



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/281123/01

Dated: 28.11.2023

To,

Regional Office (ECZ),
Ministry of Environment, Forest and 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 2023 to September 2023 -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 2023 to September 2023.

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



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 2023 – SEPTEMBER 2023

**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 2023 to September 2023		
Sl No	EC Conditions	Status as on 30th September 2023
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 2023 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	Fly Ash utilization are adhered in compliance with MoEF&CC notification dated 31.12.2021. Fly Ash generation & Utilization report (April 2023-September 2023) 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

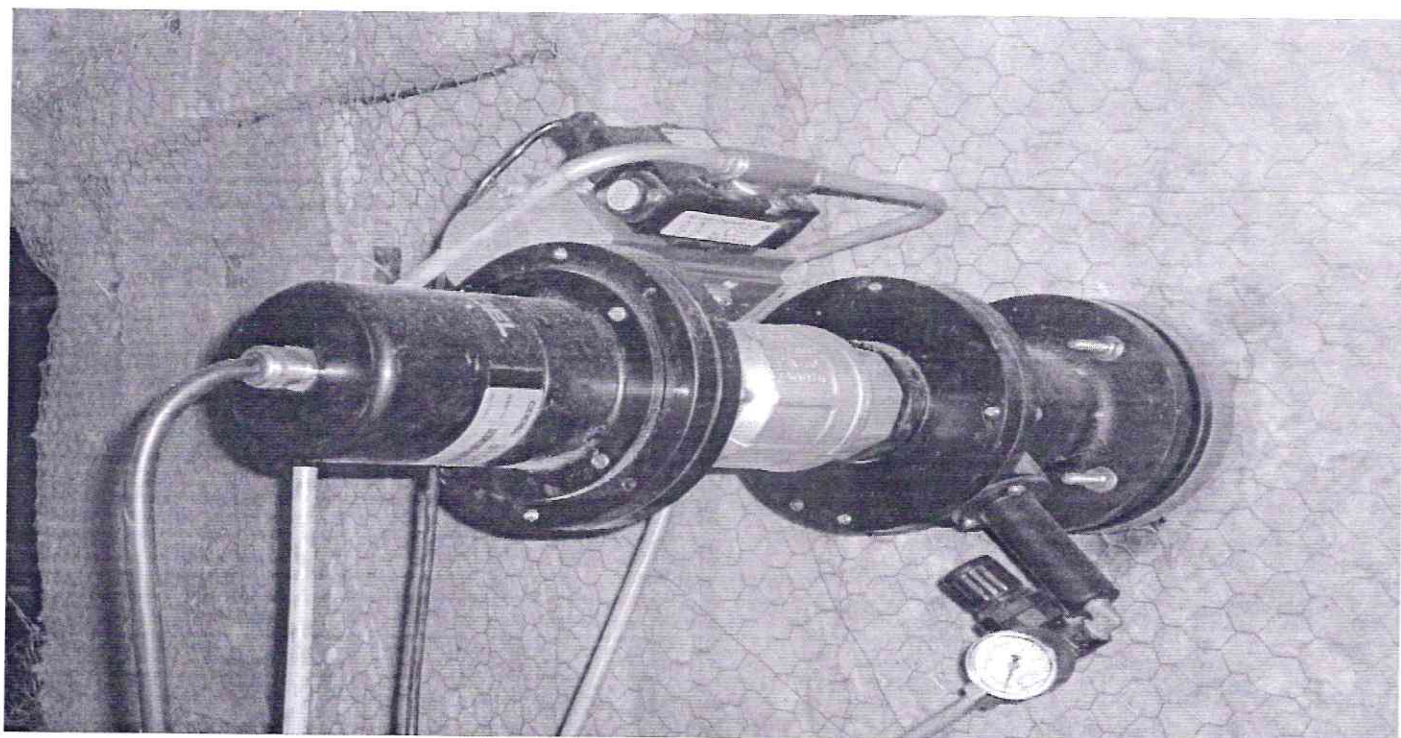
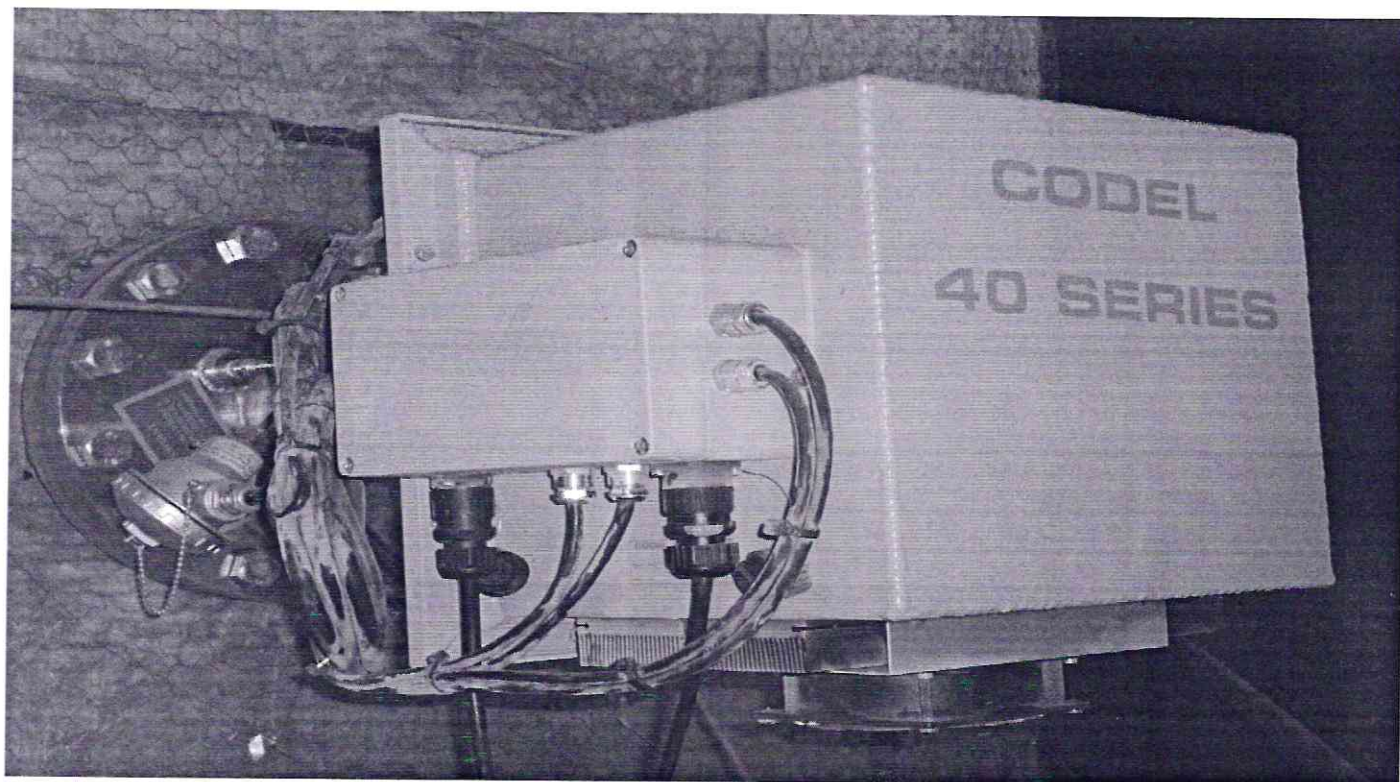
	bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.	periodically. Bottom ash analysis report & effluent analysis report of ash pond for the month of September 2023 enclosed as Annexure V & Annexure VI respectively.
10	Ash pond shall 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 2023 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	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

	shall be furnished to RO of ministry. The 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.	Data for the month of September 2023 enclosed as 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 2023 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 2023 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/competent authority.	Complied.

	may also be seen at Website of the Ministry of Environment, Government of India at 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 2022 to September 2022.
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 (Oct 2022 to March 2023) for the project along with environmental monitoring data submitted to MoEF RO at Ranchi vide letter No MOE&F,RNC/HYC/KKJ/29523/01 dated 29 th May 2023. 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 (2022-2023) in Form V has submitted dated 20 th Sep 2023. 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 on the website of the company.	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.

Continuous emission monitoring system



(2/3)

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.	HNE10CC003
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 V.A.C., 50-60Hz, 125 VA
18	Remote/local control unit	Isolated 2x 4-20 mA, 500 ohms output fully configurable. 3 x Volt free SPNO contact rated at 50 VDC 1 Amp. 2 Line X 32 character alpha-numeric LCD displays with 4 key keypad. Provided in the instrument as a warning signal of misalignment
19	Automatic misalignment detection	Automatic window contamination check
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.	-30deg.C to 60 deg.C
26	Gas Temperature	Up to 850 deg.C
CONNECTIONS & DIMENSIONS		
27	Analyzer mounting details	Analyzer can be mounted in Chimney at Elevation of 91.6 Mtrs. Please refer drawing for analyzer 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	

36

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 SO ₂ : 0 to 1000ppm, 0 to 1000mg/m ³ , NO _x : 0 to 1000ppm, 0 to 1000mg/m 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		



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Accredited by Jharkhand State Pollution Control Board, JSPCB
National Accreditation Board for Testing Laboratory (NABL) vide TC-11515
Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

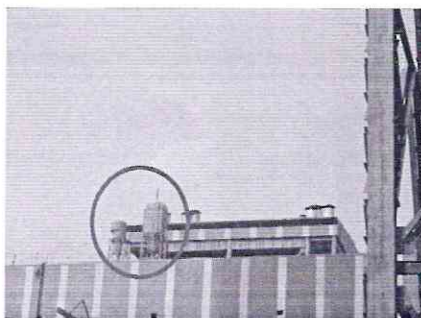
ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	1	7
Discipline: Chemical						Group: Atmospheric Pollution						Sub-Group: Stack Emission						
Report Issue Date: 30-09-2023										Test Report No.: RN-230320001S1								
Sample ID: 230923AP06001										Sample Description: Stack Emission								
Challan No./P.O. No.: 3030006457										Challan Date/P.O. Date.: 06-12-2022								
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																		
Type of Industry: Power Plant										Customer Representative: Kamlesh Jha								
Sample Drawn by: IEM Team										Sampling Date: 22-09-2023								
Protocol: CPCB Guideline (LATS/80/2013-14) & IS Method 11255 Series																		
Field Meteorological Information						A. Temp.(°C): 27			R.H. (%): 61			W.C.: Partly Sunny			W.D.: NW to SE			
Sample Receiving Date: 23-09-2023						Testing Started: 23-09-2023						Testing Ended: 27-09-2023						

General Physical Information

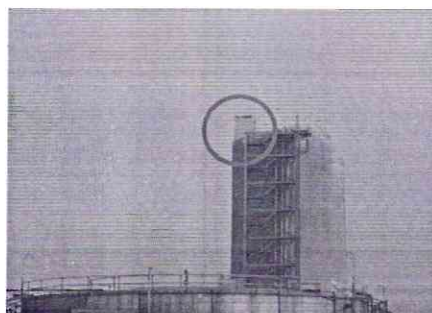
Stack Identification	Single	Stack Height from Ground Level (m)	275
Emission Due to	Boiler	Port Hole Height from Ground Level (m)	90
Plat Form	Permanent	Inner Dimension of Stack (m)	4.2
Stack Description	Stack Unit - 1	Type of Fuel Used	Coal
Shape of Stack	Circular	Quantity of Fuel	----
Construction Material	Metal	Production Capacity	----
Sampling Port	Available	Pollution Control Device (if any)	ESP

Test Result

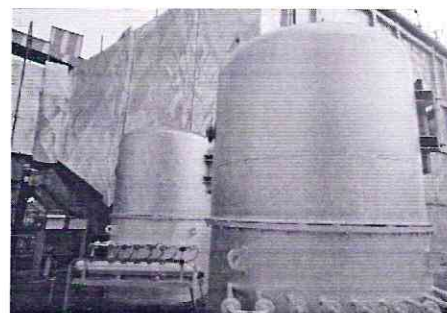
Bag Filter installed at Coal mill building



Bag Filter installed at Ash silo



Bag filter at buffer hopper



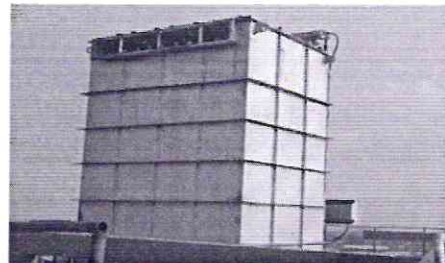
Dust suppression through Tanker



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 Resource Limited

FLY ASH GENERATION & UTILIZATION REPORT (2023-24)

Sl. No.	Ash Generation and Utilization						Mode of Ash Utilization			
	Months	Coal Consumed	Ash Contents of Coal (%)	Fly Ash Generation	Fly Ash Utilization	%age Utilization	In Making of Fly Ash Based bricks /Blocks /Tiles etc	In manufacturing of Portland Pozzolana Cement	RMC	Export of ash to other countries;
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
1	APRIL	124286	42.29	52557.94	44268.79	84.2%	188.72	37168.00	6868.00	43.86
2	MAY	129117	40.71	52569.24	44766.41	85.2%	1180.23	36464.00	7123.00	
3	JUNE	168814.6	40.37	68155.20	58078.6	85.2%	3103.80	47415.00	7560.00	
4	JULY	260175	40.84	106258.4	74880.2	70.5%	8255.17	59174.71	7450.30	
5	AUG	276754.5	39.56	109489.66	68455.3	62.5%	8126.80	52085.04	8243.50	
6	SEP	282140.7	42.54	120023.49	76073.7	63.4%	12362.58	57284.82	6426.27	
	Total	1241287.6	41.05	509053.92	366522.95	75.2%	33217.30	289591.57	43671.07	43.86





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 Certified by ISO 9001:2015 (Quality Management System)
 ISO 45001:2018 (Occupational Health & Safety Management System)

Test Report

Discipline: Chemical	Group: Pollution & Environment	Sub-Group: Soil & Sediments		
Report Issue Date: 30-09-2023	Test Report No.: RN-230320001S02			
Sample ID: 230923PE04002	Sample Description: Soil and Sediment			
Challan No./P.O. No.: 3030006457	Challan Date/P.O. Date.: 06-12-2022			
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402				
Type of Industry: Power Plant	Customer Representative: Kamlesh Jha			
Sample Drawn by: IEM Team	Sampling Date: 23-09-2023			
Protocol: CPCB Guideline & IS Method 3025 Part-01				
Sampling Location: Bottom Ash				
Field Meteorological Information	A. Temp.(°C): 27	R.H. (%): 68		
	W.C.: Partly Sunny	W.D.: North to South		
Sample Receiving date: 23-09-2023	Testing Started: 23-09-2023	Testing Ended: 27-09-2023		

----Test Result----

Sl. No.	Tested Parameters	Unit	Method No.	Limits	Results
1.	Zinc	ppm	USEPA 3050 B, APHA: 3111 B.2017	--	0.07
2.	Copper	ppm	USEPA 3050 B, APHA: 3111 B.2017	--	BDL(MDL-0.02)
3.	Lead	ppm	USEPA 3050 B, APHA: 3111 B.2017	--	BDL(MDL-0.07)
4.	Arsenic	ppm	USEPA 3050 B, APHA: 3111 B.2017	0.2	0.09
5.	Cadmium	ppm	USEPA 3050 B, APHA: 3111 B.2017		



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National Accreditation Board for Testing Laboratory (NABL) vide TC-11515
Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	2	0				
Discipline: Chemical	Group: Pollution & Environment										Sub-Group: Waste Water											
Report Issue Date: 30-09-2023										Test Report No.: RN-230320001WW03												
Sample ID: 230923PE03001										Sample Description: Waste Water (Ash Pond)												
Challan No./P.O. No.: 3030006457										Challan Date/P.O. Date.: 06-12-2022												
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																						
Type of Industry: Power Plant										Customer Representative: Kamlesh Jha												
Sample Drawn by: IEM Team										Sampling Date: 23-09-2023												
Protocol: CPCB Guideline & IS Method 3025 Part-01																						
Sampling Location: Ash Pond Outlet																						
Field Meteorological Information										A. Temp.(°C): 27				R.H. (%): 68				W.C.: Partly Sunny		W.D.: North to South		
Sample Receiving date: 23-09-2023										Testing Started: 23-09-2023					Testing Ended: 27-09-2023							

----Test Result----

Sl. No.	Tested Parameters	Unit	Method No.	Limits	Results
1.	pH value at 25°C	----	IS 3025 (Part-11)	5.5 to 9.0	7.65
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	65.0
3.	Chromium	mg/l	APHA 3111 B.2017	2.0	BDL



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National Accreditation Board for Testing Laboratory (NABL) vide TC-11515
Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



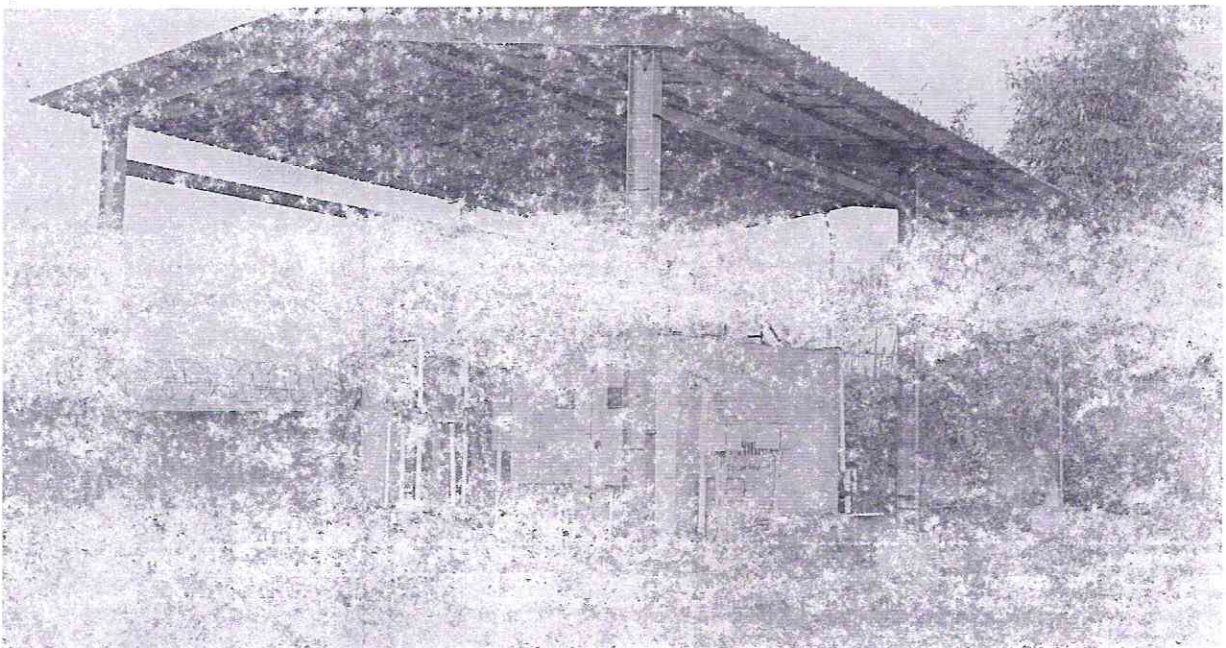
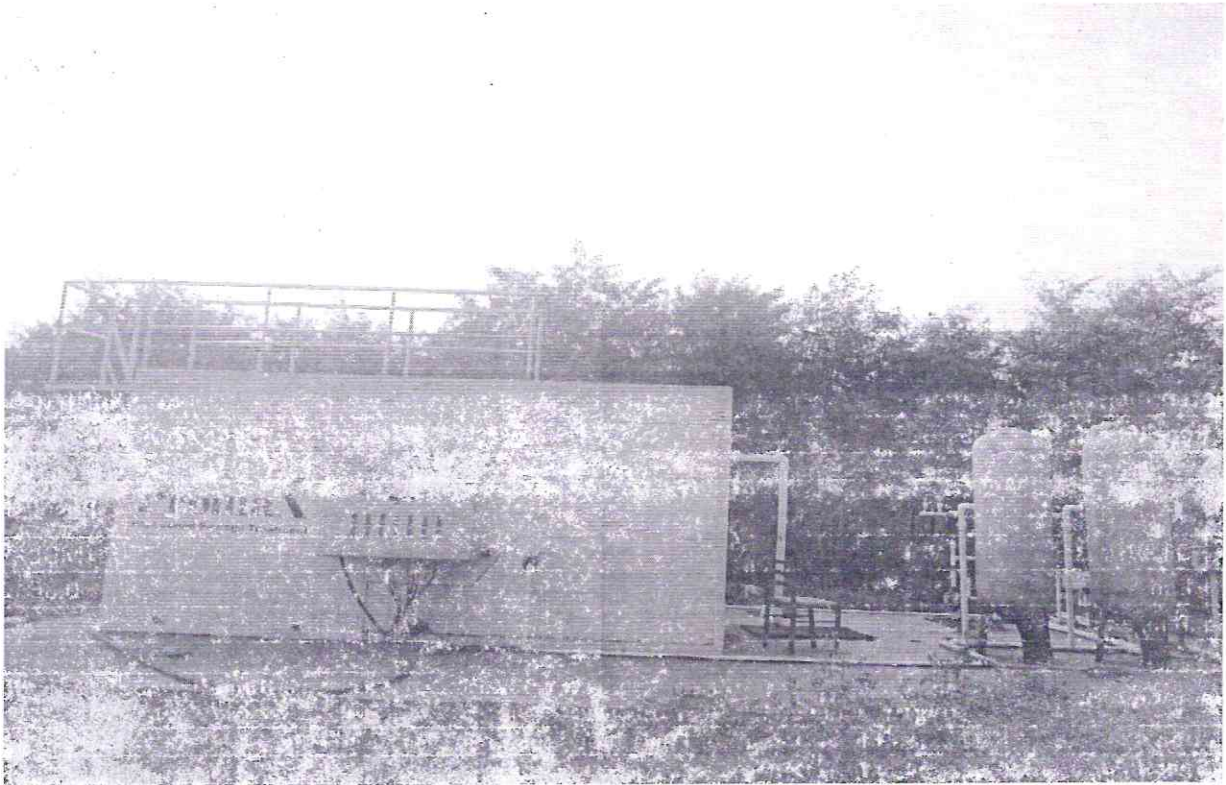
Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	1	9
Discipline: Chemical			Group: Pollution & Environment										Sub-Group: Waste Water					
Report Issue Date: 30-09-2023										Test Report No.: RN-230320001WW02								
Sample ID: 230923PE02001										Sample Description: Waste Water (ETP)								
Challan No./P.O. No.: 3030006457										Challan Date/P.O. Date.: 06-12-2022								
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																		
Type of Industry: Power Plant										Customer Representative: Kamlesh Jha								
Sample Drawn by: IEM Team										Sampling Date: 23-09-2023								
Protocol: CPCB Guideline & IS Method 3025 Part-01																		
Sampling Location: ETP Outlet																		
Field Meteorological Information				A. Temp.(°C): 27				R.H. (%): 68				W.C.: Partly Sunny				W.D.: North to South		
Sample Receiving date: 23-09-2023						Testing Started: 23-09-2023						Testing Ended: 27-09-2023						

---Test Result---

Sl. No.	Tested Parameters	Unit	Method No.	Limits	Results
1.	pH value at 25°C	---	IS 3025 (Part-11)	5.5 to 9.0	8.17
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	30.0

Sewage Treatment Plant





Government of India

व्यवसाय और उद्योग विभाग

Ministry of Commerce & Industry

पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पेसो)

Petroleum & Explosives Safety Organisation (PESO)

श्री मोहन, तीसरा फ्लोर, सीता कंपाउंड, मेन रोड, सुशिला ऑटोमोबाइल के पीछे

पिन- 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 निम्न विषयक पेट्रोलियम क्लास C अस्त्रिकरण में अनुमति में 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

HINDUSTAN PETROLEUM CORPORATION LIMITED

(A Government of India Enterprise)

QUALITY CONTROL LABORATORY

Visakhapatnam 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 / tk70/668.3 b.no.38/2019
 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 : 35323320
 Batch No :

Test Line Number	Characteristics	Units	Test Method	Specification		Result Value
				Min	Max	
5	DENSITY @ 15°C	Kg/m ³	IS 1448 (P:16)	-	-	887.3
6	KINEMATIC VISCOSITY @ 40°C	cSt	IS 1448 P:25	2,500	15,000	8,800
7	FLASH POINT - PMCC	°C	IS 1448 P:21	66	-	79
8	WATER CONTENT	% Vol	IS 1448 P:46	-	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 (Reaffirmed 2014) in the above parameters

Appearance : Light Brown

- 1) The sample is drawn by client and it is not related to quality control.
- 2) The test report shall not be reproduced, except in the written and 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.
-



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National Accreditation Board for Testing Laboratory (NABL) vide TC-11515
Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	2	9	
Discipline:	Chemical					Group: Water					Sub-Group: Ground Water								
Report Issue Date:	30-09-2023										Test Report No.: RN-230320001GW1								
Sample ID:	230923WA02001										Sample Description: GW (Bore well)								
Challan No./P.O. No.:	3030006457										Challan Date/P.O. Date.: 06-12-2022								
Issued to:	ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																		
Type of Industry:	Power Plant										Customer Representative: Kamlesh Jha								
Sample Drawn by:	IEM Team										Sampling Date: 23-09-2023								
Protocol:	CPCB Guideline & IS Method 3025 Part-01																		
Sampling Location:	SHRIRAMPUR VILLAGE																		
Field Meteorological Information	A. Temp.(°C): 27					R.H. (%): 68					W.C.: Partly Sunny					W.D.: North to South			
Sample Receiving Date:	23-09-2023					Testing Started: 23-09-2023					Testing Ended: 27-09-2023								

---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Limit
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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	3	1		
Discipline: Chemical	Group: Residues and Contaminants in Water										Sub-Group: Trace Metals elements									
Report Issue Date: 30-09-2023										Test Report No.: RN-230320001GW1										
Sample ID: 230923RC02001										Sample Description: Ground Water										
Challan No./P.O. No.: 3030006457										Challan Date/P.O. Date.: 06-12-2022										
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																				
Type of Industry: Power Plant										Customer Representative: Kamlesh Jha										
Sample Drawn by: IEM Team										Sampling Date: 23-09-2023										
Protocol: IS Method & CPCB Guideline																				
Sampling Location: SHRIRAMPUR VILLAGE																				
Field Meteorological Information										A. Temp.(°C): 27				R.H. (%): 68		W.C.: Partly Sunny		W.D.: North to South		
Sample Receiving Date: 23-09-2023						Testing Started: 23-09-2023						Testing Ended: 27-09-2023								

----Test Result----

Sl.No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.05 - 1.5	<0.01
2.	Chromium	mg/l	APHA 3111 B.2017	0.05 - No Relaxation	BDL (MDL- 0.005)
3.	Lead	mg/l	APHA 3111 B.2017	0.01 - No Relaxation	<0.01
4.	Zinc	mg/l	APHA 3111 B.2017	05 - 15	0.32



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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	3	0	
Discipline:	Chemical					Group: Water					Sub-Group: Ground Water								
Report Issue Date:	30-09-2023										Test Report No.: RN-230320001GW2								
Sample ID:	230923WA02002										Sample Description: GW (Bore well)								
Challan No./P.O. No.:	3030006457										Challan Date/P.O. Date.: 06-12-2022								
Issued to:	ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																		
Type of Industry:	Power Plant										Customer Representative: Kamlesh Jha								
Sample Drawn by:	IEM Team										Sampling Date: 23-09-2023								
Protocol:	CPCB Guideline & IS Method 3025 Part-01																		
Sampling Location:	PADAMPUR VILLAGE																		
Field Meteorological Information	A. Temp.(°C): 27					R.H. (%): 68					W.C.: Partly Sunny					W.D.: North to South			
Sample Receiving Date:	23-09-2023					Testing Started: 23-09-2023					Testing Ended: 27-09-2023								

---Test Result---

Sl. No.	Tested Parameter	Unit	Method No.	Limit	
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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	1	4
Discipline: Chemical	Group: Atmospheric Pollution								Sub-Group: Ambient Noise Levels (Excluding Vibration)									
Report Issue Date: 30-09-2023									Test Report No.: RN-230320001WN3									
Sample ID: 230923AP04003									Sample Description: Workzone Noise									
Challan No./P.O. No.: 3030006457									Challan Date/P.O. Date.: 06-12-2022									
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																		
Type of Industry: Power Plant									Customer Representative: Kamlesh Jha									
Sample Drawn by: IEM Team									Sampling Date: 22-09-2023 to 23-09-2023									
Protocol: CPCB Guideline & IS Method 9989:1981																		
Sampling Location: Near Turbine Floor																		
Field Meteorological Information									A. Temp.(°C): 27		R.H. (%): 61		W.C.: Partly Sunny		W.D.: NW to SE			
Sample Receiving Date: 23-09-2023									Testing Started: 23-09-2023					Testing Ended: 27-09-2023				

----Test Result----

Sl. No	Parameter	Method	Unit	Day Time		Night Time		Limits
				1 m	10 m	1 m	10 m	
1.</								



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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	1	6
Discipline: Chemical	Group: Atmospheric Pollution								Sub-Group: Ambient Noise Levels (Excluding Vibration)									
Report Issue Date: 30-09-2023										Test Report No.: RN-230320001VN5								
Sample ID: 230923AP04005										Sample Description: Workzone Noise								
Challan No./P.O. No.: 3030006457										Challan Date/P.O. Date.: 06-12-2022								
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																		
Type of Industry: Power Plant										Customer Representative: Kamlesh Jha								
Sample Drawn by: IEM Team										Sampling Date: 22-09-2023 to 23-09-2023								
Protocol: CPCB Guideline & IS Method 9989:1981																		
Sampling Location: Near Compressor House																		
Field Meteorological Information			A. Temp.(°C): 27			R.H. (%): 61			W.C.: Partly Sunny			W.D.: NW to SE						
Sample Receiving Date: 23-09-2023					Testing Started: 23-09-2023					Testing Ended: 27-09-2023								

---Test Result---

Sl. No	Parameter	Method	Unit	Day Time		Night Time		Limits



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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	1	3	0	2
Discipline:	Chemical								Group: Atmospheric Pollution				Sub-Group: Ambient Air				
Report Issue Date:	30-09-2023								Test Report No.: RN-230320001A1								
Sample ID:	230923AP01001								Sample Description: Ambient Air								
Challan No./P.O. No.:	3030006457								Challan Date/P.O. Date.: 06-12-2022								
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																	
Type of Industry: Power Plant									Customer Representative: Kamlesh Jha								
Sample Drawn by: IEM Team									Sampling Date: 21-09-2023 to 22-09-2023								
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																	
Sampling Location: Village Padampur (Buffer Zone)																	
Field Meteorological Information			A. Temp.(°C): 28			R.H. (%): 65			W.C.: Partly Sunny			W.D.: NW to SE					
Sample Receiving Date: 23-09-2023					Testing Started: 23-09-2023					Testing Ended: 27-09-2023							

----Test Results----

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006	µg/m ³	100	94.2
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24			



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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	1	3	0	5																					
Discipline:	Chemical					Group:					Atmospheric Pollution					Sub-Group:					Ambient Air																		
Report Issue Date:										30-09-2023										Test Report No.:										RN-230320001A4									
Sample ID:										230923AP02001										Sample Description:										Ambient Air									
Challan No./P.O. No.:										3030006457										Challan Date/P.O. Date.:										06-12-2022									
Issued to:																																							
ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																																							
Type of Industry:										Power Plant										Customer Representative:										Kamlesh Jha									
Sample Drawn by:										IEM Team										Sampling Date:										22-09-2023 to 23-09-2023									
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																																							
Sampling Location: VILLAGE PINDRABARA GATE (BZ)																																							
Field Meteorological Information					A. Temp.(°C): 27					R.H. (%): 61					W.C.: Partly Sunny					W.D.: NW to SE																			
Sample Receiving Date:					23-09-2023					Testing Started:					23-09-2023					Testing Ended:					27-09-2023														

---Test Results---

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (PM ₁₀)	IS 5182 Part 23:2006	µg/m ³	100	92.5
2.	Particulate Matter (PM _{2.5})	IS 5182 Part 24:2019	µg/m ³	60	



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Test Report

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	1	3	0	6
Discipline:	Chemical								Group: Atmospheric Pollution				Sub-Group: Ambient Air				
Report Issue Date:	30-09-2023								Test Report No.: RN-230320001A5								
Sample ID:	230923AP02002								Sample Description: Ambient Air								
Challan No./P.O. No.:	3030006457								Challan Date/P.O. Date.: 06-12-2022								
Issued to: ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402																	
Type of Industry: Power Plant									Customer Representative: Kamlesh Jha								
Sample Drawn by: IEM Team									Sampling Date: 22-09-2023 to 23-09-2023								
Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series																	
Sampling Location: CHP Area (Core Zone)																	
Field Meteorological Information			A. Temp.(°C): 27			R.H. (%): 61			W.C.: Partly Sunny			W.D.: NW to SE					
Sample Receiving Date: 23-09-2023						Testing Started: 23-09-2023						Testing Ended: 27-09-2023					

----Test Results----

Sl. No.	Parameters	Test Method No.	Unit	Norms as per NAAQS - 2009	Results
1.	Particulate Matter (				



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/2022-23/01

Date: 20th Sep 2023

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 2022-23.

This is for your kind information & record please.

Thanking You

Your's faithfully

Kamlesh Kumar
Sr. Manager (Environment)

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



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.adhunikpower.com