**22.4**	**12.8**	**5.3**	**10.4**	**23.1**	**12.6**	**3.4**	**9.1**	**21.2**	**13.2**	**3.3**	**8.4**
Average		**47.8**	**27.0**	**10.7**	**16.6**	**49.0**	**26.3**	**10.3**	**16.4**	**45.9**	**24.8**	**11.1**	**17.1**
NAAQMS Standard	**24 Hourly**	**100**	**60**	**80**	**80**	**100**	**60**	**80**	**80**	**100**	**60**	**80**	**80**
	Annual	**60**	**40**	**20**	**30**	**60**	**40**	**20**	**30**	**60**	**40**	**20**	**30**

Note :-

1. Schedule monitoring not done due to rain on 18-19.08.2023, 08-09.09.2023 and 15-16.109.2023
2. Tested results are well within the permissible limits of National Ambient Air Quality Monitoring Stanadard (NAAQMS)
3. The data is referring only to the tested sample and for applicable parameter and report submited to MPCB Board monthwise
4. This data is not to be reproducing wholly or in part, and can't t

ISO-KINETIC STACK MONITORING DATA (IN-HOUSE LAB)

Power Plant				Unit # 1						Unit # 2					
Sl	**Parameters**	**Units**	**MPCB Standards**	**Apr-24**	**May-24**	**Jun-24**	**Jul-24**	**Aug-24**	**Sep-24**	**Apr-24**	**May-24**	**Jun-24**	**Jul-24**	**Aug-24**	**Sep-24**
1	Height of Stack	Meter	-	275	275	275	275	275	275	275	275	275	275	275	275
2	Diameter of Stack	Meter	-	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
3	Flue Gas Temperature	0 C	-	121	121	121	119	121	127	119	125	119	119	122	133
4	Flue Gas Velocity	m/sec :	-	23.20	22.86	23.20	23.65	22.89	22.95	23.10	22.72	23.10	23.29	22.86	23.57
5	Flow of Exit Gas at NTP	Nm3/Hr	-	2614296	2575413	2614296	2678817	2579607	2547238	2616346	2534443	2616346	2637945	2569354	2577765
6	**PM**	Mg/Nm3	50	31.0	43.1	31.0	31.2	44.0	36.3	33.0	38.4	33.0	33.3	35.2	31.8
7#	**SO2**	Mg/Nm3	200#	916.3	801.5	916.3	733.0	795.0	882.9	902.4	856.2	902.4	789.5	810.6	856.3
8	**NOx**	Mg/Nm3	450	294.1	341.3	294.1	293.3	337.4	325.7	253.3	271.4	253.3	252.2	411.1	332.9
9##	**Mercury**	Mg/Nm3	0.03	0.0151	0.0147	0.0151	0.0151	0.0151	0.0151	0.0155	0.0140	0.0155	0.0155	0.0155	0.0155

Power Plant				Unit # 3						Unit # 4					
Sl	**Parameters**	**Units**	**MPCB Standards**	**Apr-24**	**May-24**	**Jun-24**	**Jul-24**	**Aug-24**	**Sep-24**	**Apr-24**	**May-24**	**Jun-24**	**Jul-24**	**Aug-24**	**Sep-24**
1	Height of Stack	Meter	-	275	275	275	275	275	275	275	275	275	275	275	275
2	Diameter of Stack	Meter	-	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
3	Flue Gas Temperature	0 C	-	118	120	118	120.0000	120	123	199	120	119	120	122	127
4	Flue Gas Velocity	m/sec :	-	23.20	22.61	23.20	23.2700	22.95	23.79	23	23	23	23	23	23
5	Flow of Exit Gas at NTP	Nm3/Hr	-	2633974	2553817	2633974	2628638	2593123	2667533	2581974	2593123	2581974	2544842	2599487	2525600
6	**PM**	Mg/Nm3	50	29.2	46.2	29.2	35.0000	41.2	37.3	35	40	35	36	34	40
7#	**SO2**	Mg/Nm3	200#	847.5	885.7	847.5	717.8000	840.9	867.4	880	758	880	758	767	820
8	**NOx**	Mg/Nm3	450	312.8	319.5	312.8	311.2000	310.4	343.6	302	293	302	300	298	310
9##	**Mercury**	Mg/Nm3	0.03	0.0143	0.0149	0.0143	0.0143	0.0143	0.0143	0.0147	0.0139	0.0147	0.0161	0.0147	0.0161

Power Plant				Unit # 5					
Sl	**Parameters**	**Units**	**MPCB Standards**	**Apr-24**	**May-24**	**Jun-24**	**Jul-24**	**Aug-24**	**Sep-24**
1	Height of Stack	Meter	-	275	275	275	275	275	275
2	Diameter of Stack	Meter	-	7.4	7.4	7.4	7.4	7.4	7.4
3	Flue Gas Temperature	0 C	-	117	119	117	119	120	132
4	Flue Gas Velocity	m/sec :	-	23.00	22.87	23.00	22.69	22.73	22.86
5	Flow of Exit Gas at NTP	Nm3/Hr	-	2618416	2590377	2618416	2569318	2567455	2505639
6	**PM**	Mg/Nm3	50	37.7	35.0	37.7	37.0	37.4	42.4
7#	**SO2**	Mg/Nm3	200#	892.6	812.2	892.6	772.0	718.9	842.7
8	**NOx**	Mg/Nm3	450	342.7	390.2	342.7	342.3	284.0	368.6
9##	**Mercury**	Mg/Nm3	0.03	0.0138	0.0144	0.0138	0.0155	0.0138	0.0155

Note:

1. Test Method : PM - IS 11255 (Part- 1):1985, SO2- IS 11255 (Part 2) 1985, NOx- IS 11255 (Part 7) 2005, Hg -USEPA - 0060
2. The report is referring only to the tested sample and for applicable parameter.
3. The sample will be destroyed after retention time unless otherwise specified specially.
4. This report is not to be reproducing wholly or in part, and can't be used as evidence in court of law.

5 **#** As per MoEF&CC Notification the SO2 Limit will be applicable after installation of FGD (March 2023-March 2024)

6## Mercury monitoring & analysis is being done on quaterly basis through third party.

Waste Water Analysis Report

S.N.	Parameters	Unit	MPCB Standards	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24	
				STP-1	STP-2	STP-1	STP-2	STP-1	STP-2	STP-1	STP-2	STP-1	STP-2	STP-1	STP-2
1	TSS	mg / l	50	13	16	37	16	16.9	11.6	12.9	28.3	29	20	21.7	25.6
2	COD	mg / l	100	59	49	29	39	29.4	32.2	19.6	29.4	9.8	39.2	49	29.4
3	BOD at 27 0C for 3 days	mg / l	30	14	19	14	18	18	16	21	14	12	14	10	12

S.N.	Parameters	Unit	MPCB Standards	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Sep-24	
				ETP	Ash Pond	ETP	Ash Pond	ETP	Ash Pond	ETP	Ash Pond	ETP	Ash Pond	ETP	Ash Pond
1	pH Value	----	5.5-9.0	8.3	8.2	8.3	8.31	8.0	7.4	8.3	7.6	7.4	7.4	8.3	7.8
2	TSS	mg / l	100	24.7	63	24.8	68	24.9	66	25	64	19.2	65	30.6	68
3	COD	mg / l	250	42.1	-	42	-	31.6	-	71.4	-	71.4	-	61.2	-
4	BOD at 27 0C for 3 days	mg / l	30	18	-	19	-	21	-	17	-	15	-	24	-
5	Oil & Grease	mg / l	10	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Note :- **Test Methods,**

TSS - APHA-24th - 2540 D,
COD-APHA-24th Ed 2017- 5220B Open Reflux Method,
BOD (at 270C for 3 days) - IS: 3025 (P-44)-1993 R-1999 Ad.1 BOD 3-days at 27 ºC,
pH - APHA-24th -4500-H+B Electrometric Method
O & G - APHA-24th Ed 2023- 5520 B Liquid Partition Gravemetric method

Noise Monitoring Data

A Day Time in dB(A) (06:00 AM to 10:00 PM)

Sl	Locations	Apr'24	May'24	Jun'24	Jul'24	Aug'24	Sept'24
1	Near Shanti Niketan I II & III	57.7	61.4	63.3	60.6	61.1	60.4
2	Near Labour Hutment	63.2	64.6	65.7	68.0	63.7	63.0
3	Near Store Area	55.2	59.6	62.6	64.4	64.7	62.8
4	Gate No.1	57.8	55.7	52.4	50.9	52.0	50.0
5	Gate No.2	64.7	63.8	65.9	63.5	65.8	61.2
6	Gate No.3	62.4	62.4	62.4	62.4	62.4	62.4
7	Near OHC	46.2	46.0	45.6	62.6	59.1	54.5
8	Railway Siding	65.2	65.2	64.5	66.6	63.1	60.9
9	Near Reservoir 2	52.9	51.7	54.5	52.8	51.8	50.5
10	Near Ash Water Recovery Pump House	63.5	63.5	65.4	66.3	65.2	64.0
11	In China Colony	41.2	39.1	38.7	39.8	38.8	37.1
CPCB Standards (Industrial Area)		**75 (dBA) Leq**					

B Night Time in dB (A) (10:00PM to 06:00 AM)

S. No	Locations	Apr'24	May'24	Jun'24	Jul'24	Aug'24	Sept'24
1	Near Shanti Niketan I II & III	46.4	45.9	45.4	45.4	48.7	46.5
2	Near Labour Hutment	54.6	55.5	55.2	55.2	53.0	52.3
3	Near Store Area	51.6	52.7	52.6	52.6	55.4	54.1
4	Gate No.1	44.8	43.4	43.5	43.5	47.7	45.1
5	Gate No.2	55.6	54.3	54.6	54.6	55.2	53.0
6	Gate No.3	57.1	54.5	55.1	55.1	58.2	56.1
7	Near OHC	42.4	43.0	42.1	42.1	37.3	36.2
8	Railway Siding	55.8	55.0	54.3	54.3	53.0	51.1
9	Near Reservoir 2	46.5	45.2	45.2	45.2	41.4	40.2
10	Near Ash Water Recovery Pump House	53.4	54.1	52.3	52.3	56.1	54.0
11	In China Colony	36.2	35.0	35.2	35.2	33.5	31.6
CPCB Standards (Industrial Area)		**75 (dBA) Leq**					

Annexure -III

Maharashtra Pollution Control Board

Site Name: M/s.Adani Power Limited

From Date: 2024/04/01 To Date: 2024/09/30 (Daily Averge value)

Report Name: Custom Report, M/s.Adani Power Limited

Report Created by APMPL on 2024-11-14 11:22:36

Sl No.	Time	CAAQMS_1-PM10 - (ug/m3)	CAAQMS_1-PM2.5 - (ug/m3)	CAAQMS_1-NOx - (ug/m3)	CAAQMS_1-SO2 - (ug/m3)	CAAQMS_2-PM10 - (ug/m3)	CAAQMS_2-PM2.5 - (ug/m3)	CAAQMS_2-NOx - (ug/m3)	CAAQMS_2-SO2 - (ug/m3)	CAAQMS_3-PM10 - (ug/m3)	CAAQMS_3-PM2.5 - (ug/m3)	CAAQMS_3-NOx - (ug/m3)	CAAQMS_3-SO2 - (ug/m3)
1	2024-04-01	71.18	30.6	21.61	17.96	73.54	30.68	20.3	9.44	72.48	37.4	24.6	11.96
2	2024-04-02	69.17	29.77	24.03	18.9	70.84	32.24	22.08	10.16	73.73	40.77	25.16	13.12
3	2024-04-03	67.78	31.37	27.23	19.53	68.93	36.2	22.94	10.67	74.55	43.76	26.57	13.92
4	2024-04-04	67.77	30.15	25.66	19.52	68.93	35.41	22.72	10.68	74.55	43.05	26.52	13.94
5	2024-04-05	67.78	28.84	26.18	19.52	68.66	34.23	23.18	10.66	74.55	41.73	26.55	13.94
6	2024-04-06	67.79	27.62	25.83	19.51	68.85	34.93	23.36	10.65	74.55	40.63	26.57	13.94
7	2024-04-07	67.79	30.78	25.71	19.51	68.93	31.4	22.6	10.63	74.55	40.29	26.62	13.94
8	2024-04-08	67.8	29.21	25.64	19.5	68.02	29.33	22.98	10.63	74.55	36.65	26.63	13.94
9	2024-04-09	67.79	32.86	27.07	19.49	67.23	29.33	23.09	10.62	74.54	36.88	26.55	13.92
10	2024-04-10	67.8	29.45	25.82	19.49	63.51	26.96	22.4	10.63	68.99	36.71	27.07	14.53
11	2024-04-11	63.67	19.03	24.54	18.84	54.63	23.1	19.68	10.25	50.86	28.33	25.09	14.23
12	2024-04-12	59.65	21.3	23.48	18.21	53.04	23.54	19.79	9.91	60.71	26.15	23.58	14.54
13	2024-04-13	59.65	24.89	23.48	18.22	53.68	24.45	19.35	9.92	62.84	26.35	23.42	14.51
14	2024-04-14	59.65	27.86	23.53	18.21	55.38	25.06	19.66	9.91	70.84	26.63	23.21	14.52
15	2024-04-15	59.65	28.55	23.64	18.2	58.37	26.95	19.81	9.92	79.78	28.46	23.17	14.54
16	2024-04-16	59.65	28.54	23.62	18.2	57.83	26.47	21.2	9.93	80.11	28.09	23.37	14.53
17	2024-04-17	61.31	28.53	23.41	17.77	57.68	25.18	20.86	10.13	80.68	27.3	23.5	14.53
18	2024-04-18	60.93	27.69	22.45	16.14	58.73	26.65	20.69	11.37	81.41	27.68	23.53	14.9
19	2024-04-19	58.99	27.03	21.59	15.42	58.92	29.45	20.45	11.74	80.13	28.07	23.28	15.16
20	2024-04-20	59	27.03	21.57	15.42	58.84	28.27	20.55	12.39	81.43	29.67	23.42	15.12
21	2024-04-21	60.78	27.06	21.57	15.41	58.3	26.28	20.66	12.38	81.43	32.85	23.71	15.17
22	2024-04-22	60.57	25.01	22.64	16.49	53.58	21.88	18.25	10.29	60.52	30.73	22.56	13.87
23	2024-04-23	60.52	25.24	26.07	17.88	49.63	21.16	18.73	10	56.08	27.28	22.71	14.69
24	2024-04-24	61.99	25.85	27.42	18.64	51.78	27.16	21.93	7.64	56.64	27.74	23.83	16.61
25	2024-04-25	66.72	27.57	32.21	21.05	52.25	21.68	28.77	8.46	70.09	27.63	26.14	18.07
26	2024-04-26	70.02	28.36	38.82	22.78	53.1	21.03	32.31	9.41	72.46	21.68	27.56	19.39
27	2024-04-27	68.54	28.63	25.2	22.16	52.83	21.06	31.75	9.41	66.81	21.73	27.38	19.4
28	2024-04-28	66.28	28.54	25.29	21.32	54.43	23.28	31.08	9.42	70.66	23.5	27.5	19.4
29	2024-04-29	66.28	28.54	25.35	21.33	54.79	24.46	34.56	11.21	75.2	25.65	27.28	19.11
30	2024-04-30	NA	NA	NA	NA	54.85	25.83	31.12	16.42	74.18	27.27	27.24	18.76
31	2024-05-01	NA	NA	NA	NA	54.86	23.93	28.72	17.42	75.22	25.73	27.4	18.66
32	2024-05-02	64.2	30.02	17.88	12.15	54.94	23.11	31.72	16.69	75.33	23.28	27.11	18.5
33	2024-05-03	64.21	30.02	17.92	12.13	54.94	24.37	29.94	16.54	75.33	25.62	27.38	18.5
34	2024-05-04	66.17	31.19	17.92	12.13	54.94	25.47	31.06	16.38	75.07	27.05	27.42	18.5
35	2024-05-05	68.88	32.84	17.86	12.13	56.16	26.32	31.13	16.14	70.61	27.64	27.53	18.36
36	2024-05-06	69.76	30.64	17.87	12.67	57.62	21.42	34.33	15.14	67.95	22.21	27.26	18.35
37	2024-05-07	67.83	28.13	17.85	13.28	56.4	21.98	33.19	15.05	64.23	21.54	27.25	17.95
38	2024-05-08	61.32	26.03	17.86	13.26	54.38	20.28	36.44	14.4	53.86	20.04	27.51	17.73
39	2024-05-09	59.25	24.36	17.88	13.26	55.54	19.81	37.51	13.91	55.8	20.07	27.8	17.73
40	2024-05-10	58.16	19.79	17.72	13.25	55.41	19.89	39.88	13.83	59.16	21.27	27.42	17.73
41	2024-05-11	59.93	24.36	17.71	13.24	57.5	21.66	41.76	14.87	68.39	24.54	27.2	17.82
42	2024-05-12	62.99	24.36	17.69	13.24	57.8	21.96	41.48	15.19	68.49	24.08	26.95	17.86
43	2024-05-13	62.03	23.39	17.7	14.12	55	20.36	33.69	15.08	59.64	22.41	27.01	17.86
44	2024-05-14	62.8	23.59	17.72	14.96	57.31	21.7	29.16	15.06	69.01	23.75	26.7	17.82
45	2024-05-15	68.41	27.37	18.06	15.82	56.94	24.67	26.61	15.45	67.71	23.72	26.54	17.76
46	2024-05-16	69.91	28.88	18.48	15.82	58.33	25.66	26.8	15.75	70.37	26.87	26.96	17.77
47	2024-05-17	70.47	30.02	18.85	14.96	56.79	22.5	26.58	15.71	65.45	25.04	27.16	17.73
48	2024-05-18	70.06	29.6	19.06	14.77	52.75	18.12	27.1	15.36	53.33	18.9	27.08	17.7
49	2024-05-19	68.6	28.13	20.02	14.13	58.33	22.9	27.15	13.68	69.48	25.39	27.03	17.6
50	2024-05-20	69.51	27.57	19.99	14.11	55.55	21.07	28.08	13.65	63.34	22.2	27.04	17.6
51	2024-05-21	71.41	28.13	22.29	14.11	57.62	22.33	25.76	13.59	69.45	24.02	27.09	17.6
52	2024-05-22	71.98	26.24	20.25	14.11	57.72	22.42	24.69	15.92	68.84	22.94	27.09	17.6
53	2024-05-23	73.29	26.42	20.23	14.13	57.13	22.18	23.74	16.62	67.99	23.72	27.3	17.6
54	2024-05-24	70.63	27.86	20.24	14.14	58.11	23.75	25.15	16.38	67.32	26.27	27	17.58
55	2024-05-25	66.87	27.69	20.24	14.14	58.14	23.06	25.35	14.99	67.07	25.03	26.13	17.54
56	2024-05-26	63.93	26.23	20.21	14.14	58.3	24.15	25.57	14.99	67.77	27.22	26.27	17.54
57	2024-05-27	63.93	27.92	20.26	14.15	58.32	23.04	25.93	14.95	67.78	25.14	26.37	17.54

58	2024-05-28	65.43	27.82	20.24	14.15	57.92	21.29	26.06	14.8	68.66	22.69	26.4	17.56
59	2024-05-29	69.35	27.5	20.15	14.49	58.21	22.24	26.56	14.64	70.61	24.13	26.96	17.6
60	2024-05-30	70.47	28.13	20.01	15.01	58.34	22.25	26.98	14.51	70.61	23.96	26.88	17.6
61	2024-05-31	71.37	28.72	20.29	14.55	58.93	23.82	26.55	14.56	71.2	26.07	26.83	17.6
62	2024-06-01	73.29	30.02	20.58	13.56	61.17	22.82	26.69	14.64	72.5	25.02	26.83	17.6
63	2024-06-02	73.29	30.02	20.55	13.55	61.07	23.79	25.33	14.62	72.5	26.28	26.81	17.6
64	2024-06-03	71.68	29.04	20.51	13.54	60.34	22.21	25.65	15.05	71.53	24.25	26.95	17.62
65	2024-06-04	68.6	27.19	22.96	13.55	60.14	21.75	25.44	15.93	69.66	22.94	27.48	17.65
66	2024-06-05	67.35	25.27	20.84	14.2	60.03	21.83	25.75	15.83	68.41	23.5	27.52	17.7
67	2024-06-06	67.1	24.36	20.78	15.58	60.72	22.49	25.54	15.74	68.92	24.06	26.9	17.74
68	2024-06-07	67.67	24.36	20.85	15.6	62.23	21.58	26.56	15.73	70.62	22.72	26.05	17.67
69	2024-06-08	69.03	24.32	20.95	15.6	62.84	21.76	26.25	15.24	70.62	22.8	26.22	17.67
70	2024-06-09	71.41	24.36	NA	15.58	64.33	22.96	25.73	14.79	70.61	25.39	26.46	17.67
71	2024-06-10	73.09	25.63	20.7	15.62	62.68	21.09	25.32	14.79	72.31	22.08	26.41	17.67
72	2024-06-11	75.16	27.19	20.18	15.65	64.94	25.24	26.14	14.7	74.39	28.08	26.59	17.67
73	2024-06-12	72.47	24.5	20.7	15.64	62.52	21.78	25.06	14.54	74.39	24.51	26.41	17.67
74	2024-06-13	71.41	23.42	20.92	15.65	64.4	22.91	25.52	13.36	74.39	24.91	26.38	17.66
75	2024-06-14	73.03	25.04	20.81	16.69	62.41	20.65	25.67	10.73	71.7	21.8	26.88	17.74
76	2024-06-15	74.22	26.25	20.75	17.45	59.26	20.05	25.53	10.79	69.67	21.1	27.49	17.79
77	2024-06-16	74.22	26.25	20.86	17.47	62.67	21.57	25.33	10.69	69.66	23.3	27.53	17.79
78	2024-06-17	71.46	24.86	20.84	17.45	59.27	19.84	25.08	10.35	67.93	20.75	27.46	17.79
79	2024-06-18	66.73	22.47	20.84	14.36	59.1	19.63	25.19	10.09	64.94	23.51	27.63	17.81
80	2024-06-19	64.97	22.47	20.85	12.3	56.75	19.03	24.66	10.08	67.02	30.76	28.28	17.74
81	2024-06-20	62.99	20.82	22.17	14.61	57.26	19.09	24.95	10.06	68.73	30.76	29.25	17.69
82	2024-06-21	62.99	17.98	18.16	13.64	57.47	18.98	25.31	10.05	68.73	25.38	30.65	17.66
83	2024-06-22	61.97	17.89	18.25	13.44	56.05	19.45	20.01	11.2	67.96	19.98	26.72	17.7
84	2024-06-23	59.25	19.6	18.3	12.9	60.41	21.32	26.27	12.5	65.89	23.23	26.19	17.71
85	2024-06-24	59.6	19.14	18.25	12.93	59	20.5	26.45	12.52	65.89	21.99	26.16	17.7
86	2024-06-25	65.8	18.65	18.24	12.94	57.61	19.72	26.56	12.53	65.89	21	26.16	17.68
87	2024-06-26	67.69	18.61	18.17	12.94	56.67	19.08	28.02	13.05	67.76	19.77	26.42	17.71
88	2024-06-27	68.45	18.64	18.14	12.93	54.17	18.93	29.69	14.24	67.82	19.18	26.64	17.78
89	2024-06-28	62.35	17.93	17.52	12.16	53.86	18.18	28.92	15.29	60.07	21.27	25.83	17.73
90	2024-06-29	60.65	17.92	16.97	11.52	54	18.18	29.02	15.27	58.35	30.87	25.2	17.7
91	2024-06-30	60.65	17.83	16.97	11.52	55.18	18.79	29.11	15.26	58.34	30.84	25.22	17.7
92	2024-07-01	63.72	17.92	16.86	12.28	54.54	18.27	29.06	15.26	60.44	30.32	25.83	17.75
93	2024-07-02	63.23	18.45	17.13	13.82	56.15	18.81	30.08	15.28	63.47	24.82	27.13	17.82
94	2024-07-03	60.59	19.3	17.44	14.87	56.81	19.09	29.08	15.27	64.07	19.11	27.84	17.85
95	2024-07-04	61.08	18.86	17.26	14.26	56.5	18.98	28.95	15.28	60.95	19.12	27.36	17.81
96	2024-07-05	57.84	18.68	16.85	12.87	54.92	18.57	29.29	15.28	58.35	18.58	26.53	17.72
97	2024-07-06	57.84	18.63	16.85	12.86	54.99	18.56	29.47	15.28	58.34	18.69	26.57	17.72
98	2024-07-07	57.84	19	16.86	12.84	54.81	18.83	29.44	15.24	58.34	19.44	26.49	17.72
99	2024-07-08	52.42	19.64	17.45	14.23	57.37	19.96	29.65	15.24	54.25	20.66	26.48	17.72
100	2024-07-09	53.68	18.34	17.96	15.45	54.48	18.14	29.72	15.22	56	18.93	26.94	17.76
101	2024-07-10	57	19.06	18.75	15.54	55.39	19.14	29.83	15.22	60.51	19.55	28.6	17.93
102	2024-07-11	55.03	18.43	18.79	14.69	54.12	18.39	33.53	15.18	59.29	18.2	29.17	17.99
103	2024-07-12	56.51	20.23	18.39	14.71	54.89	19.04	31.82	15.04	60.77	18.7	28.86	18.02
104	2024-07-13	56.09	20.95	17.97	13.99	53.69	18.39	31.98	15.23	60.77	18.4	27.88	17.98
105	2024-07-14	53.16	21.58	17.54	12.79	53.03	17.97	32.33	15.21	58.35	18.25	27.26	17.85
106	2024-07-15	55.65	21.94	17.63	13.8	53.7	18.29	30.97	15.19	59.85	19.11	27.25	17.99
107	2024-07-16	57.84	23.23	17.66	14.69	56.23	19.44	27.53	15.21	61.17	20.65	27.26	18.12
108	2024-07-17	61.25	20.77	17.08	13.53	51.97	17.78	27.52	15.21	62.91	18.06	27.95	18.08
109	2024-07-18	65.69	22.08	17.18	13.68	54.25	18.64	27.78	15.22	65.81	19.88	29.35	18.12
110	2024-07-19	67.68	22.25	17.43	14.51	54.92	19.13	27.67	15.24	67.14	19.4	30.14	18.17
111	2024-07-20	63.46	20.28	16.88	12.78	51.97	23.82	26.93	15.27	61.18	17.91	28.63	18.05
112	2024-07-21	60.59	19.31	17.73	14.24	50.89	27.15	26.53	15.3	59.01	17.3	27.37	18.15
113	2024-07-22	58.74	19.76	17.88	14.16	51.71	23.84	26.81	15.31	57.04	17.46	26.54	18.12
114	2024-07-23	54.56	20.42	17.81	14.6	51.68	17.18	26.86	15.33	52.23	18.11	26.53	17.95
115	2024-07-24	51.75	20.57	18	15.35	52.64	17.62	26.71	15.34	49.36	17.63	27.1	17.88
116	2024-07-25	50.35	21.06	17.74	13.37	52.94	17.78	27.26	15.38	47.94	18.2	26.43	17.98
117	2024-07-26	51.46	21.98	17.9	13.56	55.06	18.46	28.47	15.34	47.94	18.81	26.43	17.98
118	2024-07-27	54.1	20.26	18.22	14.07	52.09	17.77	29.04	15.35	50.65	17.67	27.13	18.08
119	2024-07-28	54.1	19.72	18.1	14.09	50.17	17.05	28.83	15.34	51.72	16.84	27.49	18.12
120	2024-07-29	52.81	21.72	17.92	13.73	52.6	18.01	28.96	15.34	50.1	18.19	27.87	18.14
121	2024-07-30	52.27	22.48	17.96	13.74	53.99	18.46	29.36	15.26	50.2	19.19	28.18	18.09
122	2024-07-31	55.97	22.03	18.52	14.96	54.93	18.56	29.3	15.28	56.44	18.88	27.38	17.91
123	2024-08-01	55.97	16.68	18.35	14.98	53.43	18.39	29.03	15.28	56.44	18.38	27.43	17.91
124	2024-08-02	53.35	13.07	17.9	15.64	52.33	18.04	29.02	15.29	53.8	18.05	28.77	18.09
125	2024-08-03	50.55	21.1	17.29	16.33	51.94	17.79	28.85	15.29	50.56	17.69	28.56	18.21
126	2024-08-04	48.48	21.06	16.42	16.79	51.64	17.53	28.96	15.29	47.93	17.46	27.42	18.24

127	2024-08-05	48.76	21.57	17.81	16.65	53.4	18.28	29.26	15.28	48.28	18.52	27.51	18.27
128	2024-08-06	55.97	21.19	19.87	14.87	55.81	19.98	29.64	15.27	57.39	18.62	31.29	18.92
129	2024-08-07	53.08	20.72	19.59	14.39	52.48	17.9	29.19	15.27	53.99	17.92	29.38	19.09
130	2024-08-08	50.35	20.81	19.26	13.94	57.21	21.08	28.83	15.27	50.77	18.07	27.48	19.23
131	2024-08-09	50.35	22.69	19.47	13.96	64.95	27.16	27.58	15.29	50.77	19.69	27.48	19.22
132	2024-08-10	55.17	22.09	17.45	15.05	57.32	23.27	28.32	15.3	54.24	19.3	28.96	19.65
133	2024-08-11	56.91	22.08	16.95	15.43	51.68	18.57	28.94	15.29	55.49	18.82	29.59	19.78
134	2024-08-12	61.06	20.4	18.65	14.89	52.16	18.25	30.23	15.29	59.27	18.83	27.5	19.58
135	2024-08-13	64.23	23.5	18.69	15.19	52.5	19.16	29.78	15.28	60.83	20.57	27.96	19.37
136	2024-08-14	63.11	21.16	17.39	15.09	50.12	18.54	29.31	15.29	60.35	18.87	28.3	19.11
137	2024-08-15	57.84	33.79	18.55	14.38	46.76	18.33	29.45	15.3	57.38	19.05	28.07	18.9
138	2024-08-16	57.84	29.31	22.92	14.38	52.97	19.05	29.67	15.3	57.38	19.78	28.13	18.91
139	2024-08-17	57.84	23	23.25	14.36	51.96	18.97	29.44	15.39	57.38	20.8	28.81	18.93
140	2024-08-18	57.84	23.73	19.96	14.35	NA	NA	NA	NA	NA	NA	NA	NA
141	2024-08-19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
142	2024-08-20	62.52	22.19	18.93	14.7	52.67	20.13	29.86	15.28	63.05	20.38	27.31	18.71
143	2024-08-21	65.16	26.12	18.88	14.04	54.43	20.67	29.39	15.29	64.03	22.65	27.4	18.71
144	2024-08-22	65.04	23.43	17.31	13.71	51.86	19.35	29.29	15.31	65.04	19.96	27.46	18.72
145	2024-08-23	65.63	25.13	15.68	13.76	51.6	19.59	29.58	15.37	64.05	18.79	27.44	18.71
146	2024-08-24	70.01	33.79	14.21	13.88	48.66	17.29	29.07	15.4	66.82	17.19	27.54	18.71
147	2024-08-25	70.01	33.79	14.2	13.88	48.45	17.22	28.93	15.43	66.82	17.03	27.6	18.7
148	2024-08-26	62.28	26.94	14.93	13.97	50.88	18.17	29.29	15.47	59.27	18.1	29.72	19.37
149	2024-08-27	61.59	21.6	15.87	13.96	51.85	18.8	29.46	15.45	59.27	18.87	29.6	19.39
150	2024-08-28	61.59	21.48	17.53	13.95	51.28	18.47	29.42	15.4	59.27	18.56	29.59	19.38
151	2024-08-29	65.02	20.32	19.45	14.36	51.07	17.78	29.24	15.41	63.17	18.99	29.05	19.38
152	2024-08-30	69.07	21.2	20.05	14.87	51.52	18.89	28.99	15.42	67.78	19.23	28.3	19.4
153	2024-08-31	70.49	22.83	19.75	14.85	52.38	19.16	35.45	15.41	69.19	20.37	28.37	19.37
154	2024-09-01	71.88	22.12	19.41	14.93	52.68	19.35	38.11	15.36	70.61	20.74	28.43	19.36
155	2024-09-02	67.64	21.16	16.46	14.84	51.5	18.56	31.17	15.35	65.28	18.77	28.44	19.35
156	2024-09-03	64.39	19.99	16.24	14.79	49.38	17.38	24.03	15.33	61.16	17.31	28.35	19.34
157	2024-09-04	67.91	21.8	17.7	14.69	50.58	18.1	26.26	15.34	64.9	25.98	28.64	19.96
158	2024-09-05	67.39	20.03	18.38	14.52	49.98	17.89	28.02	15.33	64.37	17.96	28.44	19.31
159	2024-09-06	62.52	21.77	15.87	14.58	50.99	18.12	28.09	15.32	58.33	18.68	28.43	19.37
160	2024-09-07	65.18	22.65	17.53	14.67	51.79	18.78	28.2	15.32	54.51	19.53	28.38	19.37
161	2024-09-08	66.81	20.88	29.93	14.73	50.79	18.22	28.25	15.32	53.33	18.83	28.43	19.38
162	2024-09-09	70.94	22.17	26.66	14.7	52.43	18.53	28.22	15.3	47.43	19.24	28.61	19.37
163	2024-09-10	67.06	20.36	26.72	14.66	49.91	17.88	27.53	15.31	31.41	17.65	28.73	19.33
164	2024-09-11	61.59	23.4	26.85	14.79	52.18	19.16	27.77	15.31	41.52	19.38	28.65	19.35
165	2024-09-12	61.59	23.31	26.87	14.74	52.08	19.07	27.99	15.25	51.83	19.8	28.65	19.34
166	2024-09-13	64.22	23	26.83	14.74	52.95	19.19	27.72	15.27	57.44	19.67	28.8	19.35
167	2024-09-14	67.2	22.29	26.81	14.64	54.06	20.13	27.94	15.28	55.24	19.75	29.03	19.36
168	2024-09-15	67.2	21.9	26.75	14.67	52.66	19.05	27.88	15.32	55.7	19.22	28.94	19.34
169	2024-09-16	67.2	24.42	22.93	18.34	54.76	19.99	27.89	15.33	57.21	20.93	29.03	19.36
170	2024-09-17	67.2	27.12	17.58	16.15	53.86	20.12	27.83	15.36	49.63	20.03	29.38	19.36
171	2024-09-18	67.2	32.72	18.17	16.16	53.98	20.26	29.92	19.44	57.11	19.86	32.35	23.18
172	2024-09-19	68.45	26.21	19.54	16.12	56.97	21.86	37.83	17.45	61.98	24.86	29.34	26.37
173	2024-09-20	70.95	24.17	20.11	16.18	56.35	20.87	34.91	18.2	62.11	22.81	29.32	26.97
174	2024-09-21	70.94	19.08	21.54	16.24	55.26	20.27	29.33	18.23	61.79	22.8	29.33	24.47
175	2024-09-22	70.94	23.9	21.33	16.22	53.28	19.48	29.27	18.3	60.75	20.98	29.32	25.01
176	2024-09-23	67.85	23.75	19.67	16.21	53.3	19.78	29.25	18.38	53.04	21.54	29.34	23.57
177	2024-09-24	66.26	21.11	18.57	16.15	51.34	18.26	28.93	18.31	53.9	18.74	29.36	23.12
178	2024-09-25	66.26	21.81	19.2	16.05	51.99	18.92	28.92	18.36	54.41	19.66	29.38	22.83
179	2024-09-26	62.41	20.98	19.61	16.24	50.46	20.8	28.63	18.43	38.09	18.43	29.36	22.95
180	2024-09-27	59.71	21.25	19.33	16.23	49.89	27.15	27.05	18.44	40.04	18.56	29.36	23.13
181	2024-09-28	59.71	22.65	19.2	16.22	51.77	27.15	25.47	18.46	45.21	19.47	29.37	23.22
182	2024-09-29	59.71	23.01	19.23	16.18	53.02	27.15	25.55	18.48	52.6	19.69	29.36	23.31
183	2024-09-30	64.13	24.72	19.68	16.15	54.07	24.02	25.97	18.52	59.9	22.41	29.38	21.96
184	**Prescribed Standards**	**100**	**60**	**80**	**80**	**100**	**60**	**80**	**80**	**100**	**60**	**80**	**80**
185	Maximum Value	75.16	33.79	38.82	22.78	73.54	36.2	41.76	19.44	81.43	43.76	32.35	26.97
187	Minimum Value	48.48	13.07	14.2	11.52	46.76	17.05	18.25	7.64	31.41	16.84	22.56	11.96
189	Geometric Mean	66.77	27	21.28	15.89	55.87	21.49	27.74	14.38	63.08	22.96	27.32	18.17
190	Median	64.21	23.42	19.37	14.7	54.92	20.26	28.02	15.27	63.47	21.27	27.37	17.91
191	Standard Deviation	42.77	39.75	10.27	9.8	4.68	3.81	4.01	2.37	9.06	5.47	1.62	2.22
194	Data Availablity %	98.91	98.91	98.36	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91

Annexure -IV

Maharashtra Pollution Control Board

Site Name: M/s.Adani Power Limited

From Date: 2024/04/01 To Date: 2024/09/30 (Average Daily Value)

Report Name: Custom Report, M/s.Adani Power Limited

Report Created by APMPL on 2024-11-14 11:57:45

Sl No.	Time	Stack_1 Boiler_1 PM - (mg/Nm3	Stack_1 Boiler_1 NOx - (mg/Nm3	Stack_1 Boiler_1 SO2 - (mg/Nm3	Stack_2 Boiler_2 PM - (mg/Nm3	Stack_2 Boiler_2 NOx - (mg/Nm3	Stack_2 Boiler_2 SO2 - (mg/Nm3	Stack_3 Boiler_3 PM - (mg/Nm3	Stack_3 Boiler_3 NOx - (mg/Nm3	Stack_3 Boiler_3 SO2 - (mg/Nm3	Stack_4 Boiler_4 PM - (mg/Nm3	Stack_4 Boiler_4 NOx - (mg/Nm3	Stack_4 Boiler_4 SO2 - (mg/Nm3	Stack_5 Boiler_5 PM - (mg/Nm3	Stack_5 Boiler_5 NOx - (mg/Nm3	Stack_5 Boiler_5 SO2 - (mg/Nm3
1	2024-04-01	37.45	329.4	847.97	37.99	307.38	847.65	36.76	330.74	834.16	37.52	315.72	818.09	39.79	357.7	834.8
2	2024-04-02	37.32	328.38	845.37	38.25	309.62	853.37	37.34	333.54	842.89	37.45	315.34	816.58	39.61	356.78	831.79
3	2024-04-03	38.17	332.66	860.54	38.55	311.89	859.35	37.74	335.36	848.77	38.87	322.57	840.52	40.75	362.53	851.18
4	2024-04-04	37.1	327.13	841.35	20	161.66	447.47	37.35	333.46	842.85	38.73	321.78	838.41	40.85	363.03	852.66
5	2024-04-05	37.64	330.24	851.41	38.43	310.57	856.99	37.21	332.84	840.83	38.19	319.11	829.19	40.41	360.74	845.25
6	2024-04-06	37.4	328.95	846.76	38.69	312.92	862.27	37	331.85	837.55	38.51	320.66	834.58	40.42	360.91	845.66
7	2024-04-07	37.51	329.55	848.73	38.68	312.58	861.92	37.56	334.43	845.96	38.22	319.33	830.18	40.69	362.18	849.89
8	2024-04-08	37.21	327.92	843.57	38.31	310	854.45	37.29	333.33	842.33	37.82	317.37	823.24	39.92	358.37	836.95
9	2024-04-09	37.05	327.21	840.58	37.88	306.59	845.47	37.44	333.99	844.46	37.84	317.38	823.59	39.65	357.04	832.91
10	2024-04-10	36.82	325.91	836.53	38.63	312.48	861.05	37.47	334.07	844.71	37.04	313.32	809.99	39.27	355.03	826.14
11	2024-04-11	36.63	324.78	832.93	38.41	310.52	856.32	37.47	334.14	844.81	36.82	312.24	806.4	39.19	354.61	824.57
12	2024-04-12	36.59	324.46	831.95	38.52	311.75	858.92	37.62	334.68	846.68	36.84	312.43	806.77	38.98	353.67	821.39
13	2024-04-13	37.1	327.54	841.59	38.17	308.63	851.69	9.86	82.95	208.5	37.69	316.51	820.68	40.06	359.01	839.29
14	2024-04-14	36.68	325.17	833.84	38.54	311.49	859.1				37.11	313.77	811.55	39.41	355.97	829.22
15	2024-04-15	37.72	330.64	852.67	38.73	313.28	863.18		SD		38.34	319.95	831.98	40.9	363.25	853.25
16	2024-04-16	37.33	326.01	841.95	38.35	310.02	853.78				37.75	313.97	817.79	40	355.57	835.5
17	2024-04-17	37.04	327.13	840.38	37.52	303.79	838	35.34	323.91	812.19	37	313.06	808.9	39.38	355.46	827.39
18	2024-04-18	36.31	323.27	827.41	37.06	300.05	828.28	35.27	323.71	811.41	36.74	311.85	804.92	38.86	353.12	819.6
19	2024-04-19	36.43	323.79	829.5	37.19	300.9	830.87	35.35	324.07	812.49	36.4	310.26	799.51	39.01	353.83	821.78
20	2024-04-20	35.52	319.11	812.84	36.7	297.07	820.54	34.39	319.56	798.05	35.72	306.74	787.95	38.18	349.62	807.98
21	2024-04-21	36.45	323.87	829.57	37.38	302.23	834.7	35.55	325.04	815.66	36.78	312.06	805.93	38.99	353.69	821.58
22	2024-04-22	37.38	328.81	846.52	38.23	309.27	852.65	36.82	331.03	835.13	37.93	317.79	824.76	40.03	358.81	838.58
23	2024-04-23	31.1	274.64	705.34	31.79	257.15	709.78	30.62	275.54	693.7	37.14	313.86	811.77	39.26	355.1	826.24
24	2024-04-24					SD					38.29	319.66	830.78	40.01	358.88	838.58
25	2024-04-25	37.97	331.75	856.86	38.67	312.72	861.94	37.22	332.66	840.46	38.67	321.28	836.64	41.07	363.92	856.34
26	2024-04-26	35.61	319.63	814.76	36.8	297.84	822.72	34.41	319.75	798.58	36.1	308.61	794.01	38.15	349.41	807.45
27	2024-04-27	36.71	325.29	834.32	37.57	304.39	838.89	35.75	325.96	818.63	37.51	315.72	817.65	39.38	355.67	828.33
28	2024-04-28	36.63	324.54	832.75	37.73	305.23	842.24	36.11	327.58	823.86	37.47	315.53	817.24	38.86	353.06	819.49
29	2024-04-29	36.91	326.62	838.05	37.84	306.21	844.59	35.91	326.74	821.09	37.39	315	815.64	39.41	355.76	828.29
30	2024-04-30	36.33	323.12	827.42	37.12	300.23	829.26	34.87	321.88	805.45	36.41	310.25	799.45	38.51	351.32	813.6
31	2024-05-01	35.16	317.12	806.2	36.14	292.5	808.88	33.67	316.2	787.09	35.33	304.83	781.59	37.52	346.32	796.73
32	2024-05-02	36.15	322.7	824.25	37.16	299.96	829.92	34.66	320.78	801.69	36.7	311.72	804.47	38.52	351.27	813.57
33	2024-05-03	36.64	324.8	833.05	37.44	302.76	836.23	35.35	324.04	812.54	36.99	313.12	808.95	39.07	354.03	822.55
34	2024-05-04	36.68	324.98	833.76	37.53	303.6	838.42	35.49	324.65	814.63	36.89	312.76	807.81	38.96	353.6	820.99
35	2024-05-05	37.14	327.47	842.43	37.78	305.65	843.37	36.12	327.65	824.12	37.33	314.82	815.11	39.29	355.23	826.47
36	2024-05-06	37.73	330.45	852.63	38.06	307.69	849.06	34.13	318.42	794.25	37.87	317.55	824.13	39.73	357.42	833.98
37	2024-05-07	35.73	320.25	816.61	36.34	294.03	813.18	33.21	314.04	780.11	35.74	306.94	788.52	37.88	348.18	803.19
38	2024-05-08	36.16	322.36	824.35	37.11	300.79	829.34	34.93	322.12	806.23	36.28	309.56	797.24	38.51	351.3	813.23
39	2024-05-09	35.76	320.33	817.67	36.75	297.61	821.92	34.56	320.45	800.75	36.33	309.81	798.13	37.94	348.49	804.36
40	2024-05-10	35.69	319.8	815.91	36.41	294.93	814.66	33.84	316.96	789.61	35.92	307.8	791.38	37.78	347.67	801.67
41	2024-05-11	37.35	328.57	845.83	37.92	306.73	846.08	36.06	327.41	823.3	37.61	316.26	819.76	39.54	356.47	830.8
42	2024-05-12	37.47	329.34	848.21	38.04	307.4	848.32	36.64	330.04	831.75	37.71	316.66	820.82	39.61	356.81	831.77
43	2024-05-13	35.68	319.62	815.62	36.45	295.19	815.55	33.91	317.37	790.86	35.75	306.99	788.49	37.81	347.71	801.81
44	2024-05-14	35.83	320.56	818.69	36.67	296.65	820.02	34.51	320.16	799.95	36	308.26	793.06	38.33	350.35	810.38
45	2024-05-15	38.08	332.27	858.97	38.31	309.93	854.35	36.67	330.26	832.48	38.26	319.26	829.8	40.5	361.22	846.36
46	2024-05-16	36.45	323.95	829.47	36.76	297.37	822.01	34.73	321.19	803.22	36.44	310.39	800.07	38.47	351.08	812.85
47	2024-05-17	36.35	323.39	827.83	36.96	299.26	826.31	34.7	321.08	802.9	36.45	310.45	800.37	38.37	350.61	811.41
48	2024-05-18	36.31	323.07	826.85	36.96	299.37	826.33	34.91	322.07	806.09	36.62	311.33	803.11	38.42	350.9	812.29
49	2024-05-19	35.91	320.97	819.68	37.47	303.7	837.24	35.29	323.91	812.1	37.06	313.51	811.23	39.22	354.92	825.12
50	2024-05-20	35.75	320.24	816.91	36.6	296.09	818.64	34.64	320.8	802.1	36.23	309.32	796.67	38.19	349.78	808.29
51	2024-05-21	36.12	322.22	823.54	36.9	298.61	824.95	34.77	321.38	803.77	36.35	309.93	798.47	38.4	350.86	811.85
52	2024-05-22	37.16	327.81	842.55	37.79	305.63	843.64	36.05	327.43	823.36	37.73	316.88	821.92	39.7	357.31	833.54
53	2024-05-23	37.54	329.66	849.41	38.11	308.23	850.05	36.14	327.81	824.39	38.01	318.22	826.04	39.64	356.99	832.61
54	2024-05-24	37	326.82	839.6	37.44	302.84	836.3	35.69	325.74	817.94	37.46	315.56	817.15	39.41	355.85	828.57
55	2024-05-25	35.67	319.3	814.96	36.78	297.63	822.5	34.08	317.98	793.05	36.11	308.85	794.58	38.22	350.04	809.23
56	2024-05-26	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
57	2024-05-27	34.09	311.51	787.25	35.54	287.99	796.74	32.55	310.77	770.01	34.41	300.41	766.43	36.47	341.11	779.51
58	2024-05-28	34.82	315.65	800.51	36.06	292.29	807.48	33.19	313.95	779.94	35.19	304.18	779.1	37.18	344.71	791.5
59	2024-05-29	35.76	320.64	817.6	36.82	297.82	823.28	34.15	318.41	794.33	36.03	308.4	793.29	38.18	349.64	807.81
60	2024-05-30	37.25	328.11	844.19	37.25	301.36	832.15	35.78	326.15	819.22	37.25	314.46	813.51	39.67	357.06	832.69
61	2024-05-31	36.06	321.95	822.52	37.03	299.72	827.7	34.74	321.26	803.48	36.15	309.03	795.39	38.35	350.5	810.78

62	2024-06-01	37.2	327.65	843.12	37.94	306.99	846.94	35.76	325.94	818.37	37.39	315.19	816.03	39.68	357.17	832.97
63	2024-06-02	37.29	328.32	845.11	37.91	306.62	846.26	36	327.22	822.64	37.82	317.36	823.16	39.98	358.68	838.02
64	2024-06-03	38.07	331.96	858.85	38.5	311.48	858.51	37.17	332.66	840.06	38.36	320.07	832.39	40.54	361.39	846.91
65	2024-06-04	36.49	324.24	830.58	37.49	303.27	837.19	35.19	323.41	810.36	36.77	312.06	805.45	38.6	351.79	815.21
66	2024-06-05	35.05	316.39	804.11	36.19	293.14	810.08	33.36	314.7	782.48	35.16	303.99	778.58	37.3	345.26	793.2
67	2024-06-06	36.24	322.47	825.77	37.16	300.45	830.22	34.81	321.62	804.56	36.46	310.61	800.3	38.66	352.11	815.94
68	2024-06-07	35.21	317.72	807.2	36.32	294.04	813.02	33.82	316.92	789.47	35.56	306	785.37	37.5	346.34	796.6
69	2024-06-08	35.2	317.51	807.59	36.37	294.62	813.98	33.89	317.26	790.53	35.47	305.62	783.99	37.62	346.91	798.89
70	2024-06-09	34.05	311.35	786.26	35.27	286.03	791.11	32.12	309	763.83	33.87	297.54	757.35	36.05	339.06	772.93
71	2024-06-10	32.83	304.94	764.2	34.41	279.36	773.13	30.92	303.22	745.44	27.13	242.9	613.54	34.95	333.49	754.3
72	2024-06-11	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
73	2024-06-12	35.08	316.47	804.29	36.42	295.29	814.95	33.95	316.8	790.17				37.52	345.97	797.24
74	2024-06-13	33.61	309.09	778.53	35.05	284.66	786.34	31.96	308.19	761.44		RSD		35.94	338.3	770.31
75	2024-06-14	34.18	311.86	788.33	35.38	286.96	793.17	32.5	310.58	769.25				36.45	340.81	779.13
76	2024-06-15	35.06	316.93	804.65	36.15	292.74	809.09	33.7	316.43	787.92				37.51	346.14	796.8
77	2024-06-16	36.26	322.94	826.49	37.22	301.38	831.83	35.04	322.65	807.89				38.89	353.2	820.3
78	2024-06-17	36.7	325.21	834.12	37.55	304.06	838.71	35.38	324.27	813.02	27.49	236.29	606.74	39.37	355.55	827.56
79	2024-06-18	35.18	317.46	806.83	36.3	294.06	812.41	33.62	315.97	786.44	35.11	303.76	777.92	37.27	345.12	792.9
80	2024-06-19	34.86	315.74	801	36.39	295.02	814.24	33.59	315.82	785.75	34.93	302.88	775.12	37.08	344.17	789.75
81	2024-06-20	34.11	311.32	787.19	35.76	289.67	801.23	32.75	311.94	773.47	34.31	299.79	764.51	36.38	340.63	778.32
82	2024-06-21	34.21	312.62	789.56	36.53	295.75	817.13	32.67	311.59	772.44	34.33	299.86	764.94	36.52	341.33	780.26
83	2024-06-22	36.62	324.88	832.67	37.48	303.4	837.18	35.41	324.45	813.72	36.96	313.02	808.51	38.9	353.26	820.19
84	2024-06-23	36.43	323.84	829.47	37.21	300.73	831.4	34.77	321.33	803.81	36.5	310.74	801.28	38.51	351.3	813.55
85	2024-06-24	35.77	320.52	817.57	36.91	298.43	825.09	34.47	319.99	799.55	36.16	309.07	795.41	38.4	350.77	811.6
86	2024-06-25	35.71	320.35	816.38	36.53	295.73	817.18	34.33	319.26	797.11	36.08	308.53	794.03	38.31	350.35	810.4
87	2024-06-26	35.77	320.35	817.27	36.66	297.22	820.05	34.32	319.28	797.02	36.1	308.79	794.46	38.01	348.87	805.09
88	2024-06-27	34.86	316.01	801.39	36.11	292.52	808.49	33.46	315.19	783.86	35.39	305.23	782.59	37.3	345.26	793.19
89	2024-06-28	34.26	312.53	790.39	35.84	290.65	802.8	33.08	313.51	778.49	34.71	301.76	771.32	37.04	344.01	789.01
90	2024-06-29	34.28	312.83	790.73	35.61	288.62	797.98	32.99	313	776.96	34.69	301.65	770.77	36.75	342.56	784.54
91	2024-06-30	33.84	310.35	782.89	35.45	287.25	794.72	32.79	312.07	773.81	34.44	300.33	766.47	36.45	341.07	779.25
92	2024-07-01	33.39	308.29	774.78	34.85	282.8	782.17	31.77	307.41	758.85	33.62	296.34	753.23	35.74	337.5	767.65
93	2024-07-02	34.21	312.01	789.27	35.44	287.36	794.61	32.64	311.43	771.76	34.51	300.6	767.36	36.37	340.64	778.01
94	2024-07-03	34.95	316.13	802.6	36.02	291.5	806.27	33.62	316.03	786.79	35.35	304.94	782.22	37.2	344.75	791.8
95	2024-07-04	36.49	324.15	830.21	37.31	301.71	833.42	35.45	324.61	814.1	36.99	313.07	808.83	38.88	353.14	819.57
96	2024-07-05	34.86	315.7	800.95	36.36	294.67	813.62	33.77	316.71	788.71	35.27	304.53	780.58	37.52	346.32	796.78
97	2024-07-06	34.05	311.59	786.63	35.59	288.56	797.79	32.8	312.12	774.06	34.14	298.86	761.7	36.5	341.25	780
98	2024-07-07	34.53	314.11	795.18	36.33	294.25	813.14	33.78	316.72	788.79	34.75	301.79	771.78	36.87	343.13	785.94
99	2024-07-08	35.96	321.56	820.72	37.78	305.26	843.23	36.03	327.23	822.66	36.33	309.95	798.36	38.42	350.89	812.09
100	2024-07-09	35.93	321.31	820.45	36.65	296.77	819.81	34.75	321.34	803.6	36.18	309.08	795.87	38.23	349.91	808.67
101	2024-07-10	35.72	319.94	816.48	36.56	295.78	817.78	34.6	320.59	801.19	36.4	310.19	799.33	38.08	349.14	806.37
102	2024-07-11	35.7	319.97	816.15	36.48	295.12	816.15	34.36	319.44	797.5	36.19	309.18	795.93	38.1	349.3	806.86
103	2024-07-12	34.32	312.91	791.46	35.78	290.05	801.62	33.07	313.35	778.1	34.95	302.92	775.1	36.96	343.71	788.19
104	2024-07-13	33.99	311.17	785.25	35.5	287.45	795.69	32.53	310.9	770.33	34.31	299.73	764.42	36.47	341.08	779.66
105	2024-07-14	33.63	309.36	778.85	32.73	265.51	734.88	32.15	309.11	764.27	34.01	298.26	759.38	36.02	338.93	772.35
106	2024-07-15	34.8	315.17	799.76				33.37	314.8	782.61	35.2	304.17	779.28	37.14	344.33	789.96
107	2024-07-16	37.41	328.72	846.86				36.47	329.37	829.5	38.23	319.45	830.04	39.63	356.94	832.18
108	2024-07-17	36.44	323.83	829.5				35.31	323.99	812.17	36.97	313.19	809.11	38.78	352.73	818.26
109	2024-07-18	36.12	321.94	823.57				34.78	321.45	803.94	36.47	310.63	800.6	38.1	349.35	807.05
110	2024-07-19	35.57	319.35	813.74				33.75	316.65	788.75	35.62	306.4	786.55	37.56	346.67	798.12
111	2024-07-20	36.04	321.9	822.32				34.54	320.35	800.47	36.33	310.02	798.62	38.25	350.11	809.41
112	2024-07-21	34.43	313.26	792.92				33.47	315.31	784.24	35.16	304.15	778.93	37.45	346.12	796.4
113	2024-07-22	34.6	314.56	796.39				32.94	312.81	776.25	35.16	304.04	778.82	37.14	344.49	790.77
114	2024-07-23	34.48	313.62	794.09				32.72	311.82	773	35.24	304.46	780.02	37.09	344.24	789.96
115	2024-07-24	34.91	315.81	801.97				32.97	312.88	776.48	35.21	304.21	779.31	37.32	345.36	793.46
116	2024-07-25	35.12	316.88	805.69		SD		33.75	316.63	788.5	35.14	303.94	778.79	37.2	344.79	791.55
117	2024-07-26	34.17	312.14	788.49				33.21	314.03	780.18	34.94	302.85	774.74	36.8	342.84	785.18
118	2024-07-27	35.12	317.26	805.77				33.39	314.92	783.08	35.32	304.8	781.39	37.34	345.43	793.99
119	2024-07-28	34.85	325.48	796.28				33.21	312.75	776.15	35.34	303.56	777.39	37.24	343.64	788
120	2024-07-29	34.88	315.33	800.94				33.25	314.32	780.94	34.99	303.2	775.79	36.91	343.24	786.73
121	2024-07-30	36.09	322.17	823.29				34.51	320.21	799.79	36.41	310.35	799.65	38.28	350.23	810.03
122	2024-07-31	35.97	321.46	821.02				34.93	322.12	806.06	36.75	312	805.31	38.67	352.17	816.4
123	2024-08-01	34.93	315.62	801.75				33.32	314.62	782.04	35.19	304.21	778.85	37.09	344.21	789.83
124	2024-08-02	33.85	310.47	782.9				32.07	308.67	763.02	33.94	297.91	758.16	36.01	338.77	771.71
125	2024-08-03	33.77	309.92	781.47				32.19	309.21	764.52	33.9	297.67	757.72	36.04	339	772.24
126	2024-08-04	33.52	308.91	776.96				31.7	306.83	757.29	33.63	296.37	753.19	35.68	337.15	766.2
127	2024-08-05	34.75	315.13	799.21				33.61	315.93	786.14	35.52	305.93	785.02	37.02	343.87	788.89
128	2024-08-06	35.91	321.39	820.24				34.55	320.39	800.55	36.81	312.34	806.23	37.86	348.2	803.42
129	2024-08-07	35.95	321.57	820.85				34.79	321.46	804.2	36.74	311.99	805.2	37.85	347.96	802.02
130	2024-08-08	36.1	322.37	823.62				34.73	321.2	803.36	36.64	311.45	803.38	38.4	350.79	811.68
131	2024-08-09	36.76	325.47	835.23				34.92	322.14	806.33	36.72	311.83	804.56	38.49	351.27	813.39
132	2024-08-10	36.53	324.22	831.37	36.65	296.58	819.76	35.55	325.08	815.69	37	313.26	809.43	38.47	351.1	812.86
133	2024-08-11	35.58	319.57	814.1	36.32	294.05	812.76	34.3	319.14	796.56	35.87	307.53	790.64	37.44	346.01	796.09

134	2024-08-12	35.19	317.26	806.87	36.52	295.68	816.83	34.63	320.76	801.77	36.53	310.97	801.86	38.12	349.44	807.01
135	2024-08-13	36.68	325.06	833.96	37.34	302.1	834.1	35.82	326.33	819.81	37.29	314.72	814.35	39.59	356.77	832
136	2024-08-14	36.75	325.71	835.19	37.64	304.77	840.67	36.6	330	831.56	37.97	318.1	825.6	38.99	353.86	821.83
137	2024-08-15	36.08	322.28	823.28	36.81	298.02	822.98	35.15	323.19	809.55	36.46	310.65	800.65	38.14	349.47	807.41
138	2024-08-16	37.00	326.93	839.59	37.41	302.68	835.76	36.4	328.98	828.11	37.61	316.39	819.89	39.29	355.2	826.57
139	2024-08-17	36.93	326.4	838.43	37.9	306.48	845.91	36.68	330.24	832.48	37.76	317.07	822.21	39.35	355.55	827.44
140	2024-08-18	35.73	320.31	816.84	36.83	297.92	823.39	35.63	325.5	817.01	36.8	312.29	806.06	38.59	351.75	814.86
141	2024-08-19	35.48	319.12	812.35	36.12	292.34	808.6	34.33	319.33	797.16	35.31	304.77	781.36	37.18	344.8	791.69
142	2024-08-20	35.67	319.81	815.58	36.22	293.04	810.71	34.17	318.56	794.85	35.85	307.48	790.23	37.67	347.25	799.98
143	2024-08-21	36.53	324.39	831.22	37.21	301.06	831.71	35.2	323.47	810.61	36.74	311.99	805.04	38.58	351.66	814.54
144	2024-08-22	36.61	324.47	832.32	37.37	302.06	834.61	35.93	326.76	821.13	37.84	317.52	823.39	39.79	357.72	834.74
145	2024-08-23	35.11	316.88	805.4	35.96	291.05	805.38	33.17	313.89	779.91	35.37	305.12	782.39	37.17	344.65	791.44
146	2024-08-24	33.19	306.89	770.55	34.61	280.76	776.91	31.41	305.63	753	33.35	294.95	748.46	31.75	300.52	681.03
147	2024-08-25	22.11	207.58	516.54	34.14	277.14	767.1	30.84	302.9	744.24	32.79	292.12	739.21			
148	2024-08-26				35.37	286.71	792.95	32.67	311.45	771.79	34.33	299.82	764.73			
149	2024-08-27		RSD		35.3	286.09	791.43	32.35	310.11	767.36	34.35	299.85	765.28		RSD	
150	2024-08-28				35.32	286.19	791.9	32.47	310.62	769.01	34.27	299.48	763.53			
151	2024-08-29				35.06	284.57	786.74	32.05	308.57	762.62	34.13	298.77	761.41			
152	2024-08-30	19.85	179.17	454.28	36.26	293.03	811.54	34.11	318.35	793.79	35.62	306.4	786.82	37.31	345.52	794.08
153	2024-08-31	34.48	313.79	794.33	35.87	290	803.23	33.03	313.33	777.83	34.76	302.02	772.06	36.73	342.43	783.79
154	2024-09-01	33.29	307.59	772.81	34.59	280.68	776.92	31.45	305.75	753.43	33.23	294.41	746.44	35.39	335.68	761.66
155	2024-09-02	33.96	311.12	785.06	35.27	285.88	790.87	32.3	309.74	766.56	34.33	299.81	764.67	36.17	339.61	774.87
156	2024-09-03	35.11	317.11	805.68	36.12	292.51	808.85	33.87	317.18	790.26	35.53	305.88	784.82	37.2	344.8	792.07
157	2024-09-04	34.88	315.83	801.55	35.98	291.41	805.98	33.69	316.31	787.48	35.09	303.57	777.49	37.21	344.93	792.19
158	2024-09-05	34.93	316.14	802.64	35.92	290.82	804.19	33.67	316.25	787.23	35.25	304.42	780.08	37.23	344.9	792.02
159	2024-09-06	34.99	316.34	803.54	36.3	293.91	812.36	33.6	315.83	785.9	35.17	304.1	778.93	37.23	344.87	792.07
160	2024-09-07	34.24	312.5	789.79	35.36	286.41	792.81	32.44	310.38	768.52	34.33	299.9	764.89	36.13	339.56	774.47
161	2024-09-08	33.22	307.19	771.5	34.64	281.13	777.76	31.4	305.53	752.87	33.26	294.56	747.41	35.6	336.84	765.18
162	2024-09-09	34.51	313.79	794.59	35.95	291.35	805.16	33.28	314.45	781.59	34.81	302.34	772.85	26.14	245.7	556.86
163	2024-09-10	35.51	318.96	812.32	36.59	296.12	818.22	34.28	319.06	796.31	35.78	307.13	789.15			
164	2024-09-11	33.91	310.75	783.76	35.19	285.57	789.39	32.57	311.08	770.87	34.47	300.61	767.29		SD	
165	2024-09-12	35.16	317.17	806.38	35.98	291.5	805.62	33.37	314.82	782.67	35.4	305.15	782.65			
166	2024-09-13	35.09	316.91	805.64	36.08	292.65	808.04	33.78	316.64	788.65	35.27	304.55	780.52	37.17	344.67	791.62
167	2024-09-14	35.67	319.91	815.8	36.53	296.02	817.38	34.43	319.83	798.85	35.79	307.12	789.2	38.08	349.14	806.32
168	2024-09-15	35.23	317.67	807.89	36.31	293.99	812.52	34.29	319.01	796.45	35.53	305.94	785.34	37.54	346.55	797.51
169	2024-09-16	36.66	324.91	833.2	37.62	304.27	839.95	26.7	241	605.26	36.73	311.78	804.91	38.9	353.32	820.27
170	2024-09-17	35.63	319.7	814.68	37.02	299.88	827.4	35.04	322.72	808.12	36.6	311.26	803.02	38.4	350.81	811.79
171	2024-09-18	36.74	325.45	834.81	37.44	302.95	836.15	35.69	325.72	817.81	37.24	314.43	813.43	39.01	354.04	822.55
172	2024-09-19	37.62	329.99	851.06	38.28	309.37	853.89	37.23	332.97	841.16	38.24	319.42	830.06	40.1	359.24	839.55
173	2024-09-20	37.84	331.09	854.56	38.19	308.8	851.73	37.11	332.27	838.94	38.27	319.69	830.96	40.21	359.72	841.46
174	2024-09-21	38.19	332.79	860.81	38.31	309.82	854.55	37.47	334.19	844.94	38.63	321.37	836.41	38.46	351.05	812.64
175	2024-09-22	36.62	324.75	832.52	37.87	305.93	845.18	36.92	331.52	836.42	38.12	318.93	828.29	39.79	357.82	835.25
176	2024-09-23	35.83	330.53	813.26	37.56	301.64	832.9	35.96	325.56	817.47	37.17	312.79	808.03	39.23	353.35	820.63
177	2024-09-24	36.99	326.59	839.16	37.73	305.66	842.66	35.99	327.12	822.32	37.03	313.41	809.97	39.28	355.32	826.89
178	2024-09-25	36.59	324.7	832.16	37.3	301.67	833.33	35.93	326.87	821.47	36.8	312.25	805.72	38.73	352.46	817.29
179	2024-09-26	34.50	313.8	794.58	36.28	293.79	812.08	33.82	316.9	789.39	34.98	303.17	775.95	37.35	345.48	793.82
180	2024-09-27	34.31	312.95	791.57	35.62	288.55	798.35	33.02	313.13	777.16	34.78	302.2	772.42	36.77	342.63	784.61
181	2024-09-28	33.48	308.6	776.21	34.76	281.83	780.22	31.8	307.38	758.79	33.7	296.73	754.46	35.79	337.84	768.78
182	2024-09-29	35.51	319.05	812.95	36.47	295.6	816.27	34.12	318.42	794.46	35.59	306.18	785.73	37.41	345.89	795.47
183	2024-09-30	36.32	323.24	826.99	36.69	296.8	820.57	34.77	321.33	803.65	36.35	310.15	798.93	38.33	350.42	810.46
184	Prescribed Standards	50	450	-	50	450	-	50	450	-	50	450	-	50	450	-
185	Maximum Value	38.19	332.79	860.81	38.73	313.28	863.18	37.74	335.36	848.77	38.87	322.57	840.52	41.07	363.92	856.34
187	Minimum Value	19.85	179.17	454.28	20.0	161.66	447.47	9.86	82.95	208.5	27.13	236.29	606.74	26.14	245.7	556.86
189	Geometric Mean	34.63	310.34	791.28	31.2	252.58	697.94	33.58	311.32	777.77	35.06	299.66	771.25	36.48	333.69	771.09
190	Median	35.75	320.35	816.84	36.52	295.68	816.83	34.36	319.44	797.5	36.18	309.08	795.87	38.18	349.64	807.98
191	Standard Deviation	6.02	52.76	136.37	13.15	106.44	293.22	5.3	48.94	123.15	6.14	51.59	133.62	7.73	71.66	166.72
194	Data Availablity %	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91	98.91

RSD - Reserv shutdown

SD- Shutdown for maintenance

Ash Generation and Utilization

(For the Period from 1st April 2024 to Sept 2024)

Ash generation and utilization (in LMT)					Mode of ash utilization and utilization in each mode (in LMT)					
Sl. No.	Month	Ash Generation	Ash Utilization	% age Utilization	Fly ash-based products viz. bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels.	Cement manufacturing, ready mix concrete (RMC- Fine Ash)	Construction of road and fly over embankment, Ash and Geo-polymer based construction material	Filling up of low lying area;	Filling of mine voids;	Export of ash to other countries (Cenosphere)
1	APR' 24	4.17982	4.63001	110.77	0.17087	0.90921	0.60032	2.42558	0.52391	0.00012
2	MAY' 24	4.19874	5.02521	119.68	0.27099	0.89193	0.72012	2.57500	0.56718	-
3	JUN' 24	3.68470	4.73892	128.61	0.29949	0.82308	0.54313	2.52577	0.54746	-
4	JUL' 24	3.53791	2.46001	69.53	0.20813	0.88114	0.57988	0.57014	0.22072	-
5	AUG' 24	3.82832	2.35058	61.40	0.19435	1.04663	0.54065	0.37101	0.19794	-
6	SEPT' 24	3.87028	2.98479	77.12	0.26009	0.95684	0.66112	0.88432	0.22242	-
TOTAL		**23.29977**	**22.18952**	**95.23%**	**1.40392**	**5.50882**	**3.64522**	**9.35182**	**2.27962**	0.00012

EFFORTS TO MAXIMIZE ASH UTILIZATION

Dedicated Ash Handling System & Ash Utilization Cell (AHP & AUC) have been established to collect, transport, and utilize all types of ash. We have made the following practices/efforts to maximize the ash utilization: -

Ash Collection, Storage, Loading & Transportation Facilities:

- Dry Ash collected from ESP through pneumatically conveying system & stored in Silos (6 x 1700MT) and (2 x 700MT)
- Railway line with rapid loading system (Telescopic chutes) provided under Silos for fast loading to Bulkers, Rail wagons & tippers with ash conditioners to add moisture in each silo. Bulk quantity of ash dispatched through Rail wagons to various cement manufacturers. With the above measures, pollution-free loading & transporting activities are being taken place.
- Parallel Rail loading and bulker/truck loading is being done in Silos.
- In-motion & Static weighbridge provided for fast rake weighment.
- 01 additional dedicated LOCO Diesel Engine procured to maximize ash utilization by rail.
- An Ultra-Fine ash separation system installed with bagging facilities.
- Bottom Ash Collection Pit provided for utilisation of Bottom ash.
- HCSD System along with Silos provided.

Ash Utilisation Avenue/user base

- We have engaged M/s Ambuja Cement for ash utilization activities to 100 % ash utilization Fly Ash is being provided to various cement manufacturers across Maharashtra, Chhattisgarh, Andhra Pradesh, Karnataka, Madhya Pradesh, Uttar Pradesh, Rajasthan, Gujarat, etc.
- Fly ash is being utilized by over 180 ash brick manufacturers in Gondia and Bhandara districts of Maharashtra, as well as Balaghat and Seoni districts of Madhya Pradesh, for producing fly ash-based products like bricks and paver blocks. Additionally, bottom ash is provided to red brick manufacturers as a substitute of sand.
- Pond ash and bottom ash are being utilized in the construction of flyovers, embankments, and roads. We currently supplying ash for several road projects, including the Balaghat to Gondia section 4-lane for NH-543 under the Bharat Mala project by M/s KCPL, as well as the Barbik Road Project, Atcon Road Project, JMC Road Project Limited, and HG Infra.
- We also provide bottom ash to MOIL India for mine void stowing.
- Nearby landowners have been requested to provide ash for land reclamation and low-lying area filling. We ensure suitable protection measures are taken, which include ash filling patterns, surface run-off control, compaction, soil covering, water sprinkling, and subsequent plantation, all in accordance with MoEF&CC and CPCB guidelines.
- To further promote ash utilization, we support research and monitor the impact on the local environment:
  - CSIR – NEERI, Nagpur has been engaged to conduct a hydrogeological and fly ash leachability study in the areas surrounding the ash dyke and land reclamation site.
  - A study on bioaccumulation and biomagnification is also being conducted by NEERI Nagpur.

Awareness /Publicity:

- Awareness sessions conducted to Self-help groups under LRP program coming from Balaghat (MP) on fly ash & ash-based product manufacturing like brick & paver blocks etc.
- Regular awareness training & awareness programs organized for ash Transporters, Users & vendors who are engage in Fly ash handling, loading & use in Land reclamation, brick manufacturing etc.
- We also conducted meeting with Transporters, User & other vendors to resolve any issues raised and discussion on maximisation of Ash utilisation.
- An awareness session was conducted on June 8, 2023, focusing on ***"solutions to plastic pollution and the utilization of ash in forestry, agriculture, and other areas" by*** eminent speakers from CSIR-NEERI, Nagpur, ICFRE - TFRI, Jabalpur, and Fly Ash Cluster, Chandrapur.
- A Workshop on ***"Land Restoration, Desertification, and Drought Resilience"*** were also conducted for nearby progressive farmers and Adani Power employees. Distinguish speakers from Tropical Forest Research Institute, Jabalpur and Soil Science, College of Agriculture, Nagpur were facilitated the workshop. An awareness session was also conducted in the Village Panchayat Berdipar.

Way Forward for Maximize Ash Utilization

- We are developing Ash Research Park and engaged Tropical Forest Research Institute (TFRI) – Jabalpur for "Implementable Forestry Research for Ash Utilization Promotion and Development of Research Park" at APL Tiroda. It will create potential to ash utilisation in the agroforestry sector.

Groundwater Recharge through Rainwater Harvesting -at APL, Tiroda

Sr. No.	Month	Rainfall (mm)	Rainwater Harvesting (m3)
1	Apr-24	76.8	28.06
2	May-24	29.6	10.82
3	Jun-24	50	18.27
4	Jul-24	736.4	269.08
5	Aug-24	512.6	187.30
6	Sep-24	290	105.97
Total		**1695.4**	**619.50**

Rainwater Harvesting Structure within plant premises

ADANI POWER TIRODA,

GREEN BELT & PLANTATION DETAILS

A. **Total Green Belt Area Covered**: 258 HA
   - **Total Nos of Tree Planted**: 8,78,506 Nos.
   - **FY 2024-25: 1,65,324 Nos.**

B. Land scaping & Horticulture Area
   - **Shrubs Planted**: 60418 Sq. Meter
   - **Green Carpet**: 3,22,194 Sq. Meter

Plant & Shrubs Species used for Green Belt Development

Tree Species		Shrubs species
Scientific Name	**Common Name**	**Common Name**
Psidium guavajava	Amarud	Bogunvellia
Punica granatum	Anar	Rose
Manilkara zapota	Chikoo	Furcaria
Phyllanthus emblica	Anola	Cassia biflora
Tamarindus indica	Imali	Lagerstromia indica
Mangifera indica	Mango	Shrubs
Citrus Limon	Lemon	Flower Beds.
Carissa carandas	Karaunda	Lawn
Callistemon Lanceolatus	Bottle Brush	Exora Tall
Casuarina	Beach She-Oak	Golden Ficus
Samania saman	Monkey pod tree	Ficus panda
Ficus religeosa	Sacred Fig	Group plants
Casia siamia	Kassod	Nerium Bell
Bauhinia purpuria	Kachnar	(Yellow Ghanti Kanher)
Ficus bengalensis	Bargadh	Hibiscus
Delonix regia	Gulmohar	Musanda
Azadiracta Indica	Neem	Nolino
Spathodia	kadam	Furcaria
Peltaphorum	Pila Gulmohar	Junifer
Acacia auriculiformis	Babul	Ficus Golden
Jackranda	Neela Gulmohar	Ficus blackiana
Neolamarckia cadamba	Kadam	Headge
Arecaceae	Coconut, Fistal palm, Royal Palm, etc	
Ficus Golden	Pilkhan	
Mimusops elengii	Bakul	
Cassia fistula	Kaisiya Phistula	
Tectona grandis (Teak)	sagoan	
Ficus Religiosa	Peepal	
Bambusa Vulgaris	Bamboo	
Alstonia Scholaris	Satparni	
Earleaf Acacis	Australian babul	

Conocarpus Erectus	Buttonwood
Eucalyptus Teriticornis	Neelgiri
Pongame Oiltree	Karanj
Hardwicka	Anjan
Nyctanthes arbor-tristis	Parijat
Syzygium Cumini	Jamun
Annona Squamosa	Sitaphal
Psidium	Guava
Milletia Pinnata	Karanj
Terminalia Arjuna	arjuna
Erythrina Variegata	Pangara

Tree Plantation Drive - एक पेड़ माँ के नाम

5th Jun'24

2000 saplings were planted in the Township and Plant premises on 5th June - 2024




Plantation under 100 million trees programme around Ash Dyke & Plant Boundary during 2023-24.


Gap filling in Ash pond-2 Reclaimed Dyke.

Front and surrounding View of the Admin Building

Near Unit 4 & 5 and Switchyards

Towrds Reservoire - 1 site

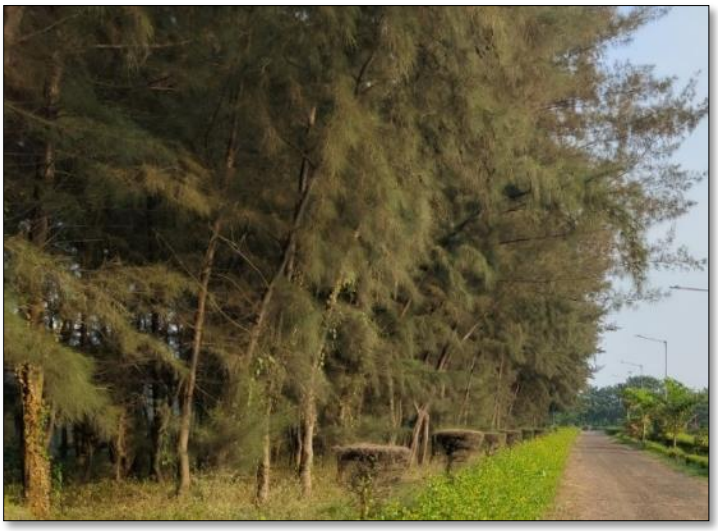

Near Switch Yards


BGT to Electrical Workshop


Aerial View of Cooling Tower Area

Ash Dyke 2 Reclaimed with Green Belt


OHC & Main Canteen Site




Near Cooling Tower


Avenue Plantation near BTG Area

Near BTG area Unit # 5

DM Plant Road

BTG#1 to Store Road

Ash Slury Pump House Unit# 4 & 5 Area

Mango Orchard

CHP to BTG Road

From Gate # 3 (Material Road) to Ash Pond

Sapling distribution under CSR effort to Nearby

Main Gate # 2

Tree Saplings Distribution under CSR through Adani Foundation - Tiroda

ADANI POWER LIMITED - TIRODA

ENVIRO ANALYSTS & ENGINEERS PVT. LTD.
(NABET, NABL Accredited and MoEFCC Approved)
CIN No-U28900MH1995PTC093129 | GST No-27AAACE6597R1ZP
B-1003,Enviro House,10th Flr, Western Edge II, W.E. Highway, Borivali (E), Mumbai-400066

ENV/SWT/2024-25/038 **Date: 2.07.2024**

ISSUED TO:
M/s ADANI POWER LIMITED
Plot no. - A1, Tirora Growth Center, MIDC, Tirora,
Dist.: Gondia, Maharashtra – 441 911. India

Sample Particulars : Fly Ash Sample

Sample Registration Date	: **21.06.2024**	Analysis Starting Date :	22.06.2024
Quantity received	: **2 kg**	Analysis Completion Date :	2.07.2024
Sample Type:	: **Solid Waste**	Sampled by :	EAEPL Representative

Toxicity Characteristic Leaching Procedure (TCLP)

TEST RESULTS

Sr. No.	Test Parameters	Measurement Unit	Results	Standards as per Schedule II of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
1	pH Value (1:2.5 ration in water)	-	8.85	-
2	Alumina (as Al_2O_3)	% by mass	21.8	-
3	Iron Oxide (as Fe_2O_3)	% by mass	4.77	-
4	Silica (as SiO_2)	% by mass	46.3	-
5	Reactive Silica	% by mass	0.012	-
6	Magnesium Oxide (as MgO)	% by mass	1.395	-
7	Sulphur Trioxide (as SO_3)	% by mass	0.036	-
8	Alkalies (as Na_2O)	% by mass	3.22	-
9	Chloride (as Cl)	% by mass	0.031	-
10	Loss on ignition (as LOI)	% by mass	0.023	-
11	Cadmium	mg/kg	0.118	1.0
12	Chromium	mg/kg	2.52	5.0
13	Arsenic	mg/kg	0.699	5.0
14	Mercury	mg/kg	0.0252	0.2
15	Selenium	mg/kg	Nil	1.0
16	Cyanide	mg/kg	Nil	20
17	Cobalt	mg/kg	11.88	80.0
18	Copper	mg/kg	10.35	25
19	Lead	mg/kg	1.66	5.0
20	Molybdenum	mg/kg	Nil	350
21	Nickel	mg/kg	11.2	20.0
22	Tin	mg/kg	Nil	-

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

ENV/SWT/2024-25/038 **Date: 2.07.2024**

ISSUED TO:
M/s ADANI POWER LIMITED
Plot no. - A1, Tirora Growth Center, MIDC, Tirora,
Dist.: Gondia, Maharashtra – 441 911. India

Sample Particulars : Fly Ash Sample

Sample Registration Date	: **21.06.2024**	Analysis Starting Date :	22.06.2024
Quantity received	: **2 kg**	Analysis Completion Date :	2.07.2024
Sample Type:	: **Solid Waste**	Sampled by :	EAEPL Representative

Toxicity Characteristic Leaching Procedure (TCLP)

Sr. No.	Test Parameters	Measurement Unit	Results	Standards as per Schedule II of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
23	Barium	mg/kg	51.5	100
24	Calcium	mg/kg	123058	-
25	Iron	mg/kg	33342.3	-
26	Zinc	mg/kg	59.8	-
27	Aluminium	mg/kg	115322	-
28	Manganese	mg/kg	7.62	10.0
29	Antimony	mg/kg	Nil	-
30	Beryllium	mg/kg	Nil	-

Note: 1. Results relate to tested sample only.
2. Test report should not be reproduced partially.

REMARKS: Based upon request of party, sample was tested for above mentioned parameters only.

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

enviro
ENVIRO ANALYSTS & ENGINEERS PVT. LTD.
(NABET, NABL Accredited and MoEFCC Approved)
CIN No-U28900MH1995PTC093129 | GST No-27AAACE6597R1ZP
B-1003,Enviro House,10th Flr, Western Edge II, W.E. Highway, Borivali (E), Mumbai-400066

ENV/SWT/2024-25/038/2 **Date: 2.07.2024**

ISSUED TO:
M/s ADANI POWER LIMITED
Plot no. - A1, Tirora Growth Center, MIDC, Tirora,
Dist.: Gondia, Maharashtra – 441 911. India

Sample Particulars : Bottom Ash Sample

Sample Registration Date	: **21.06.2024**	Analysis Starting Date	: 22.06.2024
Quantity received	: **2 kg**	Analysis Completion Date	: 2.07.2024
Sample Type:	: **Solid Waste**	Sampled by	: EAEPL Representative

Toxicity Characteristic Leaching Procedure (TCLP)
TEST RESULTS

Sr. No.	Test Parameters	Measurement Unit	Results	Standards as per Schedule II of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
1	pH Value (1:2.5 ration in	-	8.55	-
2	Alumina (as Al_2O_3)	% by mass	18.14	-
3	Iron Oxide (as Fe_2O_3)	% by mass	4.12	-
4	Silica (as SiO_2)	% by mass	46.40	-
5	Reactive Silica	% by mass	0.0107	-
6	Magnesium Oxide (as MgO)	% by mass	1.34	-
7	Sulphur Trioxide (as SO_3)	% by mass	0.047	-
8	Alkalies (as Na_2O)	% by mass	3.11	-
9	Chloride (as Cl)	% by mass	0.063	-
10	Loss on ignition (as LOI)	% by mass	0.027	-
11	Cadmium	mg/kg	0.119	1.0
12	Chromium	mg/kg	2.57	5.0
13	Arsenic	mg/kg	0.17	5.0
14	Mercury	mg/kg	0.0112	0.2
15	Selenium	mg/kg	Nil	1.0
16	Cyanide	mg/kg	Nil	20
17	Cobalt	mg/kg	11.37	80.0
18	Copper	mg/kg	11.71	25
19	Lead	mg/kg	3.61	5.0
20	Molybdenum	mg/kg	Nil	350
21	Nickel	mg/kg	11.22	20.0
22	Tin	mg/kg	Nil	-

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

ENV/SWT/2024-25/038/2 **Date: 2.07.2024**

ISSUED TO:
M/s ADANI POWER LIMITED
Plot no. - A1, Tirora Growth Center, MIDC, Tirora,
Dist.: Gondia, Maharashtra – 441 911. India

Sample Particulars : Bottom Ash Sample

Sample Registration Date	: **21.06.2024**	Analysis Starting Date	: 22.06.2024
Quantity received	: **2 kg**	Analysis Completion Date	: 2.07.2024
Sample Type:	: **Solid Waste**	Sampled by	: EAEPL Representative

Toxicity Characteristic Leaching Procedure (TCLP)

TEST RESULTS

Sr. No.	Test Parameters	Measurement Unit	Results	Standards as per Schedule II of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
23	Barium	mg/kg	73.3	100
24	Calcium	mg/kg	125115	-
25	Iron	mg/kg	28798.8	-
26	Zinc	mg/kg	63.3	-
27	Aluminium	mg/kg	95960.6	-
28	Manganese	mg/kg	6.15	10.0
29	Antimony	mg/kg	Nil	-
30	Beryllium	mg/kg	Nil	-

Note: 1. Results relate to tested sample only.
2. Test report should not be reproduced partially.

REMARKS: Based upon request of party sample was tested for above mentioned parameters only.

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

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ENVIRO ANALYSTS & ENGINEERS PVT. LTD.
(NABET, NABL Accredited and MoEFCC Approved)
CIN No-U28900MH1995PTC093129 | GST No-27AAACE6597R1ZP
B-1003,Enviro House,10th Flr, Western Edge II, W.E. Highway, Borivali (E), Mumbai-400066

ENV/SWT/2024-25/038/1 **Date: 2.07.2024**

ISSUED TO:
M/s ADANI POWER LIMITED
Plot no. - A1, Tirora Growth Center, MIDC, Tirora,
Dist.: Gondia, Maharashtra – 441 911. India

Sample Particulars : Pond Ash Sample

Sample Registration Date	: **21.06.2024**	Analysis Starting Date	: 22.06.2024
Quantity received	: **2 kg**	Analysis Completion Date	: 2.07.2024
Sample Type:	: **Solid Waste**	Sampled by	: EAEPL Representative

Toxicity Characteristic Leaching Procedure (TCLP)

TEST RESULTS

Sr. No.	Test Parameters	Measurement Unit	Results	Standards as per Schedule II of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
1	pH Value (1:2.5 ration in water)	-	8.28	-
2	Alumina (as Al_2O_3)	% by mass	20.44	-
3	Iron Oxide (as Fe_2O_3)	% by mass	4.27	-
4	Silica (as SiO_2)	% by mass	51.70	-
5	Reactive Silica	% by mass	0.011	-
6	Magnesium Oxide (as MgO)	% by mass	1.02	-
7	Sulphur Trioxide (as SO_3)	% by mass	0.039	-
8	Alkalies (as Na_2O)	% by mass	3.32	-
9	Chloride (as Cl)	% by mass	0.049	-
10	Loss on ignition (as LOI)	% by mass	0.024	-
11	Cadmium	mg/kg	0.117	1.0
12	Chromium	mg/kg	2.13	5.0
13	Arsenic	mg/kg	0.55	5.0
14	Mercury	mg/kg	0.013	0.2
15	Selenium	mg/kg	Nil	1.0
16	Cyanide	mg/kg	Nil	20
17	Cobalt	mg/kg	11.17	80.0
18	Copper	mg/kg	12.28	25
19	Lead	mg/kg	2.33	5.0
20	Molybdenum	mg/kg	Nil	350
21	Nickel	mg/kg	11.16	20.0
22	Tin	mg/kg	Nil	-

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

ENV/SWT/2024-25/038/1 **Date: 2.07.2024**

ISSUED TO:
M/s ADANI POWER LIMITED
Plot no. - A1, Tirora Growth Center, MIDC, Tirora,
Dist.: Gondia, Maharashtra – 441 911. India

Sample Particulars : Pond Ash Sample

Sample Registration Date	: **21.06.2024**	Analysis Starting Date	: 22.06.2024
Quantity received	: **2 kg**	Analysis Completion Date	: 2.07.2024
Sample Type:	: **Solid Waste**	Sampled by	: EAEPL Representative

Toxicity Characteristic Leaching Procedure (TCLP)

TEST RESULTS

Sr. No.	Test Parameters	Measurement Unit	Results	Standards as per Schedule II of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
23	Barium	mg/kg	61.8	100
24	Calcium	mg/kg	129134	-
25	Iron	mg/kg	29847.3	-
26	Zinc	mg/kg	98.1	-
27	Aluminium	mg/kg	108127.6	-
28	Manganese	mg/kg	6.74	10.0
29	Antimony	mg/kg	Nil	-
30	Beryllium	mg/kg	Nil	-

Note: 1. Results relate to tested sample only.
2. Test report should not be reproduced partially.

REMARKS: Based upon request of party sample was tested for above mentioned parameters only.

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

Half yearly update

Adani Foundation, Tirora

Key programmatic accomplishments

- **Community Health**
- Education
- Sustainable Livelihoods
- Community Development
- Climate action

Multi-Specialty Medical Health Diagnostic and Treatment camps	General Medical Health Camp	Regular OPD	Blood Sugar Testing
- **4** camps - **1115** Patients	- **11** Camps - **851** Patients	- MHCU visites **25** villages - Consulted **17586** patients	**225** Test

Blood Donation Mega Drive:-Successfully conducted the blood donation drive and collected **1641** units of blood at APL Tirora



- Community Health
- **Education**
- Sustainable Livelihoods
- Community Development
- Climate action

Summer Camp:- **100** students of Z.P School

Special day celebration:- Celebrated 6 special days with **2458** students of **15 Z.P schools**

Project UDAAN :- **936** students, from 18 schools and institutions

Scholarship support to **80 meritorious Students**

Aamchi Shala Aadarsh Shala (Documentary film):- Ongoing

Strengthening public education infrastructure:- Waiting for SO



- Community Health
- Education
- **Sustainable Livelihoods**
- Community Development
- Climate action

Dairy development
- 17.52 lakh liters milk
- Turnover - Rs. 7.74 Crore
- Benefiting 1997 Farmers
- Employment- 132 women SHG
- Total Turnover - 41.40 Cr

Kamdhenu
- No of AI - 1182
- Improved calves born - 465
- Cattle health check-up camp- treated 253 Cattles

Organic based Multiple Cropping for Raising Productivity and Farm Income of small and tribal Farmers
- Completed Solar fencing project at tribal village Ghoti
- Protecting 100 acres of farmland
- Benefiting 57 farmers

Pre police and army training for youths
- 100 youths attending theoretical and physical practices
- 15 youths selected in Govt. department
- Up to now 67 students were selected




Women Entrepreneurship Development

- Community Health
- Education
- **Sustainable Livelihoods**
- Community Development
- Climate action

Agarbatti making
- Turnover - 20.32 lakh
- No of SHG -20 SHG

Lac Bangle Making
- Sathwaro mela 2024- Showcased 1000 Products By SHG
- Training- 45 SHG women

Mushroom cultivation
- Training- 16 women SHG attended this training, from tribal village

Vegetable shop
- Turnover - Rs. 8.18 Lakh
- 3 SHG women in Income generation



- Community Health
- Education
- Sustainable Livelihoods
- **Community Development**
- Climate action

Drinking Water Facilities with Borewell & Submersible Pump	Installed water RO purification units
• Completed at **2** villages • Benefiting **3162** villagers	• **6 units** of 50 LPH in Z.P School and Sport academy. Benefiting **1306 students and villagers.** • **2 units** of 500 LPH at 2 village. Benefiting **3380 villagers.**





- Community Health
- Education
- Sustainable Livelihoods
- Community Development
- **Climate action**

❖ **Water Conservation**

Work Detail	Planned (CUM)	Actual (CUM)	Beneficiaries count	Area brought under irrigation (Acre)
Pond-Garada	9240	6110	109	150
Pond - Mundikota	6000	5937	62	150
Stream - Bhiwapur	2800	2773	64	160
Total	**18040**	**14820**	**235**	**460**

❖ The renovation and beautification of pond

❖ **Vruksh Se Vikas- Planting 100 million tree**

24310 Tree plantation	1305 Beneficiaries	190 acres Green cover

Pond Deepening – Garada Village


Pond Deepening – Mundikota Village


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Foundation

Tree Saplings Distribution under CSR through Adani Foundation - Tiroda

ADANI POWER LIMITED - TIRODA

SAKSHAM- ADANI SKILL DEVELOPMENT CENTRE

An initiative of Adani Foundation, a CSR wing of ADANI Group of Companies, A section 8, Non-for-Profit company, **"Adani Skill Development Centre"** is registered on **16th May 2016** to focus on Skill Development activities to contribute to Nation Building to bridge the Skill Gap demand & supply. Adani Skill Development Centre, Tiroda is the first SAKSHAM Skill Centre set up on 14th Dec 2016 and the first one to obtain work orders to train 335 candidates from the Tribal Department (GoM) along with Resume services, Nagpur. The first batch of ASDC Tiroda commenced on 21.04.2017 for imparting Welding and Electrician trade training to I.T.I. passed Tribal Youth of Gondia and Bhandara district.

VISION

- To make everyone Skilled, Employable & Entrepreneur to benefit them in gaining or advancing their career aspiration to uplift the social life of Citizens of India with mapping the demands of Industries of getting Trained Manpower

MISSION

- To create a transformative educational experience for candidates by focusing on bridging the industry skill gap and by creating a collaborative environment open to the free exchange of ideas, where research, creativity, innovation, and entrepreneurship can flourish with a sustainable livelihood.

OBJECTIVE

- Sustainable development in and around the geographical locations of Adani Power Ltd, Tiroda.
- Bridging the wide gap between demand & supply of human resource.
- Spreading awareness regarding availability, needs and vision for career development and education.
- Facilitating, spreading awareness, creating new opportunity to upgrade skills by organizing various skill training in the region.
- Improving overall status of rural youth and women in the society by enhancing their entrepreneurship skills.
- Encouraging & helping local youth to become self-dependent and live a dignified life.
- Building a feeling of harmony in the society by creating a rapport of goodwill, mutual trust and respect.

HIGHLIGHTS

- In our Centre a total of 4319 candidates trained till 30-09-2024.
- In our Centre domain trade 1699 and non-domain trade 2620 candidates trained till date.
- Our trained candidates passed ratio is 100%.
- In our Centre all domain trade trained candidates, three company offers have arrange.
- In our centre all domain trade trained candidate's placement ratio is above 90%.
- We have signed MOU of nearly 17 companies for 1300 candidates and signed our own batch MOU.
- More than 150 stories databank is preserved.
- We conducted an online Job fair (Shares all companies related information) for all trained candidates and parents.

- ❖ As per H.O. instructions and SOP we organize every event like Induction program, celebration of festival, learn with fun activity, alumni meet etc. done on time.
- ❖ In our centre 100% ratio of completing monthly certificates by all staff members.
- ❖ Regular databases are maintained on ERP portals and shared drives.
- ❖ Our centre is authorised centre of testing high pressure welding from Directorate Steam Boiler Maharashtra State.
- ❖ Out of several best methods that are followed at ASDC Tiroda, many of them are told to be implemented at the other centres.

TRAINING STATISTICS:

In the year 2024-25: Apr to Sep 2024,

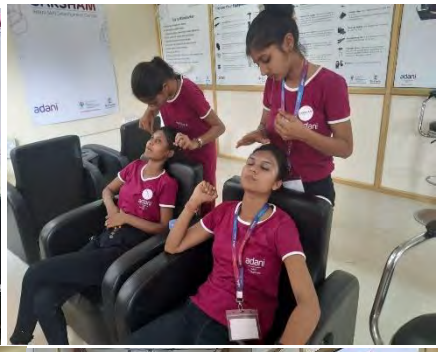
ASDC Tiroda Training and Placement Details							
S. N.	**Trade**	**Total Female**	**Total Male**	**Total Trained**	**Not willing to work /Higher Studies**	**Self Employed**	**Total Placed**
1	Assistant Electrician	28	42	70	3	0	67
2	Welding Technician	26	30	56	2	0	54
3	Beauty Therapist	57	0	57	2	55	0
Total		**111**	**72**	**183**	**7**	**55**	**121**

Glimpse







SAKSHAM

WELCOME
SAKSHAM










Shanti Niketan - I


Stories of SAKSHAMAARTHIs

AKASH DAMAHE, a young boy from a small village in the Gondia district of Maharashtra, was determined to create a good life and achieve a better standard of living. He understood that hard work was essential but was uncertain about the right direction to take toward success. After completing his 12th standard, he tried to secure a spot in various ITIs and B.Sc. programs while also exploring different jobs in search of his place in the world.

After repeated disappointments he encountered ASDC Tiroda mobiliser and introduced him to what Adani Skill Development is and how Akash can avail benefits from skill development training provided under Adani CSR activities through its project Saksham. At first, Akash couldn't believe that even in this competitive world anything can be for free but later he understood the concept of skilling and decided to give it a shot.

It's not uncommon practice that most candidates get enrolled with no plans to continue or leave halfway. But fortunately, in ASDC Tiroda Centre, we do not face any such issues because the students come from distant villages and get advance training facilities along with uniforms and post training placement support. Moreover, the Centre staff have a long, good interaction during counselling which enables them to understand students' mentality and zeal for learning.

Akash too is one of the most dedicated students who decided to get skilled under Assistant Electrician Trade. Akash was smart and understood all the theoretical lectures. He was always attentive and sincere during the practical sessions. In fact, he was also part of all extracurricular activities of the training and spread awareness about the Skill in his neighborhood. Without wasting time after completing his course he got a job in Western Refrigeration Pvt. Ltd. Atgaon, District-Thane, Maharashtra with 11000 PM salaries. Akash is currently working in Samrudhi Highway Tollnaka, Electrical Maintance Deprtment, Nagpur as an Electrician Technician. Now he earns Rs. 32,000 PM. He is currently supporting his family financially.

He gave a message to every youth: don't miss any opportunity of learning, only learning skill is the key to success. Success is not final; It is the courage to continue that counts. SAKSHAM is the best platform to learn more and build confidence in everyone thanks to the ASDC team.

REPORT ON WORLD ENVIRONMENT DAY - 2024

ADANI POWER LIMITED - TIRODA

Programs : 5th - 11th June 2024

Theme : Land Restoration, Desertification and Drought Resilience

Adani Power Tiroda celebrated World Environment Day - 2024 with a week-long program from 5th to 11th June aiming to raise awareness among employees, workers, family members, and nearby villagers about the Protection of our Natural Environment, Resources, and the importance of maintaining Ecological Biodiversity.

The event commenced with an Taking of Mission Life Pledge and Green Rally, followed by a Tree Plantation Drive- **एक पेड़ माँ के नाम**, *Portable Model, Photography, Slogan & Drawing Competition, and Screening of Environmental movies.*

Additionally, there were Spot Drawing Competitions, a TED (Talk) Show, Departmental Spot Quiz Competitions, awareness sessions on waste segregation and handling for housekeeping workers and maids, and a Workshop on Land Restoration, Desertification, and Drought Resilience were conducted for nearby progressive farmers and Adani Power employees. Distinguish speaker from Tropical Forest Research Institute, Jabalpur and Soil Science, College of Agriculture, Nagpur facilitated the workshop. An awareness session was also conducted in the Village Panchayat Berdipar.

Furthermore, 2000 saplings were planted in Township and Plant premises on 5th June and Jute bags distributed to avoid the use plastics bags. Around 800 people were participated in various activities.

Mission Life Pledge and Green Rally, followed by a Tree Plantation Drive- **एक पेड़ माँ के नाम**

Oath Ceremony & Green Rally followed by Tree Plantation Drive.

5th June

Oath Ceremony

Green Rally

Plantation Done by SH.

2000 saplings were planted in the Township and Plant premises on 5th June - 2024

Mission Life Pledge and Green Rally, followed by a Tree Plantation Drive- **एक पेड़ माँ के नाम**

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Jute Bags Distribution

5th June

Jute Bags Distributed by SH

Screening of Environmental Movies & Spot Quiz Competition

6th June

Screening of Environmental Movies &
Spot Quiz Competition : 9 Team participated

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Power

Awareness Session for Housekeeping Worker & Maids

7th June

Awareness Session on Segregation & Handling of Domestic waste for Housekeeping Worker & Maids

Spot Drawing Competition & TED Talk Show

7th June

AVT & other Township Students (Std 01 to Std 05) and Students (Std. 06 to Std. 12)

Model – Wealth from Waste

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Awareness Session – Berdipar Gram Panchayat

8th June

Awareness Session for Nearby Villager
Venue : Berdipar Gram Panchayat

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Workshop : For APLT Employees, Nearby Progressive Farmer

10th June

Session addressed by Station Head

Dr. Avinash Jain & Dr. Nidhi Mehta from TFRI-Jabalpur, Dr. Rajendra Katkar from College of Agriculture, Nagpur

Adani Power Employee, Progressive Farmers & Haritgram Kranti Foundation

Closing Ceremony

11th June

Evaluation of Drawings

Prize Distribution to the participant winners in various competitive activities.

adani Power

लोकमत

अदानी पॉवरतर्फे पर्यावरण दिनानिमित्त विविध कार्यक्रम

वृक्षारोपणावर भर : विविध स्पर्धांमधून केली जनजागृती

लोकमत न्यूज नेटवर्क

तिरोडा : अदानी पॉवर तिरोड्याच्यावतीने जागतिक पर्यावरण दिनानिमित ५ ते ११ जूनदरम्यान पर्यावरण जनजागृतीपर विविध कार्यक्रम घेण्यात आले. कर्मचारी, कामगार, कुटुंबातील सदस्य आणि जवळपासच्या ग्रामस्थांमध्ये पर्यावरण संसाधनांच्या संरक्षणाबद्दल आणि पर्यावरणीय जैवविविधता राखण्याचे महत्त्व याबाबत जनजागृती करण्यात आली.

कार्यक्रमाची सुरुवात शपथ समारंभ आणि ग्रीन रॅलीने करण्यात आली. त्यानंतर वृक्षारोपण मोहीम, पोर्टेबल मॉडेल, फोटोग्राफी, स्लोगन आणि ड्रॉइंग स्पर्धा व पर्यावरणीय चित्रपटांचे स्क्रीनिंग. याव्यतिरिक्त, स्पॉट ड्रॉइंग स्पर्धा, एक टॉक शो होते. विभागीय प्रश्नमंजुषा स्पर्धा, घरकाम करणाऱ्या कामगार आणि मोलकरीण बाईंसाठी कचरा विलगीकरण आणि हाताळणी या विषयावर जागरूकता कार्यक्रम घेण्यात आला. प्रगतिशील शेतकरी आणि अदानी पॉवरच्या कर्मचाऱ्यांसाठी वाळवंटीकरण आणि दुष्काळ निवारण कार्यक्रमाचे आयोजन करण्यात आले होते. ट्रॉपिकल फॉरेस्ट रिसर्च इन्स्टिट्यूट, जबलपूर आणि मृदा विज्ञान, कृषी महाविद्यालय नागपूरच्या वक्त्यांनी मार्गदर्शन केले. ग्रामपंचायत बेरडीपार येथेही जनजागृती कार्यक्रम घेण्यात आला. टाऊनशिप आणि प्लांटच्या आवारात वृक्षारोपण करण्यात आले. प्लास्टिक पिशव्यांचा वापर टाळण्यासाठी ज्यूट पिशव्यांचे वाटप करण्यात आले.

देशोन्नती

अदानी विद्युत प्रकल्पाद्वारे जागतिक पर्यावरण सप्ताह उत्साहात

विविध उपक्रमात ६०० गावकऱ्यांचा सहभाग

तिरोडा : नैसर्गिक पर्यावरण संसाधनांच्या संरक्षणाबद्दल आणि पर्यावरणीय जैवविविधता राखण्याच्या उद्देशाने अदानी विद्युत प्रकल्पाच्या वतीने ५ ते ११ जून या कालावधीत जागतिक पर्यावरण सप्ताह साजरा केला. यावेळी कर्मचारी, कामगार, कुटुंबातील सदस्य तसेच परिसरातील गावकऱ्यांना पर्यावरणाला घेवून जनजागृती करण्यात आली.

कार्यक्रमादी सुरुवात शपथ समारंभ आणि ग्रीन रॅलीने झाली, त्यानंतर वृक्षारोपण मोहीम, पोर्टेबल मॉडेल, फोटोग्राफी, स्लोगन आणि ड्रॉइंग स्पर्धा, आणि पर्यावरणीय चित्रपटांचे स्क्रीनिंग, विभागीय स्पॉट प्रश्नमंजुषा स्पर्धा, घरकाम करणाऱ्या कामगार आणि मोलकरीण यांच्यासाठी कचरा विलगीकरण आणि हाताळणी या विषयावर जागरूकता सत्रे आणि जमीन पुनर्संचयनावर कार्यशाळा, प्रगतीशील शेतकरी आणि अदानी पॉवरच्या कर्मचाऱ्यांसाठी वाळवंटीकरण आणि दुष्काळ निवारणाचे आयोजन करण्यात आले, ट्रॉपिकल फॉरेस्ट रिसर्च इन्स्टिट्यूट, जबलपूर आणि मृदा विज्ञान, कृषी महाविद्यालय नागपूरचे वेगळे वक्ते यांनी कार्यशाळेची सोय केली. ग्रामपंचायत बेरडीपार येथेही जनजागृती सत्र घेण्यात आले.

टाऊनशिप आणि प्लांटच्या आवारात रोपे लावण्यात आली. प्लॅस्टिक पिशव्यांचा वापर टाळण्यासाठी ज्यूट पिशव्यांचे वाटप करण्यात आले आणि सुमारे ६०० लोकांनी विविध उपक्रमामध्ये सहभाग घेतला.

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2024

Unique Application Number	***Submitted Date***
MPCB-ENVIRONMENT_STATEMENT-0000070857	21-09-2024

PART A

Company Information

Company Name	***Application UAN number***
Residential Complex for Tiroda Thermal Power Plant of Adani Power Limited.	MPCB-CONSENT-0000086203

Address

Shantigram Adani Township, Berdipar, Tehsil Tiroda, Dist. Gondia

Plot no	***Taluka***	***Village***
Kachewani, Berdipar	Tiroda	Berdipar
Capital Investment (In lakhs)	***Scale***	***City***
13850.00	S.S.I	Gondiya
Pincode	***Person Name***	***Designation***
441911	Mayank Doshi	Station Head
Telephone Number	***Fax Number***	***Email***
8875088555	07198253971	mayank.doshi@adani.com
Region	***Industry Category***	***Industry Type***
SRO-Bhandara	Orange	O21 Building and construction project more than 20,000 sq. m built up area
Last Environmental statement submitted online	***Consent Number***	***Consent Issue Date***
yes	MPCB-CONSENT-0000086203	2020-08-17
Consent Valid Upto	***Establishment Year***	***Date of last environment statement submitted***
2025-01-31	2015	Sep 29 2023 12:00:00:000AM

Industry Category Primary (STC Code) & Secondary (STC Code)

Product Information

Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
NA	0	0	CMD

By-product Information

By Product Name	***Consent Quantity***	***Actual Quantity***	***UOM***
NA	0	0	CMD

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for	Consent Quantity in m3/day	Actual Quantity in m3/day
Process	0.00	0.00
Cooling	0.00	0.00
Domestic	240.00	240.00
All others	0.00	0.00
Total	240.00	240.00

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Domestic Effluent	192	148	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
OTHERS	0	0	CMD

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Not Applicable	0	0	

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
HSD	67	10.73	Ltr/Hr

Part-C

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason
pH	0	8.01	0	6.5 to 9.0	-
TSS	2.46	16.59	0	20	-
COD	5.09	34.41	0	50	-
BOD	1.17	7.88	0	10	-
AMMONICAL NITROGEN (NH-N)	0.45	3.02	0	5	-
N-TOTAL	0.82	5.53	00	10	-
FECAL COLIFORM	0	15	0	100	-

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	%variation	Standard	Reason

DG SET - PM	0.259	31.3	0	150	-

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Kg/Annum

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Kg/Annum

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	Kg/Annum

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
STP Sludge	627	930	Kg/Annum

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	Kg/Annum

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.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
0	0	Kg/Annum	-

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Domestic Bio-degradable waste	8074	Kg/Annum	Food & vegetable and horticulture waste used for composing
Non Biodegradable waste	67435	Kg/Annum	Plastics, glass, metals, wood, paperetc.

Part-G

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

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)

0	0	0	0	0	0	0

Part-H

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

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	***Environmental Protection Measures***	***Capital Investment (Lacks)***
Environmental Monitoring	Air, Water Noise Monitoring	1.81
Pollution Control Equipment O&M	STP Operational Cost	8.4
Green Belt Development including Nursary	Sapling plantation & Maintenance of Existing Green Belt	27.5
Biomedical Waste Management	BMW handling & disposal as per MPCB Guideline	0.67
Waste Management	Domestic waste handling & Disposal	10.85

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	***Environmental Protection Measures***	***Capital Investment (Lacks)***
Environmental Monitoring	Air,Water Noise Monitoring	2.0
Pollution Control Equipment O&M	Chemical Consumption & other Operational Cost	18
Green Belt Development including Nursary	Sapling plantation & Maintenance of Existing Green Belt	28
Biomedical Waste Management	BMW handling & disposal as per MPCB Guideline	0.67
Waste Management	Domestic waste handling & Disposal	11
Roof Top Rainwater Harvesting Facility	Domestic waste handling & Disposal	9

Part-I

Any other particulars for improving the quality of the environment.

Particulars

5 S management System implemented, Roof Top Rainwater harvesting with ground water recharging facility implemented, Single used Plastics free campaign Implemending

Name & Designation

Mayank Doshi, Station Head

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000070857

Submitted On:

21-09-2024