

Kamlesh Kr Jha

From: Kamlesh Kr Jha
Sent: 25 September 2025 11:45
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 (2024-25).
Attachments: Environment Statement-Unit I (2024-25).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 2024-25.

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



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 No APNRL/JSPCB/ES/2024-25/01

Date: 24th Sep 2025

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 2024-25.

This is for your kind information & record please.

Thanking You

Your's faithfully

(Authorized Signatory)

Encl: 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

REGISTERED & CORPORATE OFFICE :

"LANSDOWNE TOWER", 5th Floor, 2/1A, Sarat Bose Road, Kolkata - 700 020

Ph : +91 - 33 - 66384700 • Fax : +91 - 33 - 66384729

Website : www.adhunikpower.com

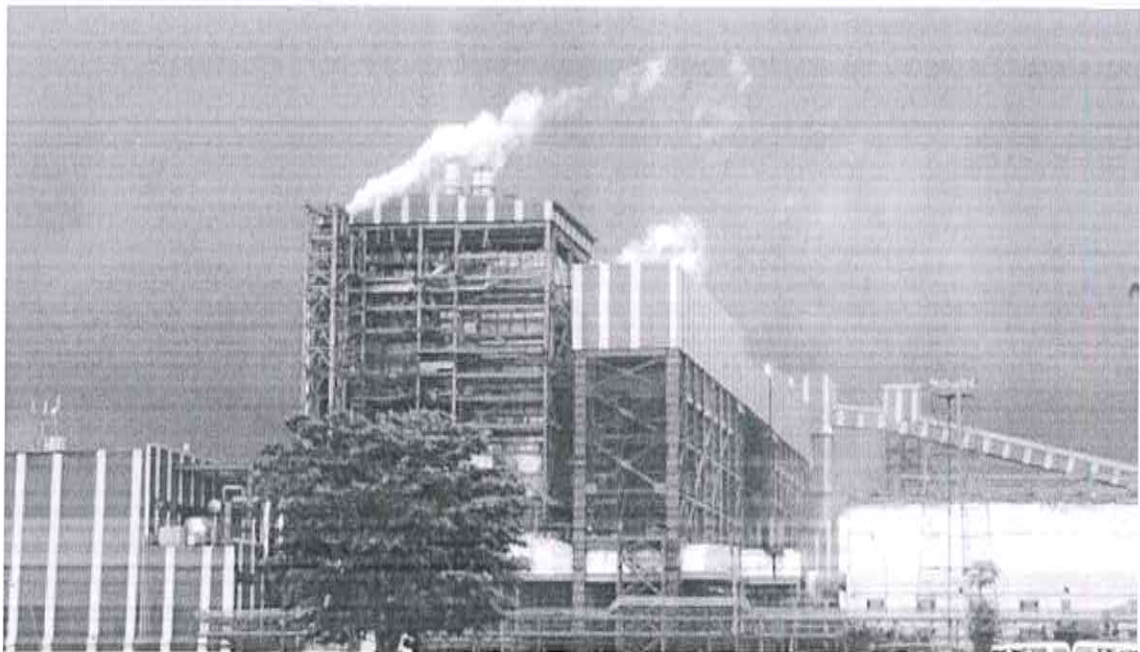
ENVIRONMENTAL STATEMENT

For

1 X 270 MW COAL BASED THERMAL POWER PLANT

(UNIT I)

FINANCIAL YEAR 2024-25



September 2025



Adhunik Power & Natural Resources Ltd
Village-Padampur, District-Saraikela-Kharsawan
Jharkhand-832402

FORM-V

From:

Adhunik Power & Natural Resources Limited

Village: Padampur

Dist: Saraikela-Kharsawan – 832 402

Jharkhand.

To,

Member Secretary

Jharkhand State Pollution Control Board,

HEC Campus, Dhurva,

Ranchi , Jharkhand.

Environmental Statement for the financial year ending on the 31st March-2025
for Unit-I (1 x 270 MW)

PART – A

- | | | |
|---|---|---|
| (i) Name & Address of the owner/occupier of the Industry operation or process | : | Sh. Nirmal Agarwal
Adhunik Power & Natural Resources Ltd, Vill- Padampur, Adityapur-Kandra Road, Dist- Saraikela-Kharswan, Jharkhand |
| (ii) Industry Category
Primary – STC Code
Secondary – STC Code | : | Red Category |
| (iii) Production Capacity – (Units-MT) | : | Power(270 MWH) |
| (iv) Year of Establishment
(COMMERCIAL PRODUCTION DECLARED) | : | 21 st January-2013 |
| (v) Date of Last Environmental Statement Submitted | : | 24th September 2024 |

PART-B

Water and Raw Material Consumption

(i) Water Consumption KL/Day

Process	:	681.5
Cooling	:	10925.50
Domestic	:	111.1

Name of product	Process water consumption KL/ MW	
	During the previous financial year	During the current financial year
	2023-24	2024-25
Electricity	0.126	0.11779

(ii) Raw Material Consumption

Name of Raw Materials	Name of product	Consumption of raw material per MW	
		During the previous financial year 2023-24	During the current financial year 2024-25
Coal	Power	0.723 MT	0.7262 MT
LDO		0.00013 KL	0.00016 KL

PART – C

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

Pollutants	Qty. Of pollutants discharged (Mass / Day) NIL	Concentration of Pollutants in discharges (Mass / Day) NIL	Percentage of variation from prescribed standards with reasons
(i) Water Unit Limit pH 5.5. to 9.0 SS < 100 mg/l Oil & Grease < 10 mg/l BOD ₅ < 30 mg/l COD < 250 mg/l	1) Effluent generated from Cooling tower, DM plant, IBD tank, CPI separator is being utilized in Ash Handling system. 2) Effluent generated from CBD is being reutilized in quenching & dust suppression system. 3) Effluent generated from STP is being utilized for gardening		Concentration is below the prescribed limits. ETP & STP analysis report are enclosed as Annexure I
(ii) Air(Stack) PM SO ₂ NO _x	730.9 Kg/Day 21604.8 Kg/Day 7979.2 Kg/Day	32.8 mg/Nm ³ 969.6 mg/Nm ³ 358.1 mg/Nm ³	Concentration of PM are below the prescribed limits Stack monitoring report are enclosed as Annexure II

*The Effluent Treatment facility for Unit I and Unit II is common.

PART - D
HAZARDOUS WASTES
(As specified under Hazardous Wastes Management and Handling
& Transboundary Movement Rules, 2008)

Hazardous Wastes	Total Quantity (KL).	
	During the previous financial Year 2023-24	During the current financial Year 2024-25
1 From Process	Used Oil-2.80928 Kl Waste Oil-1.09152 KL	Used Oil- 2.89 Kl Waste Oil-0.72 KL
2 From Pollution Control Facilities	NA	NA

- The APNRL has obtained Hazardous Waste Authorization from JSPCB for Collection & Storage of Hazardous waste.
- Waste / Spent Oil is collected at centrally located point in isolated stores area meant for them in sealed M.S. Drums which is further sent to authorized recycler for disposal as per norms of MoEF.

PART -E

Solid Wastes

	Total Quantity (MT)	
	During the previous financial Year 2023-24	During the current financial Year 2024-25
(a) From Process Bottom Ash	72753 MT	104121 MT
(b) From Pollution Control Facility Fly Ash	555830 MT	455445 MT
(c) (1) Quantity recycled or re-utilized within the unit (2) Sold (3) Disposed Fly Ash Bottom Ash	462320.09 MT 45844.67 MT	383916.7 MT 73563.3 MT

PART – F

Please specify the characterization (In terms of composition and quantum) of hazardous as well as solid and indicate disposal practice adopted for both these categories of wastes

Hazardous Waste:

1) Solid Hazardous Waste:

- Bio medical Waste is generated from OHC is being disposed as per CPCB Guidelines.
- Waste generated from Canteen is used from preparing bio-compost & it is used for plantation.
- For the collection of dry fly ash, silos have been provided with pneumatic system & Bottom ash is led to the Ash dyke through pipeline in wet slurry mode.

2) Liquid Hazardous waste:

- In this financial year, Used Oil-2.89 KL & Waste Oil-0.72 KL have been generated from process and disposed to authorized recycler as per norms of MoEF.

3) E Waste

- E Waste are disposed through Authorized recprocessors/Recyclers.

PART - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the production.

The following practices are adopted for the pollution control & conservation of natural resources:

- Specific Water consumption in FY 2024-25 is 2.03 m³ /MWh which is substantially below the statutory limit of 3.5 m³ /MWh.
- Reduce-Reuse-Recycle is adopted for water usage. We are using effluent water generated from Cooling tower, DM plant, IBD tank for Ash handling system instead of fresh water from River Subarnarekha.
- Ash water recirculation system (AWRS) is operational since inception of the plant. AWRS is used to recirculate decanted water from ash ponds to plant, where water is again used in ash slurry system, thus freshwater requirement is minimal.
- Extensive tree plantation is under progress as a part of green belt development, which will control the impact of Air pollution and optimize the ambient temperature of surrounding areas.
- Twin flue stack with height of 275 m are provided as per the CPCB guidelines for better dispersion of emissions and keep the concentrations within JSPCB/CPCB specified standards.

- High efficiency Electrostatic precipitators (ESPs) are provided for control of dust emissions into flue gases.
- Dust suppression system is installed at Truck tipping area.
- Dust Extraction system along with bag Filters have been installed at Coal bunkers, Intermediate Silo & Ash Silo to arrest the fugitive emissions.
- Roof sheeting and side cladding in conveyor galleries and TPs are installed to control fugitive dust
- The plant is designed on COC of more than 5 which is helpful in water conservation which further lead to reduction in overall fresh water intake.
- Garland drain connected with coal settling pit are installed in the Coal Stockyards for the reutilize of coal containing water.
- Mist canyons are installed around the coal stock yard for the control of fugitive dust.
- Belt washing system, coal settling pits and waste water recovery system are installed at transfer house for the dust suppression and water recovery.
- Water spraying system is installed in ash pond area for controlling the ash fugitive emissions, if any.
- Effluent Treatment Plant (ETP) and Sewage Treatment Plants (STP) are installed to control water pollution.
- Rain Water harvesting is being practiced in the plant premises, which helps in ground water recharging.
- Good housekeeping is maintained within the plant premises.
Because of the adaptation of aforementioned methods, the quality of emissions and discharges are maintained below the permissible limits prescribed by the MoEF&CC / CPCB / JSPCB.

PART - H

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

- APNRL is regularly monitoring ambient air, stack, noise level, water quality and soil quality in and around the plant premises. All the emissions and discharges are meeting the permissible limits prescribed by MoEF / CPCB / JSPCB. It is proposed to further strengthen the monitoring and reporting process.
- Ash Water Recovery System is installed for further reuse of ash water. Green belt development within plant premises is proposed to be accelerated.
- As awareness Program, Slogans on pollution control, Environmental protection, Tree plantation and Energy conservation to be displayed at the prominent locations.
- Awareness program like plantation drive, speech/essay competition was organized among children, families and employees on the occasion of 05 th June 2024 (World Environment Day).

PART – I

Any other particulars for improving the quality of the environment:

The part – I of any Environmental Statement report is perhaps the best scale to measure various parameters of the plans, target, achievements and ultimate impact. APNRL has made sincere efforts to visualize the general environmental scenario and implemented plan for the associated improvements. Some highlights are mentioned below:

1. Received certification for ISO 9001:2008, ISO 14001: 2004 & ISO 18001:2007 from BSI.
2. Training on EMS to all employees and contract labors to create Environment awareness.
3. Green Belt development is under progress.
4. Only PUC certified vehicles are engaged.
5. Monitoring of Ambient air quality, Surface and ground water quality, stack monitoring, soil, Noise level is being done through MoEF & NABL accredited laboratory.
6. Full-fledged Environmental laboratory has been installed.
7. Installation of Online Effluent monitoring system has been completed.
8. Webhosting of online environment data on CPCB/SPCB website have been completed.
9. Electronics Display board is provided at the main gate for public data display.
10. Audit by recognized organization i.e. ERM has been conducted to improve Environmental & Social Management system (EMS).
11. Celebration of Environmental promotional activities (Environment day, Earth Day, Water day, Ozone day).
12. Remote calibration facility of CEMS has been completed.
13. Solar light system has been installed in plant premises.
14. Total expenditure on Environment Pollution Control in the FY 24-25 is as –
 - 1) O & M of ESP - 2.62 Crores,
 - 2) O & M of CEMS – 16.3 Lakh
 - 3) O & M of Sewage treatment plant (STP), O & M of CAAQMS & Horticultural Initiatives 27.23 lakhs.
 4. Total plantation done during the year is 1025 Nos.

Date: 24/09/2025

Kash

Signature
Name
Designation
Address

24/9/25
M. N. Singh
Head – O&M
Adhunik Power & Natural Resources
Limited, Village : Padampur
Dist: Saraikela-Kharsawan –
832 402. Jharkhand



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by :
Registered by :
Certified by :

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



TC-12989

Test Report

URL(Unique Lab Report) No.			TC 1 2 9 8 9 2 5 0 0 0 0 0 0 5 8 2 F															
Discipline	Chemical	Group	Atmospheric Pollution				Sample Description				Stationary Source Emission							
Report Release Date		29 th March, 2025				Report ID				YBAEEL-2503-12								
W. Order / JSPCB App. No.		3030007508				Work Order Date				07.03.2025								
Type of Industry(If any)		Thermal Power Plant				Job code/ Ref. no.				YBAEEL/CA/March - 25/14								
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																
Sampling Period		13/03/2025				Mode of sample collection				By YBAEEL Team								
Sampling Plan		YBAEEL/SP/March/12/2025				Sampling Method				IS: 11255 & CPCB Guideline (Lats/80/2013-14)								
Meteorological Cond. of Field		W.C.- Clear				RH % - 50				Temp. - 34°C								
Sample receipt Date		13/03/2025		Analysis Started on		13/03/2025		Analysis completed on				29/03/2025						

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)	165 Ton/Hr.
Stack Description (Shape & Material)	Circular / RCC	Total production Capacity	270 MW (262 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)	391.0		
Stack gas Velocity (m/s)	25.16		
Volumetric Flow Rate (Nm ³ /hr)	928424.1		

Emission Rate based on Calculation of Volumetric Flow rate

1.	Particulate Matter (PM)	Kg/hr	30.4
2.	Sulphure Dioxide (SO ₂)	Kg/hr	900.2
3.	Oxide of Nitrogen (as NO _x)	Kg/hr	332.5

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

Sl	Parameters	Test Method	Units	Results	Limits
1.	Particulate Matter (PM)	IS 11255 (Part 1)2009, RA 2019	mg/Nm ³	32.80	50
2.	Sulphure Dioxide (SO ₂)	IS 11255 (Part 2)2009, RA 2019	mg/Nm ³	969.60	600
3.	Oxide of Nitrogen (as NO _x)	IS 11255 (Part 7)2005, RA 2022	mg/Nm ³	358.1	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 maintained at Temperature 27 ± 2°C and Relative Humidity 55 ± 5% in all testing & analysis as per IS: 15616 (Q).
Specific contractual notes	All values are expressed in mg/m ³ and reduced to standard conditions of the tested samples and applicable parameters 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 without written consent from the laboratory. The samples collected at the site, shall be 15 days from the date of issue of the report, beyond which the validity of the report is not guaranteed. The liability of the laboratory is limited to the information provided. All disputes are subjected to the Jurisdiction of the Court.
Remarks	Sample complies with prescribed limit, except SO ₂ .

Sample Drawn By - Angad Munda
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





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.			TC12989250000635F																	
Discipline	Chemical	Group	Pollution & Environment					Sample Description					Waste Water / Effluent Water							
Report Release Date		31 st March, 2025					Report ID					YBAEEL-2503-12								
W. Order / JSPCB App. No.		3030007508					Work Order Date					07.03.2025								
Type of Industry (If any)		Thermal Power Plant					Job code/ Ref. no.					YBAEEL/C/PE/March - 25/02								
Report Issue to		M/s Adhunik Power & Natural Resources Ltd. Vill.-Padampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand.																		
Sampling Date		13/03/2025		Mode of sample collection					By YBAEEL Team					Sample Code		250313-WW-01				
Sampling Plan		YBAEEL/SP/March/12/2025					Sampling Method					IS -17614 (Part-1):2021								
Sampling Location		STP Outlet					Sampling Source					Effluent Water								
Sample pkg. Condition		Sealed Pack in PP Bottle					Sample Quantity					3000 ml								
Meteorological Cond. of Field		W.C.- Clear					RH % - 50					Temp.-32°C								
Sample receipt Date		13/03/2025		Analysis Started on					13/03/2025		Analysis completed on					31/03/2025				

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

Sl	Parameter	Test Method	Units	Results	Limits
1.	pH value	IS 3025 (P-11):2022 (Electrometric Method)	pH	7.17 at 25.6°C	6.5 - 8.5
2.	Temperature	IS 3025 (P-09):2023	°C	29.8	--
3.	Total Suspended Solids	IS 3025 (P-17):2022 (Gravimetric Method)	mg/l	8.0	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	60.0	--
6.	Chloride (as Cl ⁻)	IS 3025 (P-32):1988, RA 2019 (Argentometric Method)	mg/l	8.73	--
7.	Oil & Grease	IS 3025 (P-39):2021 (Partition Gravimetric Method)	mg/l	1.8	--

Limit is specified as	Environmental Protection Rule - 1986.
Abbreviation	MDL - Minimum detection limit, CDL - Below detection limit
Env. Condition of Lab	Laboratory is maintaining Temperature 27 ± 2°C and Relative Humidity 55 ± 5% in all testing room as per IS 155:1985 (C).
Specific contractual notes	All values are expressed in SI 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 CLP. 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 subject to the Ranchi Jurisdiction.
Remarks	Sample complies with prescribed limit.

Sample Drawn By - Angad Munda
 Tested By - Sweta 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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ISO 9001:2015
 ISO 45001:2018