

Kamlesh Kr Jha

From: Kamlesh Kr Jha
Sent: 09 December 2024 15:54
To: 'ro.ranchi-mef@gov.in'; 'ranchijspcb@gmail.com'
Cc: 'JSPCB, Jamshedpur'
Subject: Submission of Half yearly compliance status report (Unit I) for the period – April 2024 to September 2024,-Reg.
Attachments: Annexure XVI-Environment Statement -Unit I - Submission Letter.pdf; Covering Letter with Compliance report of EC -Unit I(APNRL).pdf; Annexure I-CEMS_APNRL.pdf; Annexure III-- DE & DS system at CHP.pdf; Annexure II-Stack Monitoring -Unit I-Sep 24.pdf; Annexure IV-Fly Ash Generation & Utilization (2024-25).pdf; Annexure IX-LDO Certificate 2023-26.pdf; Annexure V-Bottom Ash-Sep 24.pdf; Annexure VI-Ash Pond Outlet-Sep 24.pdf; Annexure VII-ETP Outlet- Sep 24.pdf; Annexure VIII- Sewage Treatment Plant -60KLD.pdf; Annexure XI-Gound Water Baseline-Sep 24.pdf; Annexure XIII-Ambient Air -Sep 24.pdf; Annexure XII- Noise Monitoring -Sep 24.pdf; Annexure XIV-EMC Cell (2).pdf; Annexure X-LDO analysis report.pdf; Annexure XV-EC compliance Half Yearly -Unit I (Oct 23 -March 24).pdf

Ref:- MoEF & CC issued Environment Clearance File No.J-13011/8/2009-IA.II(T), dated 29th Aug 2009.

Sir,

With reference to the above referred Environmental Clearance, we are pleased to submit herewith the half yearly compliance status report with Annexures **(Unit I)** for the period of **April 2024 to September 2024**.

Following Documents are attached :

1. Covering Letter with compliance report of Environment Clearance –Unit I
2. Annexure I- Details of CEMS & Photographs
3. Annexure II- Stack Monitoring Report –Unit I
4. Annexure III- Photographs of DE & DS system
5. Annexure IV- Fly Ash Disposal report (2024-25)
6. Annexure V-Bottom Ash Report
7. Annexure VI-Ash Pond Outlet Water Quality Report
8. Annexure VII-ETP Treated Water Quality Report
9. Annexure VIII- Sewage Treatment Plant -60KLD
10. Annexure IX-LDO Certificate 2023-26
11. Annexure X-LDO analysis report
12. Annexure XI-Baseline Ground water quality report
13. Annexure XII-Noise Monitoring Report
14. Annexure XIII-Ambient Air Quality Report
15. Annexure XIV-EMC Cell
16. Annexure XV-HYC-Unit I (Oct 2023- March 2024)-Acknowledgement Copy
17. Annexure XVI-Environment Statement -Unit I (2023-24)

This is for your reference and record, please.

Thanks & Regards,

Kamlesh Kumar

Adhunik Power & Natural Resources Ltd.

Vill.-Padampur,,Behind P.G.C.I.L Substation,Tata-Kandra Road

Saraikela-Kharsawan,Pincode:-832402,Jharkhand

Cell No: - 07763818994

Email Id:- kamleshkrjha@adhunikpower.co.in

Website:- www.adhunikpower.com



ADHUNIK POWER & NATURAL RESOURCES LIMITED

WORKS : Village - Padampur, Behind P.G.C.I.L. Substation,
Adityapur - Kandra Road, Saraikela - Kharsawan, PIN - 832402 Jharkhand
Phone : +91 - 657 - 6628400, Fax : +91 - 657 - 6628440
CIN - U40101WB2005PLC102935

Ref: MOE&F, RNC/HYC/KKJ/11224/01

Dated: 01.12.2024

To,

The Regional Office (Eastern-Central Zone)
Ministry of Environment, Forest & Climate Change
2nd Floor, Jharkhand State Housing Board (HQ)
Harmu Chowk, Ranchi, Jharkhand-834002

Sub: - Submission of Half-yearly compliance status report (Unit I) for the period – April 2024 to September 2024 -Reg.

Ref: - MoEF letter No.J-13011/8/2009-IA.II (T), dated 29th Aug 2009.

Sir,

With reference to the above-referred Environmental Clearance, we are pleased to submit herewith the half-yearly compliance status report (Unit I) for the period of April 2024 to September 2024.

This is for your reference and record, please.

Thanking you,

For Adhunik Power & Natural resources Limited



(Authorized Signatory)

Encl: As Above

Copy to:

1. Central Pollution Control Board, Kolkata
2. Member Secretary, Jharkhand State Pollution Control Board, Jharkhand
3. Regional Officer, JSPCB, Jamshedpur

CORPORATE OFFICE : "LANSDOWNE TOWER", 2/1A, Sarat Bose Road, Kolkata - 700 020

Ph : +91 - 33 - 30517100 / 7200 / 7300 • Fax : +91 - 33 - 22890285

REGD. OFFICE

: 14, N. S. Road, 2nd Floor, Kolkata - 700 001, Phone No. +91 - 33 - 22428551, 22428553

Website

: www.adhunikpower.com

REPORT

ENVIRONMENTAL COMPLIANCE STATUS REPORT FOR 1X270 MW COAL BASED POWER PLANT (Unit I)



APRIL 2024 – SEPTEMBER 2024

**Adhunik Power & Natural Resources Limited
Village: Padampur, Behind PGCIL Substation
Kandra Chouka Road, Saraikela-Kharsawan
Jharkhand**

Adhunik Power & Natural Resources Limited Vill: Padampur, Behind PGCIL Substation, Kandra Chouka Road, Saraikela-Kharsawan, Jharkhand		
Environmental Clearance Letter No: J-13011/8/2009-IA.II(T), dated 29th Aug 2009.		
Period Of Compliances: April 2024 to September 2024		
Sl No	EC Conditions	Status as on 30th September 2024
1	No additional land in excess of 119 ha shall be acquired for any activity/facility of this project.	Total Land acquired for Unit I is well within the land mentioned in Environment Clearance.
2	EC is subject to obtaining clearance under the Wildlife Protection Act, 1972 from the competent authority	WLMP Prepared and approval has been obtained from PCCF. Complied
3	EC is subject to final order of the Hon'ble Supreme court of India in the matter of Goa foundation Vs Union of India in Writ. Petition (Civil) no. 460 of 2004 as may be applicable to this project.	Not applicable.
4	Project proponent should contribute @ Rs. 20000/ha for project area as proportionate cost to the regional Wildlife Conservation plan and a copy of the plan should be submitted to the ministry.	As in Sl. No. 2 the Wild Life Management Plan (WLMP) prepared has already been approved by PCCF, Ranchi on May'10.2010. 1 st installment already submitted. Complied
5	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.45 % and 46 % respectively at any given time. In case of variation of coal quality at the time of issuance of LOA, a fresh reference shall be made to MoEF for suitable amendment to EC condition wherever necessary	The Sulphur content in used coal conforms the limits. As per the Environment (Protection) Amendment Rules, 2020 dated 21 May 2020, Use of coal by Thermal Power Plants, without stipulations as regards ash content or distance shall be permitted.
6	A single stack of 220 m height shall be provided with continuous online monitoring equipment's for Sox, Nox and PM. Exit velocity of flue gases shall not be less than 25 m/sec. Hg emission from stack may also be monitored on periodic basis.	Twin flue chimney of 275m height has constructed for proper dispersion of gases. Online monitoring equipment has installed in chimney. Photographs with details of CEMS enclosed as Annexure I Hg concentration in flue gases is well within prescribed limits.
7	High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emissions does not exceed 50 mg/Nm3	High efficient ESPs of 32 fields has been installed to ensure control Particulate matter emission in flue gas. Stack monitoring report for the month of September 2024 enclosed as Annexure II.
8	Adequate dust extraction system such as cyclones/bag filters and water spray in dusty areas such as in coal handling and ash handling points, transfer area and other vulnerable dusty areas shall be provided.	Necessary mitigation measures in accordance with EMP and EC conditions has taken to control fugitive emissions from ash storage/transfer and coal handling plant such as installation and operation of bag filters collectors, use of water spray systems and enclosed conveyors with well designed, extraction and filtration equipment on transfer points. Photographs Attached as Annexure III.
9	Fly ash shall be collected in dry form and storage facility (Silos) shall be provided. 100 % fly ash utilization shall be ensured from 4th year onwards. Unutilized ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents	Fly Ash utilization are adhered in compliance with MoEF&CC notification dated 31.12.2021. Fly Ash generation & Utilization report (April 2024-September 2024) are enclosed as Annexure IV. Monitoring of mercury and other heavy metals (As, Hg, Cr, Pd etc.) in the bottom ash and also in the effluents emanating from the ash pond is being done periodically. Bottom ash analysis report & effluent

	emanating from the existing ash pond. No ash shall be disposed off in low lying area.	analysis report of ash pond for the month of September 2024 enclosed as Annexure V & Annexure VI respectively.
10	Ash pond shall be lined with impervious lining. Adequate safety measures shall be implemented to protect the ash dyke from getting breached.	Complied
11	Closed cycling cooling system with natural cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.	The project design involves closed cycle cooling systems with induce draft cooling towers. The effluent generated from process operation is being treated in a Guard pond to ensure conformance to CPCB standards and recycled in plant process. Treated effluent analysis report of ETP for the month of September 2024 enclosed as Annexure VII.
12	No ground water shall be extracted for project work at any stage.	We adhere.
13	Natural drainage system within the project site should not be disturbed.	Natural drainage system has not been disturbed.
14	The treated effluents conforming 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. Arrangements shall be made that effluents and storm water do not get mixed.	The project is designed with zero discharge provisions and there is separate arrangement for storm water and effluent water. Complied
15	A sewage treatment plant shall be provided and the treated sewage shall be used for raising green belt /plantation.	STP 60 KLD capacity (03 No) has installed within plant premises to treat sewage waste. Photographs enclosed as Annexure VIII.
16	Rainwater harvesting should be adopted CGWA shall be consulted for finalization of appropriate rain water technology within a period of three months from the date of clearance and details shall be furnished	The Rain water harvesting report has submitted and approved from CGWA Ranchi. 13 No Rain water harvesting system has been constructed in accordance with the approved rain water harvesting plan.
17	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires of coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to RO of the Ministry at Bhubaneswar.	The design of coal yard along with provision of fire safety measures viz. fire hydrants, water sprinklers has installed and submitted to the Ministry. Complied
18	Storage facilities of auxiliary liquid fuel such as LDO and HFO/LSHS shall be made in the plant area in consultation with dept. Of Explosive, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5 %. DMP shall be prepared to meet any eventuality in case of an accident taking place due to storage oil.	Approval received on dated 24.02.2023. License No. P/HQ/JH/15/1065 (P257355) valid upto 31 st Dec 2026 for LDO storage installation (under Petroleum Class "C") for operations. Copy of Approval are enclosed as Annexure IX. Disaster management plan (DMP) has been prepared to handle the any eventuality in case of an accident taking place due to storage of oil. APNRL is using liquid fuel with sulfur content variation between 0.80 -1.5% which is provided by HPCL. Copy of Test report are enclosed as Annexure X.
19	Regular monitoring of ground water in and around to ash pond area including heavy metals (Hg, Cr, As, Pb) shall be carried out, records maintained and six monthly report shall be furnished to RO of ministry. The	Regular monitoring of ground water in and around ash pond area including heavy metals is being carried out. Ground water analysis report of upstream & downstream of ash pond compared with baseline data for the month of September 2024 enclosed as

	data so obtained should be compared with the base line data so as to ensure that the ground water quality is not adversely affected due to the project.	Annexure XI.
20	A green belt of adequate width and density shall be developed around the plant periphery covering 1/3 of the project area preferably with local species.	A thick green belt of adequate width is being developed. 68123 nos. (Area covered-30.9 Hac) of plantation has been completed in and outside along the periphery of the power plant to arrest any dust emissions and help in attenuation of noise. Total Survival rate of Plant are 85.6 %. Name of Plant Species- Neem, , Seesam, Mango, Jamun etc.
21	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Plant is under operation however first aid center comprising of competent medical staff (6 no's) and equipped with necessary medical facilities is made available onsite to provide emergency medical aid to both contract workers and company staff.
22	Noise level emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite PPE like ear plug/ear muff etc shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas.	Adequate measures has implemented in consistent with the EMP to control turbine noise levels within stipulated limits. This include installing of sufficient engineering control in turbines as per design specifications, provision of ear plugs/ear muffs for workers exposed to high noise, rotation of workers and carrying out periodic audiometric testing of workers and records is being maintained. Noise level monitoring report for the month of September 2024 As Annexure XII.
23	Regular monitoring of ground level concentration of SO ₂ , NO _x , RSPM and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to RO of ministry. The data shall also be put on the website of the company.	Monitoring of Air quality is being conducted by APNRL on monthly basis. Review of air quality monitoring results revealed compliance to NAAQS. Ambient Air monitoring reports for the month of September 2024 is enclosed as Annexure XIII.
24	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care crèche etc, The housing may be in the form of temporary structure to be removed after the completion of the project.	Plant is in operational condition and local labors are coming from nearby villages.
25	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 EC and copies of clearance letter are available with the SPCB/committee and may also be seen at Website of the MoEF at	Complied.

	http://envfor.nic.in .	
26	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat Zila Praised/Municipal Corporation, urban local body and the local NGO, is any from whom suggestion/representation, if any were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied.
27	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	A Environmental Management Cell is being operational onsite to ensure effective implementation of specific EMPs. Organization chart of Environmental Management Cell enclosed as Annexure XIV.
28	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the RO of MoEF the respective zonal office of CPCB and the SPCB the criteria pollutant level namely SPM, RSPM, SO ₂ , NO _x (ambient level as stack emission) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	The updated compliance status of the stipulated EC conditions along with monitored data has been displayed at the company website. The monitoring data (SPM, RSPM, SO ₂ , NO _x) for both ambient air quality and chimney emissions is being displayed at the main gate of the company. Status of compliance of the stipulated EC conditions has been uploaded on company website for the period of April 2023 to September 2023.
29	The project proponent shall also submit six monthly report on the status of compliance of the stipulated condition including result of monitored data (both in hard copy as well by email) to the respective RO of MoEF, the respective zonal office of CPCB and the SPCB.	Last six monthly reports (October 2023 to March 2024) for the project along with environmental monitoring data submitted to MoEF RO at Ranchi vide letter No MOE&F,RNC/HYC/KKJ/23524/01 dated 23rd May 2024 through E Mail dated 23.05.2024 . Acknowledgement copy of same enclosed as Annexure XV.
30	The environmental statement for each financial year ending 31st September in form-V as is mandated to be submitted by the project proponent to the concern SBCB 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 the compliance of EC condition and shall also be sent to the respective RO of MoEF by email.	The last environmental statement for financial year (2023-2024) in Form V has submitted dated 24 th Sep 2024. Acknowledgement copy of same enclosed as Annexure XVI.
31	RO of the MoEF located at Bhubaneswar will monitor the implementation of the stipulated conditions. A complete set-up of documents including EIA report EMP along with the additional information submitted from time to time shall be forwarded to the RO for their use during monitoring. Project proponent will upload the compliance status their website and update the same from	The updated compliance status of the stipulated EC conditions along with monitored data has been displayed at the company website. The monitoring data (SPM, RSPM, SO ₂ , NO _x) for both ambient air quality and chimney emissions is being displayed at the main gate of the company. However Half yearly progress report is being sent to RO office, Ranchi on regular basis as per the requirement & uploaded on company website.

	time to time at least six monthly basis. Criteria pollutant level (Stack and ambient level of NOx) will be displayed at the main gate of the power plant.	
32	Separate fund shall be allocated for implementation of environmental protection measures along with item wise break up this 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.	Adequate budgetary provision has been made by the APNRL for execution of environmental management plan.
33	The project authorities shall inform the RO as well as the ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work and commissioning of plant.	Complied
34	Full cooperation shall be extended to the Scientists/officers from the ministry / RO of the ministry at Bhubaneswar/the CPCB/the SPCB who would be monitoring the compliance of environmental status.	We ensure.

CODEL

REF: DCEM2100/DS/02

DATA SHEET DCEM2100 DUST MONITOR		
GENERAL		
1.	Make	Codel, UK.
2.	Model	DCEM2100 Dust Monitor
3.	Type	In-Situ Non contact cross duct type
4.	Qty of units	2 No
5.	Tag No.	HNE10CQ003
FEATURES		
6	Range	0-100% Opacity , 0-999mg/m ³ , 0-999mg/Nm ³ (Fully site selectable)
7	Min. detectable conc.	1 mg/m ³
8	Measurement Units	Fully selectable units-, mg/m ³ (measured) , mg/Nm ³ (Normalized) and opacity(%)
9	Measurement averaging	Fully selectable in range 10sec to 30 days
10	Response time	90% in 5 seconds.
11	Auto/manual calibration	In built automatic zero and span calibration
12	Accuracy	+/-0.2% Opacity of measurement
13	Drift	Less than 1% per month
14	Resolution	+/-0.1% opacity
15	Linearity	+/- 0.1% of full scale
16	Repeatability	+/-0.1% opacity
17	Power supply	88 – 264 VAC , 50-60Hz, 125 VA
18	Remote/Local control unit	Isolated 2x 4-20 mA, 500 ohms outputs fully configurable. 3 x Volt free SPCO contact rated at 50 VDC 1 Amp. 2 Line X 32 character alpha-numeric LCD displays with 4 key keypad.
19	Automatic misalignment detection	Provided in the instrument as a warning signal of misalignment
20	Correction for contamination	Automatic window contamination check
21	Error Diagnostics	Dirty optics, Misalignment, Valve 1 closed, Valve 2 closed to indicate the error conditions.
22	Construction material and Enclosures	Fully sealed aluminum enclosures to IP 66
DESIGN CONDITIONS		
23	Source	Modulated high intensity LED
24	Detector	Silicon photocell
25	Ambient air temp.	- 20deg.C to 60 deg.C
26	Gas Temperature	Upto 850 deg.c
CONNECTIONS & DIMENSIONS		
27	Analyzer mounting details	Analyser can be mounted in Chimney at Elevation of 91.6 Mtrs. Please refer drawing for analyser mounting flange details.
28	Path length	Suitable for 0.5 to 12m duct/stack inner diameter
ACCESSORIES		
29	Fail safe shutters	Built in
30	Air Purges	Air purges for continuous air supply to instrument provided
31	Interconnecting cables and mounting hardware	Included in supply.
32	Temp. transmitter	24 VDC Supply Make: Precision Converter Model: PCHMR Range: 0 to 300 Deg C

Ref: GCEM40A0/DS/02

DATA SHEET			
CO, SO₂, NO_x GAS ANALYSER			
GENERAL			
1.	Make	CODEL International Ltd., UK	
2.	Model/Article No	GCEM4000 Series Article no GCEM40A0	
3.	Type	Infrared Absorption Analyser-In-Situ type	
4.	Qty	2 No.	
5.	Tag No.	SO _x	HNE10CQ004
		NO _x	HNE10CQ001
		CO	HNE10CQ002
FEATURES			
6.	Range	CO : 0 to 1000ppm, 0 to 1000mg/m ³ , 0 to 1000mg/Nm ³ SO ₂ : 0 to 1000ppm, 0 to 1000mg/m ³ , 0 to 1000mg/Nm ³ , NO _x : 0 to 1000ppm, 0 to 1000mg/m ³ , 0 to 1000mg/Nm ³ , CO ₂ : 0 to 25% H ₂ O : 0 to 25% Above ranges are site selectable up to 3000 ppm	
7.	Min. detectable conc.	1 ppm , 1mg/m ³ , 1mg/Nm ³ for CO,SO ₂ ,NO _x & 0.5% for CO ₂ ,H ₂ O.	
8.	Measurement Units	Fully selectable units-ppm or % by volume, mg/m ³ (measured) and mg/Nm ³ (Normalised to temperature, pressure, H ₂ O & CO ₂)	
9.	Measurement averaging	Fully selectable in range 10Sec to 1 hour	
10.	Response time (T90)	Detector less than 10 seconds, Calibration less than 200 seconds.	
11.	Auto & manual calibration	In built and selectable	
12.	Function	Continuous function	
13.	Accuracy	+/- 2% of measured value for CO,SO ₂ , NO _x ,& 0.5% for CO ₂ & H ₂ O	
14.	Zero /span drift(24hrs)	Over all drift less than +/-2% per month	
15.	Repeatability	Less than 2% of span	
16.	Sensitivity	1 ppm for CO,SO ₂ ,NO _x , 0.5% for CO ₂ ,H ₂ O	
17.	Linearity	Less than 2%	
18.	LCD Display	LCD with back light	
19.	Power supply	240VAC, 50-60Hz, +/-10% 400VA	
20.	Outputs	Analog : 5 x 4-20 mA isolated, max. 500 Ohms, full configurable from Keypad for CO,SO ₂ ,NO _x in ppm & CO ₂ ,H ₂ O in % to DCS fully site configurable. Logic: 5 x Volt free contacts, SPCO rated at 50 volt 1A & 1x data invalid output (System fault)	
21.	Serial Communications	RS232/RS485 Modbus O/P	
22.	Construction material and Enclosures	Electronic Housings (DDU) : Corrosion resistant, epoxy coated Aluminium housing sealed to IP 66 Probe : SS316L	

DESIGN CONDITIONS		
23.	Infrared source	Heater cartridge assembly
24.	Infrared detector	Lead selenid detector
25.	Ambient air temp.	Transceiver unit 0 to 70 °C, Electronic unit (PSU & DDU) 0 to 60 °C
26.	Flue gas temp.	Up to 350 deg.C

CONNECTIONS & DIMENSIONS		
27	Analyser mounting details	Please refer drawing for analyser mounting flange details. Mounting location on Chimney at 91 Mtrs Elevation.
28	Stack width	Suitable for duct/Stack inner diameter of more than 2000mm.
ACCESSORIES		
29	Standard span gas for calibration	Make : Chemtron Science Laboratory, Mumbai Material : Aluminium Cylinder Capacity : 10 ltr W.C Filled with : 500ppm CO, 500ppm SO ₂ , 500ppm NO and balance Nitrogen (N ₂) Cylinder with SS regulator, necessary tubing's & fittings. Filled pressure: filled at 120-130kg/cm ²
30	Zero Calibration	For zero calibration we use plant compressed air.
31	Air dryer unit	Maximum Pressure : 10 bar Maximum temperature : 57 deg.C Air dryer unit to dry down the compressed air to -20 deg.c .
32	Zero/span gas calibration tubes	For zero calibration, client to provide plant instrument air line up to probe (10 mm OD connection) For span gas calibration, 20 mtr length SS tube of 10mm OD with necessary fittings from Cylinder to probe.
33	Pressure transmitter	Mounted on GCEM40A0 probe Make : Druck Range : 1 .6bar absolute with 4-20mA output Input supply : 24VDC operated
34	Temperature transmitter	Mounted on GCEM40A0 probe Make : Peak Sensor Limited, Washington Type: K type thermocouple Range : 0 – 600 deg.C with 4-20mA output Input supply : 24VDC operated
35	Plant instrument air Consumption	5 LPM @3 bar pressure continuous 10LPM @3 bar pressure during zero calibration

Continuous emission monitoring system





YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by : NABL Accredited Testing Laboratory Vide Certificate No. TC -12989
 Registered by : Jharkhand State Pollution Control Board (JSPCB)
 Certified by : ISO 9001:2015 & ISO 45001:2018



TC-12989

Test Report

URL(Unique Lab Report) No.			TC	1	2	9	8	9	2	4	0	0	0	0	0	8	9	6	F
Discipline	Chemical	Group	Atmospheric Pollution					Sample Description					Stationary Source Emission						
Report Release Date		30 th September, 2024					Report ID					YBAEEL-2409-19							
W. Order / JSPCB App. No.		3030006964					Work Order Date					03.02.2024							
Type of Industry(If any)		Thermal Power Plant					Job code/ Ref. no.					YBAEEL/C/A/Sept. – 24/09							
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																	
Sampling Period		20/09/2024					Mode of sample collection					By YBAEEL Team							
Sampling Plan		YBAEEL/SP/149-2024																	
Meteorological Cond. of Field		W.C.– Partly Cloudy					RH % - 64					Temp. - 32°C							
Sample receipt Date		21/09/2024		Analysis Started on			21/09/2024			Analysis completed on			30/09/2024						

General Information

As observed while sampling		As reported by customer	
Location	Sampling port hole	Type of fuel Used	Coal
Platform	Permanent	Quantity of Fuel Used(During Sampling)	174 Ton/Hr.
Stack Description (Shape & Material)	Circular / RCC	Total production Capacity	270 MW (265 MW During Sampling)
Sampling port	Available	Height of Stack from ground level	275mtr.
Stack Identification	Unit - I	Inner Diameter of Stack	4.2 mtr.
Height of port hole from Ground level	90 mtr.	Pollution Controlling Device (if any)	ESP
Running Oven during sampling (if any)	N/A	Total No. of Oven (if any)	N/A
Stack gas Temperature (k)	389.0		
Stack gas Velocity (m/s)	23.0		
Volumetric Flow Rate (Nm³/hr)	823163.9		

Emission Rate based on Calculation of Volumetric Flow rate

1.	Particulate Matter (PM)	Kg/hr	33.3
2.	Sulphure Dioxide (SO ₂)	Kg/hr	896.6
3.	Oxide of Nitrogen (as NO _x)	Kg/hr	326.3

*****Test Results*****

Sl	Parameters	Test Method	Units	Results	Limits
1.	Particulate Matter (PM)	IS 11255 (Part 1)2009, RA 2019	mg/Nm ³	40.5	50
2.	Sulphure Dioxide (SO ₂)	IS 11255 (Part 2)2009, RA 2019	mg/Nm ³	1089.2	600
3.	Oxide of Nitrogen (as NO _x)	IS 11255 (Part 7)2005, RA 2022	mg/Nm ³	396.4	450
4.	Carbon Monoxide (CO)	IS 13270:1992:2009, RA 2019	%	BDL (MDL 0.2)	--

Limit is specified as	Environmental (Protection) Rule - 1986.
Abbreviation	MDL - Minimum detection limit, BDL - Below detection limit.
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196/1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
	This report cannot be reproduced, except when in full, without the written permission of the CEO.
	The samples collected shall be destroyed after 15 days from the date of issue of the report unless specified otherwise.
	The liability of the laboratory is limited to the invoiced amount.
Remarks	All disputes are subjected to the Ranchi Jurisdiction.
	Sample complies with prescribed limit, except SO ₂ .

Sample Drawn By - Mukesh Singh
 Tested By - Akash Khalkho (Lab Analyst)

Sanjeev Kumar Singh
 Verified & Issued by
 Sanjeev Kumar Singh
 (Technical Manager)

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

Authorized Signatory
 Atmospheric Pollution
 Yugantar Bharati Analytical &
 Environmental Engineering Laboratory

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
 Ph : 09835197960, 9304955304, Email - ybaeel@gmail.com, Web - https://ybaeel.in





YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Registered by :-
Certified by :-

Jharkhand State Pollution Control Board (JSPCB)
ISO 9001:2015 & ISO 45001:2018



State Pollution
Control Board

Test Report

Discipline	Chemical	Group	Atmospheric Pollution	Sample Description	Stationary Source Emission
Report Release Date	30 th September, 2024			Report ID	YBAEEL-2409-19
W. Order / JSPCB App. No.	3030006964			Work Order Date	03.02.2024
Type of Industry(If any)	Thermal Power Plant			Job code/ Ref. no.	YBAEEL/C/A/Sept. – 24/09
Report Issue to	M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.				
Sampling Period	20/09/2024		Mode of sample collection		By YBAEEL Team
Sampling Plan	YBAEEL/SP/149-2024				
Meteorological Cond. of Field	W.C.– Partly Cloudy		RH % - 64		Temp. - 32°C
Sample receipt Date	21/09/2024	Analysis Started on	21/09/2024	Analysis completed on	30/09/2024

General Information

As observed while sampling		As reported by customer	
Location	Sampling port hole	Type of fuel Used	Coal
Platform	Permanent	Quantity of Fuel Used (During Sampling)	174 Ton/Hr.
Stack Description (Shape & Material)	Circular / RCC	Total production Capacity	270 MW (265 MW During Sampling)
Sampling port	Available	Height of Stack from ground level	275mtr.
Stack Identification	Unit - I	Inner Diameter of Stack	4.2 mtr.
Height of port hole from Ground level	90 mtr.	Pollution Controlling Device (if any)	ESP
Running Oven during sampling (if any)	N/A	Total No. of Oven (if any)	N/A
Stack gas Temperature (k)	389.0		
Stack gas Velocity (m/s)	23.0		
Volumetric Flow Rate (Nm ³ /hr)	823163.9		

*****Test Results*****

Sl	Parameters	Test Method	Units	Results	Limits
1.	Mercury (as Hg)	Lat's/80/2013-14	mg/Nm ³	BDL (MDL 0.003)	0.03

Limit is specified as	Environmental (Protection) Rule - 1986.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS:196:1966 (C)
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility This report, in full or in part, shall not be used for advertising or as evidence in any court of law This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 15 days from the date of issue of the report unless specified otherwise. The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Sample complies with prescribed limit.

Sample Drawn By - Mukesh Singh
Tested By - Akash Khalkho (Lab Analyst)

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

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

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
Ph : 09835197960, 9304955304, Email - ybaeel@gmail.com, Web - https://ybaeel.in



ISO 9001:2015
ISO 45001:2018

Bag Filter installed at Coal mill building



Bag Filter installed at Ash silo



Bag filter at buffer hopper



Dust suppression through Tanker



Fixed type DS system for coal Conveyor



DE system at Coal Crusher House



Closed type coal conveying system



Fixed type dust suppression system



Fixed type DS system at Coal Yard



ADHUNIK POWER & NATURAL RESOURCES LTD.

FLY ASH Generation & Utilization Report (2024-25)

Month	Current Year Ash Utilization (2024-25)					Fly Ash Utilization Mode						
	Month Coal Consumption	TA Generation	Ash %	Total Ash Utilization	Utilization %	Fly ash based Products	Cement Manufacturing	Ready mix concrete	Construction of road and fly over embankment	export of ash to other countries	Filling in Low Lying Area	Total Ash Utilization
Apr-24	2,13,965.85	90,384.26	42.24%	85,571.65	94.68%	18,751.00	57,665.00	9,155.00	-	-	-	85,571.00
May-24	2,61,646.75	1,11,198.92	42.50%	1,10,965.64	99.79%	15,851.00	84,457.00	10,658.00	-	-	-	1,10,966.00
Jun-24	2,34,845.68	99,293.91	42.28%	94,726.50	95.40%	16,525.00	58,956.00	15,833.00	-	3,017.00	395.00	94,726.00
Jul-24	2,65,689.92	1,10,514.12	41.60%	88,411.29	80.00%	6,329.00	67,886.00	9,755.00	-	4,442.00	-	88,412.00
Aug-24	1,87,969.48	76,024.26	40.45%	60,819.40	80.00%	1,873.00	48,864.00	6,851.00	-	3,232.00	-	60,820.00
Sep-24	1,75,141.47	70,412.12	40.20%	56,329.70	80.00%	10,871.00	38,482.00	5,083.00	-	1,893.00	-	56,329.00
Total	13,39,259.14	5,57,827.58	41.65%	4,96,824.19	89.06%	70,200.00	3,56,310.00	57,335.00	-	12,584.0	395.00	4,96,824.00



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Registered by :-
Certified by :-

Jharkhand State Pollution Control Board (JSPCB)
ISO 9001:2015 & ISO 45001:2018



State Pollution
Control Board

Test Report

Discipline	Chemical	Group	Pollution & Environment	Sample Description	ASH
Report Release Date		30 th September, 2024		Report ID	YBAEEL-2409-19
W. Order / JSPCB App. No.		3030006964		Work Order Date	03.02.2024
Type of Industry(if any)		Thermal Power Plant		Job code/ Ref. no.	YBAEEL/C/S/Sept. 24/03
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand			
Sampling Date		20/09/2024		Mode of sample collection	By YBAEEL Team
Sampling Plan		YBAEEL/SP/149-2024		Sample Code	240921-AS-01
Sampling Location		Hopper		Sampling Source	Bottom Ash
Sample pkg. Condition		Sealed Pack in Zipper Bag		Sample Quantity	2.5 Kg Approx.
Meteorological Cond. of Field		W.C.– Partly Cloudy		RH % - 63	
				Temp. - 33°C	
Sample receipt Date		21/09/2024	Analysis Started on	21/09/2024	Analysis completed on
					30/09/2024

*****Test Results*****

Sl	Parameter	Test Method	Units	Results
1.	Iron (as Fe)	USEPA 3050 B :1996/APHA 3111 B	ppm	36.1
2.	Zinc (as Zn)	USEPA 3050 B :1996/APHA 3111 B	ppm	0.13
3.	Copper (as Cu)	USEPA 3050 B :1996/APHA 3111 B	ppm	0.01
4.	Lead (as Pb)	USEPA 3050 B :1996/APHA 3111 B	ppm	BDL (MDL 0.02)
5.	Nickel (as Ni)	USEPA 3050 B :1996/APHA 3111 B	ppm	0.06
6.	Cadmium (as Cd)	USEPA 3050 B :1996/APHA 3111 B	ppm	0.1
7.	Chromium (as Cr)	USEPA 3050 B :1996/APHA 3111 B	ppm	0.46
8.	Arsenic (as As)	USEPA 3050 B :1996/APHA 3112 B	ppm	0.05
9.	Mercury (Hg)	USEPA 3050 B :1996/APHA 3111 B	ppm	BDL (MDL 0.003)
10.	Selenium (as Se)	USEPA 3050 B :1996/APHA 3111 B	ppm	BDL (MDL 0.01)
11.	Unburn Carbon	IS 1727:1967	%	2.6

Limit is specified as	-----
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility.. This report, in full or in part, shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	-----

Sample Drawn By - Mukesh Singh
Tested By - Pinky Kumari (Lab Analyst)

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

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

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by : NABL Accredited Testing Laboratory Vide Certificate No. TC -12989
Registered by : Jharkhand State Pollution Control Board (JSPCB)
Certified by : ISO 9001:2015 & ISO 45001:2018



TC-12989

Test Report

ULR (Unique Lab Report) No.				TC	1	2	9	8	9	2	4	0	0	0	0	0	0	8	8	3	F
Discipline	Chemical	Group	Pollution & Environment					Sample Description					Waste Water / Effluent Water								
Report Release Date		30 th September, 2024					Report ID					YBAEEL-2409-19									
W. Order / JSPCB App. No.		3030006964					Work Order Date					03.02.2024									
Type of Industry(If any)		Thermal Power Plant					Job code/ Ref. no.					YBAEEL/C/PE/Sept.-24/09									
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																			
Sampling Date		20/09/2024					Mode of sample collection					By YBAEEL Team									
Sampling Plan		YBAEEL/SP/149-2024					Sample Code					240921-WW-01									
Sampling Location		Ash Pond					Sampling Source					Effluent Water									
Sample pkg. Condition		Sealed Pack in PP Bottle					Sample Quantity					3000 ml									
Meteorological Cond. of Field		W.C.– Partly Cloudy					RH % - 63					Temp.–33°C									
Sample receipt Date		21/09/2024		Analysis Started on			21/09/2024			Analysis completed on					30/09/2024						

*****Test Results *****

Sl	Parameter	Test Method	Units	Results	Limits
1.	pH value	IS 3025 (P-11):2022 (Electrometric Method)	pH	7.20 at 25.6°C	6.5 – 8.5
2.	Temperature	IS 3025 (P-09):2023	°C	30.6	--
3.	Total Suspended Solids	IS 3025 (P-17):2022 (Gravimetric Method)	mg/l	49.0	100
4.	Oil & Grease	IS 3025 (P-39):2021 (Partition Gravimetric Method)	mg/l	2.1	20
5.	Arsenic (as As)	APHA 3114 C 24 th edition 2023 (Continuous Hydride Generation Method)	mg/l	BDL (MDL 0.003)	--
6.	Lead (as Pb)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	0.18	--
7.	Mercury (as Hg)	APHA 3112 B 24 th edition 2023 (Cold Vapour AAS Method)	mg/l	BDL (MDL 0.003)	--
8.	Chloride (as Cl)	IS 3025 (P-32):1988, RA 2019 (Argentometric Method)	mg/l	38.4	--
9.	Chromium (as Cr)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	--

Limit is specified as	Environmental (Protection) Rule – 1986.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility
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	The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise
	The liability of the laboratory is limited to the invoiced amount.
Remarks	All disputes are subjected to the Ranchi Jurisdiction.
	Sample complies with prescribed limit.

Sample Drawn By – Mukesh Singh
Tested By – Pinky Kumari (Lab Analyst)

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

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

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur

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ISO 9001:2015
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Test Report

ULR (Unique Lab Report) No.			TC		1	2	9	8	9	2	4	0	0	0	0	0	0	8	8	9	F
Discipline	Chemical	Group	Pollution & Environment						Sample Description						Waste Water / Effluent Water						
Report Release Date		30 th September, 2024						Report ID						YBAEEL-2409-19							
W. Order / JSPCB App. No.		3030006964						Work Order Date						03.02.2024							
Type of Industry(If any)		Thermal Power Plant						Job code/ Ref. no.						YBAEEL/C/PE/Sept.-24/11							
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																			
Sampling Date		20/09/2024						Mode of sample collection						By YBAEEL Team							
Sampling Plan		YBAEEL/SP/149-2024						Sample Code						240921-WW-03							
Sampling Location		ETP Outlet						Sampling Source						Effluent Water							
Sample pkg. Condition		Sealed Pack in PP Bottle						Sample Quantity						3000 ml							
Meteorological Cond. of Field		W.C.– Partly Cloudy						RH % - 63						Temp.–33°C							
Sample receipt Date		21/09/2024		Analysis Started on				21/09/2024			Analysis completed on						30/09/2024				

*****Test Results *****

Sl	Parameter	Test Method	Units	Results	Limits
1.	pH value	IS 3025 (P-11):2022 (Electrometric Method)	pH	7.15 at 25.6°C	5.5 – 9.0
2.	Temperature	IS 3025 (P-09):2023	°C	28.4	--
3.	Total Suspended Solids	IS 3025 (P-17):2022 (Gravimetric Method)	mg/l	9.0	100
4.	BOD (3 days at 27°C)	IS 3025 (P-44):1993, RA 2019 (Oxygen Depletion Method)	mg/l	14.0	30
5.	COD	IS 3025 (P-58):2006, RA 2022	mg/l	40.0	250
6.	Chloride (as Cl ⁻)	IS 3025 (P-32):1988, RA 2019 (Argentometric Method)	mg/l	47.98	--
7.	Sulphate (as SO ₄ ²⁻)	IS 3025 (P-24-Sec 1):2022 (Turbidity Method)	mg/l	77.60	--
8.	Copper (as Cu)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.01)	3
9.	Lead (as Pb)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	0.1
10.	Zinc (as Zn)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	0.04	5
11.	Chromium (as Cr)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	2
12.	Arsenic (as As)	APHA 3114 C 24 th edition 2023 (Continuous Hydride Generation Method)	mg/l	BDL (MDL 0.003)	0.2

Limit is specified as	Environmental (Protection) Rule – 1986.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
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Remarks	All disputes are subjected to the Ranchi Jurisdiction.
	Sample complies with prescribed limit.

Sample Drawn By – Mukesh Singh
Tested By – Pinky Kumari (Lab Analyst)

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

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur
Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
Ph : 09835197960, 9304955304, Email - ybaeel@gmail.com, Web - https://ybaeel.in



Sewage Treatment Plant





भारत सरकार
भारत सरकार

Government of India

वाणिज्य और उद्योग मंत्रालय

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)

Petroleum & Explosives Safety Organisation (PESO)

श्री मोहन, तीसरा माला, सीता कंपाउंड, मेन रोड, सुशीला ऑटोमोबाइल के पीछे

रांची- 834001

Sri Mohan, 3rd Floor, Sita Compound, 5 Main Road, Behind Sushila Automobiles,
Ranchi - 834001

E-mail : dycceranchi@explosives.gov.in

Phone/Fax No : 651 - 2332689, 2332690, 2332688

संख्या /No. : P/HQ/JH/15/1065 (P257355)

दिनांक /Dated : 24/02/2023

सेवा में /To,

M/s. Adhunik Power & Natural Resources Ltd.,
Village-Padampur, Behind PGIL Substation,,
Adityapur-Kandra Road,,
Taluka: Adityapur(Gamharia),
District: SARAIKELLA KHARSWAN,
State: Jharkhand
PIN: 832105

24 FEB 2023

विषय /Sub : Plot No, Plot No. 161,, Behind PGIL.Substation adityapur, Kandra Road, Village- Padampur, Adityapur(Gamharia), Taluka: Adityapur (Gamharia), District: SARAIKELLA KHARSWAN, State: Jharkhand, PIN: 832402 में स्थित विद्यमान पेट्रोलियम वर्ग C अचिह्नित में अनुमति सं P/HQ/JH/15/1065 (P257355) के नवीकरण के संदर्भ में।
Existing Petroleum Class C Installation at Plot No, Plot No. 161,, Behind PGIL.Substation adityapur, Kandra Road, Village- Padampur, Adityapur(Gamharia), Taluka: Adityapur(Gamharia), District: SARAIKELLA KHARSWAN, State: Jharkhand, PIN: 832402 - Licence No. P/HQ/JH/15/1065 (P257355) - Renewal regarding.

महोदय /Sir
(s),

कृपया आपके पत्र क्रमांक OIN1307334 दिनांक 23/02/2023 का आकलन करें।

Please refer to your letter No.: OIN1307334, dated 23/02/2023

अनुमति संख्या P/HQ/JH/15/1065 (P257355) दिनांक 23/12/2011 को दिनांक 31/12/2026 तक नवीनीकृत कर इस पत्र के साथ अग्रपत्र की जा रही है।

Licence No. P/HQ/JH/15/1065 (P257355) dated 23/12/2011 is forwarded herewith duly renewed upto 31/12/2026.

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कड़ाई से पालन करें। अनुमति के नवीकरण हेतु समस्त दस्तावेजों को अनुमति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व कार्यालय को प्रेषित करें।

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence so as to reach this office on or before the date on which Licence expires.

कृपया पावती दें।

Please acknowledge the receipt.

भवदीय /Yours faithfully,

((आशेंद्र सिंह))
(Ashendra Singh)

उप मुख्य विस्फोटक नियंत्रक

Dy. Chief Controller of Explosives
रांची/Ranchi

Note:-This is system generated document does not require signature.

(अधिक जानकारी के लिए आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : <http://peso.gov.in> देखें)

(For more information regarding status, fees and other details please visit our website: <http://peso.gov.in>)

अनुज्ञप्ति संख्या-(Licence No.) P/HQ/JH/15/1065 (P257355)

नवीनीकरण के प्रस्तावक के लिए स्थान
SPACE FOR ENDORSEMENT OF RENEWALS

पेट्रोलियम अधिनियम, अनुज्ञप्ति की शर्तों का उल्लंघन न होने की दशा में यह अनुज्ञप्ति फ़िस में बिना किसी छूट के दस वर्ष तक नवीकृत की जा सकेगी। This licence shall be renewable without any concession in fee for ten years in the absence of contravention of any provisions of the Petroleum Act, 1934 or of the rules framed thereunder or of any of the conditions of this licence.	नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry of license	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature and office stamp of the licencing authority.
1).		31/12/2013	Sd/- PESO ADMIN
2).	23/09/2013	31/12/2018	Sd/- R.P.Singh Jt. Chief Controller of Explosives For Dy. Chief Controller of Explosives Ranchi
3).	18/02/2019	31/12/2022	Sd/- K. Thiagarajan Jt. Chief Controller of Explosives For Dy. Chief Controller of Explosives Ranchi
4).	24/02/2023	31/12/2026	Ashendra Singh Dy. Chief Controller of Explosives Ranchi

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

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

Note:-This is system generated document does not require signature.



भारत सरकार
भारत सरकार

Government of India

वाणिज्य और उद्योग मंत्रालय

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)

Petroleum & Explosives Safety Organisation (PESO)

श्री मोहन, तीसरा माला, सीता कंपाउंड, मेन रोड, सुशीला ऑटोमोबाइल के पीछे

रांची- 834001

Sri Mohan, 3rd Floor, Sita Compound, 5 Main Road, Behind Sushila Automobiles,
Ranchi - 834001

E-mail : dycceranchi@explosives.gov.in

Phone/Fax No : 651 - 2332689, 2332690, 2332688

संख्या /No. : P/HQ/JH/15/1065 (P257355)

दिनांक /Dated : 24/02/2023

सेवा में /To,

M/s. Adhunik Power & Natural Resources Ltd.,
Village-Padampur, Behind PGCIL Substation,,
Adityapur-Kandra Road,,
Taluka: Adityapur(Gamharia),
District: SARAIKELLA KHARSWAN,
State: Jharkhand
PIN: 832105

24 FEB 2023

विषय /Sub : Plot No, Plot No. 161,, Behind PGCIL.Substation adityapur, Kandra Road, Village- Padampur, Adityapur(Gamharia), Taluka: Adityapur (Gamharia), District: SARAIKELLA KHARSWAN, State: Jharkhand, PIN: 832402 में स्थित विद्यमान पेट्रोलियम वर्ग C अचिह्नित में अनुमति सं P/HQ/JH/15/1065 (P257355) के नवीकरण के संदर्भ में।
Existing Petroleum Class C Installation at Plot No, Plot No. 161,, Behind PGCIL.Substation adityapur, Kandra Road, Village- Padampur, Adityapur(Gamharia), Taluka: Adityapur(Gamharia), District: SARAIKELLA KHARSWAN, State: Jharkhand, PIN: 832402 - Licence No. P/HQ/JH/15/1065 (P257355) - Renewal regarding.

महोदय /Sir
(s),

कृपया आपके पत्र क्रमांक OIN1307334 दिनांक 23/02/2023 का आकलन करें।

Please refer to your letter No.: OIN1307334, dated 23/02/2023

अनुमति संख्या P/HQ/JH/15/1065 (P257355) दिनांक 23/12/2011 को दिनांक 31/12/2026 तक नवीनीकृत कर इस पत्र के साथ अग्रपत्र की जा रही है।

Licence No. P/HQ/JH/15/1065 (P257355) dated 23/12/2011 is forwarded herewith duly renewed upto 31/12/2026.

कृपया पेट्रोलियम नियम 2002 के अधीन बनाए गए नियम 148 में दी गई प्रक्रिया का कड़ाई से पालन करें। अनुमति के नवीकरण हेतु समस्त दस्तावेजों को अनुमति की वैधता समाप्त होने की तिथि से कम से कम 30 दिन पूर्व कार्यालय को प्रेषित करें।

Please follow the procedure strictly as laid down in rule 148 of the Petroleum Rules, 2002 and submit complete documents for the Renewal of the licence so as to reach this office on or before the date on which Licence expires.

कृपया पावली दें।

Please acknowledge the receipt.

भवदीय /Yours faithfully,

((आशेंद्र सिंह))
(Ashendra Singh)

उप मुख्य विस्फोटक नियंत्रक

Dy. Chief Controller of Explosives

रांची/Ranchi

Note:-This is system generated document does not require signature.

(अधिक जानकारी के लिए आवेदन की स्थिति, शुल्क तथा अन्य विवरण के लिए हमारी वेबसाइट : <http://peso.gov.in> देखें)

(For more information regarding status, fees and other details please visit our website: <http://peso.gov.in>)

HINDUSTAN PETROLEUM CORPORATION LIMITED

(A Government of India Enterprise)

QUALITY CONTROL LABORATORY

Visakha New Terminal

CONVENT JN.-SHEELANAGAR ROAD, BEHIND AIRPORT,

VISAKHAPATNAM- 530014

TEST REPORT

Product : HP INDUSTRIAL DIESEL OIL

Customer / Supplier / : NBOT-BONDED TANKS-PSD
Branch Plant
Source of Sample : TK105
Tank No : TK105
Qty of Sample/ : 1ltr uml / tk70/868.3 b.no.36/2019

Density/Type of Sample
Catg / Evnt / Actvty : Aft Receipt thru Dedicated P/L
Receipt/Despatch Mode :
Sample Drawn by : RAMAKRISHNA

Test Report No. : BFT/10835
Date of Sample Drawn : 20/07/19
Date of Sample Receipt : 21/07/19
Date of Sample Testing : 22/07/19
Date of Report : 22/07/19
Date of Printing : 22/07/19
JDE Sample Number : 865213
Batch No :

Test Line Number	Characteristics	Units	Test Method	Specifications		Result Value
				Min	Max	
5	DENSITY@ 15°C	Kg/m3	IS 1448 [P:16]	-	-	867.8
6	KINEMATIC VISCOSITY. @ 40° C	cSt	IS 1448 P:25	2.500	15.000	4.860
7	FLASH POINT - PMCC	°C	IS 1448 P:21	66	-	79
8	WATER CONTENT	% Vol	IS 1448 P:40	-	.250	.100
9	TOTAL SULPHUR	% Mass	ASTM D 4294	-	1.50	.47
10	POUR POINT SUMMER	°C	IS 1448 P:10	-	21	3

Remarks:

Sample S.No.BFT/271 meets specification as per IS-15770:2008(Reaffirmed2014) in the above parameters

Appearance : Light Brown

- Notes :
- 1) The sample is drawn by client and results relate to sample tested
 - 2) The test report shall not be reproduced except in full without prior written approval of the Lab Incharge
 - 3) This test report shall not be used in any advertising media or as evidence in the Court of Law without prior written consent of Laboratory
 - 4) Test results reported are valid at the time of testing
 - 5) This is a system generated test report and hence does not require signature

Tested By : 35323320
VELAMURI DATTATREYA

Reviewed and Approved By : 35323320
VELAMURI DATTATREYA

*** END OF TEST REPORT ***

Page No. : 1 of 1



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Registered by :-
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Jharkhand State Pollution Control Board (JSPCB)
ISO 9001:2015 & ISO 45001:2018



State Pollution
Control Board

Test Report

Baseline Ground Water Quality Report

Discipline	Chemical	Group	Water	Sample Description	Ground Water
Report Release Date	30 th September, 2024			Type of Industry (if any)	Thermal Power Plant
Report Issue to	M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.				
Sampling Date	20/09/2024			Mode of sample collection	By YBAEEL Team
Sampling Plan	YBAEEL/SP/149-2024			Sample Code	240921-GW-01
Sampling Location	Srirampur Village, Borewell			Sampling Source	Ground Water
Sample pkg. Condition	Sealed Pack in PP Bottle			Sample Quantity	3000 ml
Meteorological Cond. of Field	W.C.– Partly Cloudy			RH % - 61	Temp. – 33°C
Sample receipt Date	21/09/2024	Analysis Started on	21/09/2024	Analysis completed on	30/09/2024

*****Test Results*****

Sl	Parameter	Test Method	Units	Results	Baseline Ground Water Quality	Permissible Limit (as per IS 10500 Specification)
1.	pH value	IS 3025 (P-11):2022 (Electrometric Method)	pH	7.06 at 25.7°C	6.9-7.4	6.5-8.5
2.	Taste	IS 3025 (P-07 & 08):2017&2023	--	Agree.	Agreeable	Agreeable
3.	Odour	IS 3025 (P-05):2018	--	Agree.	Unobjectionable	Agreeable
4.	Colour	IS 3025 (P-04):2021 (Visual Comparison Method)	Hazen	<5	<5	5-15
5.	Conductivity	IS 3025 (P-14):2013, RA 2019	µs/cm	682.0 at 25.6°C	--	--
6.	Total Alkalinity (as CaCO ₃)	IS 3025 (P-23):1986, RA 2019 (Indicator Method)	mg/l	158.0	147-269	200-600
7.	Total Hardness (as CaCO ₃)	IS 3025 (P-21):2009, RA 2019 (EDTA Method)	mg/l	212.0	128-308	200-600
8.	Total dissolved solids	IS 3025 (P-16):2023 (Gravimetric Method)	mg/l	540.0	251-538	500-2000
9.	Chlorine Residual	IS 3025 (P-26):2021 (Iodometric Method)	mg/l	BDL (MDL 0.07)	<0.05	0.2-1
10.	Chloride (as Cl)	IS 3025 (P-32):1988, RA 2019 (Argentometric Method)	mg/l	58.14	42-74	250-1000
11.	Fluoride (as F ⁻)	APHA 4500 F-C 24 th edition 2023 (Ion Selective Electrode Method)	mg/l	0.16	0.31-0.50	1.0-1.5
12.	Nitrate (as NO ₃ ⁻ N)	APHA 4500 NO ₃ ⁻ (B) 24 th edition 2023 (UV Screening Method)	mg/l	1.54	03-24	45-No relaxation
13.	Sulphate (as SO ₄ ²⁻)	IS 3025 (P-24-Sec 1):2022 (Turbidity Method)	mg/l	35.13	06-28	200-400
14.	Calcium (as Ca)	IS 3025 (P-40): 1991, RA 2019 (EDTA Titrimetric Method)	mg/l	71.34	41-99	75-200
15.	Magnesium (as Mg)	APHA 3500 Mg B 24 th edition 2023	mg/l	8.17	--	30-100
16.	Sodium (as Na ⁺)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	44.0	--	--
17.	Potassium (as K ⁺)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	1.0	--	--

Prepared By – Pinkiy Kumari (Lab Analyst)

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

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Engineering Laboratory



Enquiry Office -

Jamshedpur

Dhanbad

Hazaribag

Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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State Pollution
Control Board

Test Report

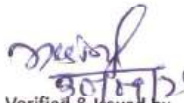
Baseline Ground Water Quality Report

Discipline	Chemical	Group	Water	Sample Description	Ground Water
Report Release Date		30 th September, 2024		Type of Industry (If any)	Thermal Power Plant
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.			
Sampling Date		20/09/2024		Mode of sample collection	By YBAEEL Team
Sampling Plan		YBAEEL/SP/149-2024		Sample Code	240921-GW-01
Sampling Location		Srirampur Village, Borewell		Sampling Source	Ground Water
Sample pkg. Condition		Sealed Pack in PP Bottle		Sample Quantity	3000 ml
Meteorological Cond. of Field		W.C.- Partly Cloudy		RH % - 61	Temp. - 33°C
Sample receipt Date		21/09/2024	Analysis Started on	21/09/2024	Analysis completed on 30/09/2024

Sl	Parameter	Test Method	Units	Results	Baseline Ground Water Quality	Permissible Limit (as per IS 10500 Specification)
18.	Cyanide(as CN ⁻)	IS 3025 (P-27/Sec1):2021 (Titrimetric Method)	mg/l	BDL (MDL 1.0)	--	0.05-No relaxation
19.	Arsenic (as As)	APHA 3114 C 24 th edition 2023 (Continuous Hydride Generation Method)	mg/l	BDL (MDL 0.003)	<0.01	0.01-No relaxation
20.	Copper (as Cu)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.01)	<0.01	0.05-1.5
21.	Iron (as Fe)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	0.89	0.13-0.90	1.0-No relaxation
22.	Lead (as Pb)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	<0.01	0.01-No relaxation
23.	Selenium (as Se)	APHA 3114 C 24 th edition 2023 (Continuous Hydride Generation Method)	mg/l	BDL (MDL 0.01)	--	0.01-No relaxation
24.	Zinc (as Zn)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	0.43	0.31-0.47	5-15
25.	Cadmium (as Cd)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	<0.01	0.003-No relaxation
26.	Mercury (as Hg)	APHA 3112 B 24 th edition 2023 (Cold Vapour AAS Method)	mg/l	BDL (MDL 0.003)	<0.001	0.001-No relaxation
27.	Chromium (as Cr)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	<0.01	0.05-No relaxation
28.	Nickel (as Ni)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	--	0.02-No relaxation
29.	Cobalt (Co)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.03)	--	--
30.	Aluminium (as Al)	IS 3025 (P-55):2003, RA 2019 (Eriochrome Cyanine R Method)	mg/l	BDL (MDL 0.02)	--	0.03-0.2

Limit is specified as	IS 10500:2012, RA 2018.
Abbreviation	MDL - Minimum detection limit, BDL - Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 85 ± 5% in all testing areas as per IS 196-1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility. This report, in full or in part, shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise. The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Sample complies with prescribed limits.

Prepared By - Pinkiy Kumari (Lab Analyst)


Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

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

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office -

Jamshedpur

Dhanbad

Hazaribag

Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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State Pollution
Control Board

Test Report

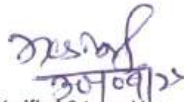
Baseline Ground Water Quality Report

Discipline	Chemical	Group	Water	Sample Description	Ground Water
Report Release Date	30 th September, 2024			Type of Industry (if any)	Thermal Power Plant
Report Issue to	M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.				
Sampling Date	20/09/2024		Mode of sample collection		By YBAEEL Team
Sampling Plan	YBAEEL/SP/149-2024		Sample Code		240921-GW-02
Sampling Location	Hariharpur Village, Borewell		Sampling Source		Ground Water
Sample pkg. Condition	Sealed Pack in PP Bottle		Sample Quantity		3000 ml
Meteorological Cond. of Field	W.C.– Partly Cloudy		RH % - 61		Temp. – 33°C
Sample receipt Date	21/09/2024	Analysis Started on	21/09/2024	Analysis completed on	30/09/2024

*****Test Results*****

Sl	Parameter	Test Method	Units	Results	Baseline Ground Water Quality	Permissible Limit (as per IS 10500 Specification)
1.	pH value	IS 3025 (P-11):2022 (Electrometric Method)	pH	7.02 at 25.5°C	6.9-7.4	6.5-8.5
2.	Taste	IS 3025 (P-07 & 08):2017&2023	--	Agree.	Agreeable	Agreeable
3.	Odour	IS 3025 (P-05):2018	--	Agree.	Unobjectionable	Agreeable
4.	Colour	IS 3025 (P-04):2021 (Visual Comparison Method)	Hazen	<5	<5	5-15
5.	Conductivity	IS 3025 (P-14):2013, RA 2019	µs/cm	549.0 at 25.6°C	--	--
6.	Total Alkalinity (as CaCO ₃)	IS 3025 (P-23):1986, RA 2019 (Indicator Method)	mg/l	130.0	147-269	200-600
7.	Total Hardness (as CaCO ₃)	IS 3025 (P-21):2009, RA 2019 (EDTA Method)	mg/l	198.0	128-308	200-600
8.	Total dissolved solids	IS 3025 (P-16):2023 (Gravimetric Method)	mg/l	450.0	251-538	500-2000
9.	Chlorine Residual	IS 3025 (P-26):2021 (Iodometric Method)	mg/l	BDL (MDL 0.07)	<0.05	0.2-1
10.	Chloride (as Cl)	IS 3025 (P-32):1988, RA 2019 (Argentometric Method)	mg/l	66.02	42-74	250-1000
11.	Fluoride (as F ⁻)	APHA 4500 F-C 24 th edition 2023 (Ion Selective Electrode Method)	mg/l	0.24	0.31-0.50	1.0-1.5
12.	Nitrate (as NO ₃ ⁻ N)	APHA 4500 NO ₃ ⁻ (B) 24 th edition 2023 (UV Screening Method)	mg/l	4.96	03-24	45-No relaxation
13.	Sulphate (as SO ₄ ²⁻)	IS 3025 (P-24-Sec 1):2022 (Turbidity Method)	mg/l	38.42	06-28	200-400
14.	Calcium (as Ca)	IS 3025 (P-40): 1991, RA 2019 (EDTA Titrimetric Method)	mg/l	63.32	41-99	75-200
15.	Magnesium (as Mg)	APHA 3500 Mg B 24 th edition 2023	mg/l	9.64	--	30-100
16.	Sodium (as Na ⁺)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	31.0	--	--
17.	Potassium (as K ⁺)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	2.0	--	--

Prepared By - Pinkiy Kumari (Lab Analyst)


Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

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

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office -

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Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
Ph : 09835197960, 9304955304, Email - ybaeel@gmail.com, Web - https://ybaeel.in



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**Test Report****Baseline Ground Water Quality Report**

Discipline	Chemical	Group	Water	Sample Description	Ground Water
Report Release Date		30 th September, 2024		Type of Industry (If any)	Thermal Power Plant
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.			
Sampling Date		20/09/2024		Mode of sample collection	By YBAEEL Team
Sampling Plan		YBAEEL/SP/149-2024		Sample Code	240921-GW-02
Sampling Location		Hariharpur Village, Borewell		Sampling Source	Ground Water
Sample pkg. Condition		Sealed Pack in PP Bottle		Sample Quantity	3000 ml
Meteorological Cond. of Field		W.C.- Partly Cloudy		RH % - 61	Temp. - 33°C
Sample receipt Date		21/09/2024	Analysis Started on	21/09/2024	Analysis completed on 30/09/2024

Sl	Parameter	Test Method	Units	Results	Baseline Ground Water Quality	Permissible Limit (as per IS 10500 Specification)
18.	Cyanide(as CN ⁻)	IS 3025 (P-27/Sec1):2021 (Titrimetric Method)	mg/l	BDL (MDL 1.0)	--	0.05-No relaxation
19.	Arsenic (as As)	APHA 3114 C 24 th edition 2023 (Continuous Hydride Generation Method)	mg/l	BDL (MDL 0.003)	<0.01	0.01-No relaxation
20.	Copper (as Cu)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.01)	<0.01	0.05-1.5
21.	Iron (as Fe)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	0.48	0.13-0.90	1.0-No relaxation
22.	Lead (as Pb)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	<0.01	0.01-No relaxation
23.	Selenium (as Se)	APHA 3114 C 24 th edition 2023 (Continuous Hydride Generation Method)	mg/l	BDL (MDL 0.01)	--	0.01-No relaxation
24.	Zinc (as Zn)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	0.10	0.31-0.47	5-15
25.	Cadmium (as Cd)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	<0.01	0.003-No relaxation
26.	Mercury (as Hg)	APHA 3112 B 24 th edition 2023 (Cold Vapour AAS Method)	mg/l	BDL (MDL 0.003)	<0.001	0.001-No relaxation
27.	Chromium (as Cr)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	<0.01	0.05-No relaxation
28.	Nickel (as Ni)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.02)	--	0.02-No relaxation
29.	Cobalt (Co)	APHA 3111 B 24 th edition 2023 (Direct Air Acetylene Flame Method)	mg/l	BDL (MDL 0.03)	--	--
30.	Aluminium (as Al)	IS 3025 (P-55):2003, RA 2019 (Eriochrome Cyanine R Method)	mg/l	BDL (MDL 0.02)	--	0.03-0.2

Limit is specified as	IS 10500:2012, RA 2018.
Abbreviation	MDL - Minimum detection limit. BDL - Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C)
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility This report, in full or in part, shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise. The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Sample complies with prescribed limits.

Prepared By – Pinkiy Kumari (Lab Analyst)

Sanjeev Kumar Singh
30/09/24
Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

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

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Engineering Laboratory



Enquiry Office -

Jamshedpur

Dhanbad

Hazaribag

Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by :- NABL Accredited Testing Laboratory Vide Certificate No. TC -12989
Registered by :- Jharkhand State Pollution Control Board (JSPCB)
Certified by :- ISO 9001:2015 & ISO 45001:2018



TC-12989

Test Report

ULR (Unique Lab Report) No.			TC	1	2	9	8	9	2	4	0	0	0	0	0	0	8	9	5	F
Discipline	Chemical	Group	Atmospheric Pollution					Sample Description					Work Zone Noise							
Report Release Date		30 th September, 2024					Report ID					YBAEEL-2409-19								
W. Order / JSPCB App. No.		3030006964					Work Order Date					03.02.2024								
Type of Industry (If any)		Thermal Power Plant					Job code/ Ref. no.					YBAEEL/C/A/Sept.- 24/09								
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																		
Sampling Period		19/09/2024 – 21/09/2024					Mode of sample collection					By YBAEEL Team								
Sampling Plan		YBAEEL/SP/149-2024																		
Meteorological Cond. of Field		W.C.– Partly Cloudy					RH % - 64					Temp. - 32°C								
Sample receipt Date		21/09/2024		Analysis Started on			21/09/2024			Analysis completed on				30/09/2024						

*****Test Results*****

Sl.	Locations	Parameters	Units	Day Time (6.00 a.m. to 10.00 p.m.)	Night Time (10.00 p.m. to 6.00 a.m.)	Limits
1.	Near CHP Area	Leq	dB (A)	70.2	61.8	85
2.	Near Cooling Tower	Leq	dB (A)	84.1	82.6	
3.	Near Turbine Floor	Leq	dB (A)	82.6	81.7	
4.	Pump House	Leq	dB (A)	60.8	57.2	
5.	Near Compressor House	Leq	dB (A)	84.3	81.3	

Limit is specified as	Factory Act, 1948 (8 hrs.)
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS: 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility.
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
	This report cannot be reproduced, except when in full, without the written permission of the CEO.
	The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise.
	The liability of the laboratory is limited to the invoiced amount.
Remarks	All disputes are subjected to the Ranchi Jurisdiction.
	Samples comply with prescribed limit.

Sample Drawn By – Mukesh Singh
Tested By – Akash Khalkho (Lab Analyst)

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

30/09/24
Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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Certified by : ISO 9001:2015 & ISO 45001:2018



Test Report

ULR (Unique Lab Report) No.			TC	1	2	9	8	9	2	4	0	0	0	0	0	0	8	9	4	F
Discipline	Chemical	Group	Atmospheric Pollution					Sample Description					Ambient Noise							
Report Release Date		30 th September, 2024						Report ID					YBAEEL-2409-19							
W. Order / JSPCB App. No.		3030006964						Work Order Date					03.02.2024							
Type of Industry (If any)		Thermal Power Plant						Job code/ Ref. no.					YBAEEL/C/A/Sept.-24/09							
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																		
Sampling Period		19/09/2024– 20/09/2024					Mode of sample collection					By YBAEEL Team								
Sampling Plan		YBAEEL/SP/149-2024																		
Meteorological Cond. of Field		W.C.– Partly Cloudy					RH % - 66					Temp. - 32°C								
Sample receipt Date		21/09/2024		Analysis Started on			21/09/2024			Analysis completed on			30/09/2024							

*****Test Results*****

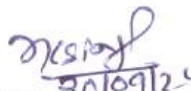
Sl.	Locations	Parameters	Units	Day Time (6.00 a.m. to 10.00 p.m.)	Night Time (10.00 p.m. to 6.00 a.m.)	Limits
1.	Near Sati Steel	Leq	dB (A)	46.8	40.2	Day – 75 Night – 70
2.	Near Reservoir	Leq	dB (A)	55.2	52.6	
3.	Near Occupational Health Centre	Leq	dB (A)	48.2	45.4	
4.	Near Main Gate	Leq	dB (A)	62.4	52.6	

- Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority. - Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority. - dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale(A) which is relatable to human hearing.	Area		Unit	Day Time	Night time
	A	Industrial Area	dB (A)	75.0	70.0
	B	Commercial Area	dB (A)	65.0	55.0
	C	Residential Area	dB (A)	55.0	45.0
	D	Silence Zone	dB (A)	50.0	40.0

Limit is specified as	Noise pollution (Regulation & Control) Rules, 2000.
Abbreviation	MDL : Minimum detection limit. BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility. This report in full or in part shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full without the written permission of the CEO. The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise. The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples comply with prescribed limit.

Sample Drawn By – Mukesh Singh
Tested By – Akash Khaikho (Lab Analyst)

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


Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur
Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

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Certified by : ISO 9001:2015 & ISO 45001:2018



TC-12989

Test Report

ULR (Unique Lab Report) No.			TC	1	2	9	8	9	2	4	0	0	0	0	0	0	8	9	1	F
Discipline	Chemical	Group	Atmospheric Pollution					Sample Description					Ambient Air Quality (Core Zone)							
Report Release Date		30 th September, 2024						Report ID					YBAEEL-2409-19							
W. Order / JSPCB App. No.		3030006964						Work Order Date					03.02.2024							
Type of Industry(If any)		Thermal Power Plant						Job code/ Ref. no.					YBAEEL/C/A/Sept.- 24/09							
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																		
Sampling Period		19/09/2024 – 20/09/2024						Mode of sample collection					By YBAEEL Team							
Sampling Plan		YBAEEL/SP/149-2024																		
Sampling Locations		A. Nea CHP Area										22°49'47"N, 86°03'39"E								
		B. Near TG Area										22°50'08"N, 86°03'46"E								
		C. Near Admin Building										22°50'22"N, 86°03'35"E								
Meteorological Cond. of Field		W.C.– Partly Cloudy					RH % - 62					Temp. - 33°C				W.D.– SW-NE				
Sample receipt Date		21/09/2024		Analysis Started on				21/09/2024			Analysis completed on					30/09/2024				

*****Test Results*****

Parameters	Test Methods	Units	Sampling Location			Limits
			Site A	Site B	Site C	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006, RA 2022	µg/m ³	92.7	78.2	71.6	100
Particulate matter (PM _{2.5})	IS:5182 (P-24) 2019	µg/m ³	40.7	36.1	31.4	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2/Sec1) 2023	µg/m ³	13.2	15.6	11.8	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2022	µg/m ³	28.7	26.3	21.6	80
Ammonia (NH ₃)	IS:5182 (P-25) 2018	µg/m ³	36.4	15.7	13.4	400
Ozone (O ₃)	IS:5182 (P-09):1974, RA 2019	µg/m ³	5.6	7.5	3.3	180 (1 hr.)
Lead (Pb)	IS:5182 (P-22) 2004, RA 2019	µg/m ³	0.018	0.023	0.012	1
Nickel (Ni)	IS:5182 (P-26) 2020	ng/m ³	BDL (MDL- 4)	BDL (MDL- 4)	BDL (MDL- 4)	--
Arsenic (As)	USEPA – IO 3.2	ng/m ³	BDL (MDL -02)	BDL (MDL -02)	BDL (MDL -02)	--

Limit is specified as	Environmental (Protection) Rule – 1986.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196-1966 (C)
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility.
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	The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise.
	The liability of the laboratory is limited to the invoiced amount.
Remarks	All disputes are subjected to the Ranchi Jurisdiction.
	Samples comply with prescribed limits.

Sample Drawn By – Mukesh Singh
Tested By – Akash Khalkho (Lab Analyst)

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

20/09/24

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Registered by :-
Certified by :-

Jharkhand State Pollution Control Board (JSPCB)
ISO 9001:2015 & ISO 45001:2018



State Pollution
Control Board

Test Report

Discipline	Chemical	Group	Atmospheric Pollution		Sample Description	Ambient Air Quality (Core Zone)	
Report Release Date		30 th September, 2024			Report ID	YBAEEL-2409-19	
W. Order / JSPCB App. No.		3030006964			Work Order Date	03.02.2024	
Type of Industry(If any)		Thermal Power Plant			Job code/ Ref. no.	YBAEEL/C/A/Sept.- 24/09	
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.					
Sampling Period		19/09/2024 – 20/09/2024		Mode of sample collection		By YBAEEL Team	
Sampling Plan		YBAEEL/SP/149-2024					
Sampling Locations		A. Nea CHP Area			22°49'47"N, 86°03'39"E		
		B. Near TG Area			22°50'08"N, 86°03'46"E		
		C. Near Admin Building			22°50'22"N, 86°03'35"E		
Meteorological Cond. of Field		W.C.– Partly Cloudy		RH % - 62		Temp. - 33°C	W.D.– SW-NE
Sample receipt Date		21/09/2024	Analysis Started on		21/09/2024	Analysis completed on	
						30/09/2024	

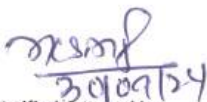
*****Test Results*****

Parameters	Test Methods	Units	Sampling Location			Limits
			Site A	Site B	Site C	
Carbon Monoxide (CO)	SOP No. YBAEEL/SOP/AIR/01	mg/m ³	BDL (MDL 1.8)	BDL (MDL 1.8)	BDL (MDL 1.8)	4
Benzene (C ₆ H ₆)	IS:5182 (P-11) 2006, RA 2022	µg/m ³	BDL (MDL 0.06)	BDL (MDL 0.06)	BDL (MDL 0.06)	--
Benzo (a)pyrene (BaP) (Particulate Phase Only)	IS:5182 (P-12) 2004, RA 2019	ng/m ³	BDL (MDL 0.2)	BDL (MDL 0.2)	BDL (MDL 0.2)	--

Limit is specified as	Environmental (Protection) Rule – 1986.
Abbreviation	MDL - Minimum detection limit, BDL - Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196-1986 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility. This report, in full or in part, shall not be used for advertising or as evidence in any court of law. This report cannot be reproduced, except when in full, without the written permission of the CEO. The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise. The liability of the laboratory is limited to the invoiced amount. All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples comply with prescribed limits.

Sample Drawn By – Mukesh Singh
Tested By – Akash Khalkho (Lab Analyst)

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


30/09/24

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office -

Jamshedpur

Dhanbad

Hazaribag

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Test Report

ULR (Unique Lab Report) No.				TC	1	2	9	8	9	2	4	0	0	0	0	0	0	8	9	2	F
Discipline	Chemical	Group	Atmospheric Pollution						Sample Description						Ambient Air Quality (Buffer Zone)						
Report Release Date		30 th September, 2024						Report ID						YBAEEL-2409-19							
W. Order / JSPCB App. No.		3030006964						Work Order Date						03.02.2024							
Type of Industry(If any)		Thermal Power Plant						Job code/ Ref. no.						YBAEEL/C/A/Sept.- 24/09							
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																			
Sampling Period		20/09/2024 – 21/09/2024						Mode of sample collection						By YBAEEL Team							
Sampling Plan		YBAEEL/SP/149-2024																			
Sampling Locations		A. Padampur Village																			
		B. Srirampur Village																			
		C. Bada Hariharpur Village																			
Meteorological Cond. of Field		W.C.– Partly Cloudy						RH % - 63						Temp. - 31°C				W.D.– North-South			
Sample receipt Date		21/09/2024		Analysis Started on				21/09/2024		Analysis completed on						30/09/2024					

*****Test Results*****

Parameters	Test Methods	Units	Sampling Location			Limits
			Site A	Site B	Site C	
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006, RA 2022	µg/m ³	89.2	84.6	67.2	100
Particulate matter (PM _{2.5})	IS:5182 (P-24) 2019	µg/m ³	43.2	34.8	25.4	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2/Sec1) 2023	µg/m ³	16.5	14.6	9.9	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2022	µg/m ³	32.6	27.9	16.9	80
Ammonia (NH ₃)	IS:5182 (P-25) 2018	µg/m ³	19.7	44.1	11.3	400
Ozone (O ₃)	IS:5182 (P-09):1974, RA 2019	µg/m ³	8.1	4.9	2.5	180 (1 hr.)
Lead (Pb)	IS:5182 (P-22) 2004, RA 2019	µg/m ³	0.021	0.018	BDL (MDL-0.004)	1
Nickel (Ni)	IS:5182 (P-26) 2020	ng/m ³	BDL (MDL- 4)	BDL (MDL- 4)	BDL (MDL- 4)	--
Arsenic (As)	USEPA – IO 3.2	ng/m ³	BDL (MDL -02)	BDL (MDL -02)	BDL (MDL -02)	--

Limit is specified as	Environmental (Protection) Rule – 1986.
Abbreviation	MDL - Minimum detection limit, BDL - Below detection limit
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C)
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility.
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	The liability of the laboratory is limited to the invoiced amount.
Remarks	All disputes are subjected to the Ranchi Jurisdiction.
	Samples comply with prescribed limits.

Sample Drawn By – Mukesh Singh
Tested By – Akash Khalkho (Lab Analyst)

Sanjeev Kumar Singh
30/09/24

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

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

Enquiry Office - Jamshedpur Dhanbad Hazaribag Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
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Certified by :-

Jharkhand State Pollution Control Board (JSPCB)
ISO 9001:2015 & ISO 45001:2018



State Pollution
Control Board

Test Report

Discipline	Chemical	Group	Atmospheric Pollution	Sample Description	Ambient Air Quality (Buffer Zone)	
Report Release Date		30 th September, 2024		Report ID	YBAEEL-2409-19	
W. Order / JSPCB App. No.		3030006964		Work Order Date	03.02.2024	
Type of Industry(If any)		Thermal Power Plant		Job code/ Ref. no.	YBAEEL/C/A/Sept.- 24/09	
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.				
Sampling Period		20/09/2024 – 21/09/2024	Mode of sample collection		By YBAEEL Team	
Sampling Plan		YBAEEL/SP/149-2024				
Sampling Locations		A. Padampur Village				
		B. Srirampur Village				
		C. Bada Hariharpur Village				
Meteorological Cond. of Field		W.C.– Partly Cloudy	RH % - 63		Temp. - 31°C	W.D.– North-South
Sample receipt Date		21/09/2024	Analysis Started on	21/09/2024	Analysis completed on	30/09/2024

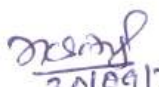
*****Test Results*****

Parameters	Test Methods	Units	Sampling Location			Limits
			Site A	Site B	Site C	
Carbon Monoxide (CO)	SOP No. YBAEEL/SOP/AIR/01	mg/m ³	BDL (MDL 1.8)	BDL (MDL 1.8)	BDL (MDL 1.8)	4
Benzene (C ₆ H ₆)	IS:5182 (P-11) 2006, RA 2022	µg/m ³	BDL (MDL 0.06)	BDL (MDL 0.06)	BDL (MDL 0.06)	--
Benzo (a)pyrene (BaP) (Particulate Phase Only)	IS:5182 (P-12) 2004, RA 2019	ng/m ³	BDL (MDL 0.2)	BDL (MDL 0.2)	BDL (MDL 0.2)	--

Limit is specified as	Environmental (Protection) Rule – 1986.
Abbreviation	MDL - Minimum detection limit, BDL - Below detection limit.
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility.
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
	This report cannot be reproduced, except when in full, without the written permission of the CEO.
	The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise.
	The liability of the laboratory is limited to the invoiced amount.
Remarks	All disputes are subjected to the Ranchi Jurisdiction.
	Samples comply with prescribed limits.

Sample Drawn By – Mukesh Singh
Tested By – Akash Khalkho (Lab Analyst)

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


20/09/24

Verified & Issued by
Sanjeev Kumar Singh
(Technical Manager)

Authorized Signatory
Atmospheric Pollution
Yugantar Bharati Analytical &
Environmental Engineering Laboratory

Enquiry Office -

Jamshedpur

Dhanbad

Hazaribag

Pakur

Main Office Cum Laboratory :- Plot No. 551, Khata No 62, Sidroul, P.O. Namkum, P.S. Namkum, Ranchi, Jharkhand
Ph : 09835197960, 9304955304, Email - ybaeel@gmail.com, Web - https://ybaeel.in





ADHUNIK POWER & NATURAL RESOURCES LIMITED

WORKS : Village - Padampur, Behind P.G.C.I.L. Substation,
Adityapur - Kandra Road, Saraikela - Kharsawan, PIN - 832402 Jharkhand
Phone : +91 - 657 - 6628400, Fax : +91 - 657 - 6628440
CIN - U40101WB2005PLC102935

01.12.2022

Office Order

As per the directions of the Ministry of Environment & Forest, Government of India while granting the Environment Clearances vide letter no J-13011/8/2009-IA.II(T), dated 29th Aug 2009 (Unit I) & Letter No :J13012/8/2009-IA .II (T) dtd 9th May 2011 to our 2x270 MW Power Plant, the Management considering the importance of Environmental concerns and set up the Environment Cell under the chair of Plant In charge who is directly reporting the Managing Director of Organization. The Cell is functional since 2009 and is equipped with qualified professionals of the fields.

Roles & Responsibility of Environment Cell

Following the broad scope of the Cell

- Understanding Environment issues in Adhunik power & Natural Resources Ltd during Construction & Operation and Maintenance Phase.
- Framing appropriate scope of work for requisite environment management, EIA & various other complex issues to address those with tailor made solutions,
- Awarding the consultancy tasks for environmental management & EIAs, Modeling, Monitoring etc & other complex studies to the appropriate agency and also sometimes In-house work of Monitoring,
- Dealing with JSPCB/CPCB/MoEF & CC for various aspects including obtaining clearances for Plant and Plant led development and policy makings at State and National level,
- The meeting of the management of M/s APNRL shall be conducted in which the budgetary allocation for the EMP shall be discussed and finalized and comprehensive EMP shall be prepared as per the guidelines of CPCB.
- Preparation of Environmental Management Plans- Basically Assisting Engineering Section for preparation Master Plan for existing plant to address policy regulations issued by MOEF& CC from time to time,
- Operating and upgrading the existing Hazardous Waste Management Facilities for Plant Area as per latest regulations.- (Development and Operation of TSDF at APNRL),
- Initiating dialogs, meeting & developing participatory approach with the key stakeholders for solving any typical pollution related problems.
- Review of EMP for various sections of plant and suggest modifications if any for better Env Management,
- Representing APNRL at the State and National level platform for Environment Management
- Comments & advice on draft amendment, notifications on Environmental Laws.
- Imparting knowledge and raising awareness for Environment Protections among APNRL key officers and other related stakeholders,
- The Plant Incharge will be responsible for environmental issues at plant.

The responsibilities of the various members of the environment management cell are enclosed as
Annexure I:

CORPORATE OFFICE : "LANSLOWNE TOWER", 2/1A, Sarat Bose Road, Kolkata - 700 020

Ph : +91 - 33 - 30517100 / 7200 / 7300 • Fax : +91 - 33 - 22890285

REGD. OFFICE

: 14, N. S. Road, 2nd Floor, Kolkata - 700 001, Phone No. +91 - 33 - 22428551, 22428553

Website

: www.adhunikgroup.com



ADHUNIK POWER & NATURAL RESOURCES LIMITED

WORKS : Village - Padampur, Behind P.G.C.I.L. Substation,
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Phone : +91 - 657 - 6628400, Fax : +91 - 657 - 6628440
CIN - U40101WB2005PLC102935

01.12.2022

Annexure I

Responsibilities of the members of the environment management cell

S. No.	Designation	Responsibility	Reporting to
01	Managing Director	Environmental policy and directions	
02	Plant Head	Overall responsibility for environmental management and decision making for all environmental issues	Managing Director
03	Environment Manager Kamlesh Kumar (M.Sc.- Environmental Science)	Overall in-charge of operation of environmental management facilities of respective sections. Ensure environmental monitoring as per appropriate procedures, Ensure correct records of generation, handling, storage, transportation and disposal of solid hazardous wastes. Ensuring legal compliance by properly undertaking activities as laid down by various regulatory agencies from time to time and interacting with the same and arranging awareness programme among the workers.	Plant Head
04	CSR Manager Sanjeet Sinha (M.Sc – Maths)	Responsibility to implement social impact improvement /mitigation measures.	Plant Head
05	Safety Manager Bidesh Bid B.Sc in Chemistry(H) Diploma in Industrial Safety	Participating in workplace safety and health planning meetings. Ensuring managers and supervisors have the appropriate safety and health; Accident prevention; and investigation & training Ensure safety and health hazards are corrected, eliminated or guarded.	Plant Head
06	Medical Officer Dr. Ganesh Prasad Murmu, MBBS	Attend all types of OPD and Emergency Patients. First Aid Treatment to all Cases. Routine Medical Examination of Company Employees. Performing & Conducting various training & awareness programs in company.	Plant Head
06	Chemist Tapas Kumar Mahato B.Sc/ M.Sc	To initiate environmental monitoring as per approved schedule. Prepare & Submit the monitored results and corrective measures in case monitored results are above the specified limit.	Environment Manager
07	Horticulture officer Ravi Prakash Sharma Graduate	Responsible for development of Green belt & Land Scape on vacant land of Plant premises.	Environment Manager

[Signature]
DGM(HR)

CORPORATE OFFICE : "LANSDOWNE TOWER", 2/1A, Sarat Bose Road, Kolkata - 700 020

Ph : +91 - 33 - 30517100 / 7200 / 7300 • Fax : +91 - 33 - 22890285

REGD. OFFICE : 14, N. S. Road, 2nd Floor, Kolkata - 700 001, Phone No. +91 - 33 - 22428551, 22428553

Website : www.adhunikgroup.com

Kamlesh Kr Jha

From: Kamlesh Kr Jha
Sent: 23 May 2024 14:50
To: 'JSPCB, Jamshedpur'; 'ro.ranchi-mef@gov.in'; 'ranchijspcb@gmail.com'; 'nazim.cpcb@nic.in'
Subject: Submission of Half yearly compliance status report (Unit I) for the period – October 2023 to March 2024,-Reg.
Attachments: Annexure XIV-EMC Cell (2).pdf; Annexure X-LDO analysis report.pdf; Annexure XV-HYC-Unit I (April 2023- Sept 2023)-Acknowledgement Copy.pdf; Annexure XVI-Environment Statement -Unit I (2022-23).pdf; Covering Letter with Compliance report of EC -Unit I(APNRL).pdf; Annexure I-CEMS_APNRL.pdf; Annexure III-- DE & DS system at CHP.pdf; Annexure II-Stack Monitoring Report- U I.pdf; Annexure IV- Fly Ash Disposal report (2023-24).pdf; Annexure IX-LDO Certificate 2023-26.pdf; Annexure V-Bottom Ash Report.pdf; Annexure VI-Ash Pond Outlet Water Quality Report.pdf; Annexure VII-ETP Treated Water Quality Report.pdf; Annexure VIII- Sewage Treatment Plant -60KLD.pdf; Annexure XI-Baseline Ground water quality report.pdf; Annexure XIII-Ambient Air Quality Report.pdf; Annexure XII-Noise Monitoring Report.pdf

Ref:- MoEF & CC issued Environment Clearance File No.J-13011/8/2009-IA.II(T), dated 29th Aug 2009.

Sir,

With reference to the above referred Environmental Clearance, we are pleased to submit herewith the half yearly compliance status report with Annexures **(Unit I)** for the period of **October 2023 to March 2024**.

Following Documents are attached :

1. Covering Letter with compliance report of Environment Clearance –Unit I
2. Annexure I- Details of CEMS & Photographs
3. Annexure II- Stack Monitoring Report –Unit I
4. Annexure III- Photographs of DE & DS system
5. Annexure IV- Fly Ash Disposal report (2023-24)
6. Annexure V-Bottom Ash Report
7. Annexure VI-Ash Pond Outlet Water Quality Report
8. Annexure VII-ETP Treated Water Quality Report
9. Annexure VIII- Sewage Treatment Plant -60KLD
10. Annexure IX-LDO Certificate 2023-26
11. Annexure X-LDO analysis report
12. Annexure XI-Baseline Ground water quality report
13. Annexure XII-Noise Monitoring Report
14. Annexure XIII-Ambient Air Quality Report
15. Annexure XIV-EMC Cell (2)
16. Annexure XV-HYC-Unit I (April 2023- Sept 2023)-Acknowledgement Copy
17. Annexure XVI-Environment Statement -Unit I (2022-23)

This is for your reference and record, please.

Thanks & Regards,

Kamlesh Kumar

Adhunik Power & Natural Resources Ltd.

Vill.-Padampur,,Behind P.G.C.I.L Substation,Tata-Kandra Road

Saraikela-Kharsawan,Pincode:-832402,Jharkhand

Cell No: - 07763818994

Email Id:- kamleshkrjha@adhunikpower.co.in

Website:- www.adhunikpower.com

Kamlesh Kr Jha

From: Kamlesh Kr Jha
Sent: 24 September 2024 11:30
To: 'ranchijspcb@gmail.com'; 'ro.ranchi-mef@gov.in'; 'jspcb.jsr@gmail.com'
Subject: Submission of Environmental Statement (Form V) for Unit I (1 x 270 MW) of M/s Adhunik Power & Natural Resources Limited,Village-Padampur, Dist-Saraikela-Kharswan, Jharkhand for FY (2023-24).
Attachments: Environment Statement-Unit I (2023-24).pdf

To,
Member Secretary
Jharkhand State Pollution Control Board,
HEC Campus, Dhurva,
Ranchi , Jharkhand.
Sub- Submission of Environmental Statement (Form V) for Unit I (1 x 270 MW) of M/s Adhunik Power & Natural Resources Limited,Village-Padampur, Dist-Saraikela-Kharswan, Jharkhand.

Ref: Environmental Clearance letter No J-13011/8/2009-IA.II(T), Dated 29th Aug 2009.

Dear Sir,

In line with compliance of above referred EC letter point No XXX of general condition, Please find attached herewith Environmental statement (Form V) for the financial year 2023-24.

This is for your kind information & record please.

Thanking You

Regards

Kamlesh Kumar

A.G.M-Environment

Adhunik Power & Natural Resources Ltd.

Vill.-Padampur,,Behind P.G.C.I.L Substation,Tata-Kandra Road

Saraikela-Kharsawan,Pincode:-832402,Jharkhand

Cell No: - 07763818994

Email Id:- kamleshkrjha@adhunikpower.co.in

Website:- www.adhunikpower.com

Attachment: As mentioned above

CC: 1. Integrated Regional Office -Ranchi,
Ministry of Environment, Forest and Climate Change,
2nd Floor, Jharkhand State Housing Board (HQ)
Harmu Chaouk, Ranchi, Jharkhand-834002
2. Regional Office. JSPCB, Adityapur