

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/29523/01

Dated: 29.05.2023

To.

Regional Office (ECZ), Ministry of Environment, Forest and Climate Change, Bungalow No. A-2, Shyamali Colony, Ranchi – 834002

Sub:- Submission of Half yearly compliance status report (Unit I) for the period – October 2022 to March 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 October 2022 to March 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

3. Regional Officer, JSPCB, Jamshedpur

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skmakko 31/05/23 निवासन मंत्रासय **मिन्ना**सय क्रिक्ट के स्थान स्य

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

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

BECD DEFICE

## REPORT

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



## **OCTOBER 2022 - MARCH 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: O	ctober 2022 to March 2023
SI No		Status as on 31 <sup>st</sup> March 2023
1	No additional land in excess of 119 ha shal be acquired for any activity/facility of this project.	Total Land acquired for Unit Lis well within the land
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. <b>Complied</b>
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.	
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.	(WLMP) prepared has already been approved by PCCF, Ranchi on May'10.2010
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
7.	High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emissions does not exceed 50 mg/Nm3	prescribed limits.  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 March 2023 enclosed as Annexure II.
8		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	Fly Ash utilization are adhered in compliance with MoEF&CC notification dated 31.12.2021. Fly Ash generation & Utilization report (April 2022-March 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 periodically. Bottom

	bottom ash as also in the effluent emanating from the existing ash pond. No	i a a a a a a a a a a a a a a a a a a a
	ash shall be disposed off in low lying area.	pond for the month of March 2023 enclosed as Annexure V & Annexure VI respectively.
	Ash pond shall be lined with impervious	s Complied
10	lining. Adequate safety measures shall be	
10	implemented to protect the ash dyke from	
	getting breached.	
	Closed cycling cooling system with natura	The project design involves closed cycle cooling
	cooling towers shall be provided. The	systems with induce draft cooling towers. The
11	effluents shall be treated as per the	e effluent generated from process operation is being
11	prescribed norms.	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 March 2023 enclosed as Annexure VII.
	No ground water shall be extracted for	We adhere.
12	project work at any stage.	
42	Natural drainage system within the project	Natural drainage system has not been disturbed.
13	site should not be disturbed.	reaction drainage system has not been disturbed.
	The treated effluents conforming to the	
	prescribed standards shall be re-circulated	and there is separate arrangement for storm water
14	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.	
	A sewage treatment plant shall be provided	STP 60 KLD capacity (03 No) has installed within plant
15	and the treated sewage shall be used for	premises to treat sewage waste. Photographs
	raising green belt /plantation.	enclosed as Annexure VIII.
	Rainwater harvesting should be adopted CGWA shall be consulted for finalization of	The Rain water harvesting report has submitted and
16	appropriate rain water technology within a	approved from CGWA Ranchi.
	period of three months from the date of	13 No Rain water harvesting system has been constructed in accordance with the approved rain
	clearance and details shall be furnished	water harvesting plan.
St. Land	Adequate safety measures shall be provided	The design of coal yard along with provision of fire
	in the plant area to check/minimize	safety measures viz. fire hydrants, water sprinklers
	spontaneous fires of coal yard, especially	has installed and submitted to the Ministry.
17	during summer season. Copy of these	Complied
	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.	
	Storage facilities of auxiliary liquid fuel such	Approval received on dated 24.02.2023. License No.
	as LDO and HFO/LSHS shall be made in the	P/HQ/JH/15/1065 (P257355) valid upto 31st Dec 2026
	plant area in consultation with dept. Of	for LDO storage installation (under Petroleum Class
	Explosive, Nagpur. Sulphur content in the	"C") for operations. Copy of Approval are enclosed as
18	liquid fuel will not exceed 0.5 %. DMP shall be prepared to meet any eventuality in case	Annexure IX. Disaster management plan (DMP) has
	of an accident taking place due to storage	been prepared to handle the any eventuality in case of an accident taking place due to storage of oil.
	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.
	Regular monitoring of ground water in and	Regular monitoring of ground water in and around
19	around to ash pond area including heavy	ash pond area including heavy metals is being carried
1.5	metals (Hg, Cr, As, Pb) shall be carried out, records maintained and six monthly report	out. Ground water analysis report of upstream &
	shall be furnished to RO of ministry. The	downstream of ash pond compared with baseline data for the month of March 2023 enclosed as
	to no of ministry. The	acta for the month of Warch 2023 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.	
78	20	A green belt of adequate with and density shall be developed around the plant periphery covering 1/3 of the project area preferably with local species.	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
	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 nonnoisy/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 March 2023 As Annexure XII.
	23	Regular monitoring of ground level concentration of SO2, NOx, 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 March 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.
		-1	Complied.

	http://envfor.nic.in.	
14	∞	
	A copy of the clearance letter shall be sent	
	by the proponent to concerned Panchayat	
	Zila Praised/Municipal Corporation, urban	
26	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.	
	A separate environment management cell	Services Com is Sering
27	with qualified staff shall be set up for implementation of the stipulated	- Circuit
2,	implementation of the stipulated environmental safeguards.	implementation of specific EMPs. Organization chart of Environmental Management Cell enclosed as
	3	Annexure XIV.
	The proponent shall upload the status of	The updated compliance status of the stipulated EC
	compliance of the stipulated EC conditions,	
	including results of monitored data on their website and shall update the same	in a series the monitoring
	website and shall update the same periodically. It shall simultaneously be sent	
28	to the RO of MoEF the respective zonal	the main gate of the company.
20	office of CPCB and the SPCB the criteria	Status of compliance of the stipulated EC conditions
¥	pollutant level namely SPM, RSPM, SO2,	has been uploaded on company website for the
	NOx (ambient level as stack emission) shall be monitored and displayed at a convenient	period of April 2022 to September 2022.
	location near the main gate of the company	
	in the public domain.	
	The project proponent shall also submit six	, , , , , , , , , , , , , , , , , , ,
	monthly report on the status of compliance	the project along with environmental monitoring data
29	of the stipulated condition including result of monitored data (both in hard copy as well	submitted to MoEF RO at Ranchi vide letter No MOE&F,RNC/HYC/KKJ/261122/01 dated 26 <sup>th</sup> Nov
X-MARK	by email) to the respective RO of MoEF, the	2022 . Acknowledgement copy of same enclosed as
	respective zonal office of CPCB and the	Annexure XV.
	SPCB.	
	The environmental statement for each financial year ending 31st March in form-V	The last environmental statement for financial year
	as is mandated to be submitted by the	(2021-2022) in Form V has submitted dated 20 <sup>th</sup> Sep 2022. Acknowledgement copy of same enclosed as
	project proponent to the concern SBCB as	Annexure XVI.
	prescribed under the Environment	
30	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.	100
	RO of the MoEF located at Bhubaneswar will monitor the implementation of the	The updated compliance status of the stipulated EC
**	stipulated conditions. A complete set-up of	conditions along with monitored data has been displayed at the company website. The monitoring
	documents including EIA report EMP along	data (SPM, RSPM, SO2, NOx) for both ambient air
31	with the additional information submitted	quality and chimney emissions is being displayed at
	from time to time shall be forwarded to the	the main gate of the company. However Half yearly
	RO for their use during monitoring. Project proponent will upload the compliance status	progress report is being sent to RO office, Ranchi on regular basis as per the requirement & uploaded on
	their website and update the same from	company website.
94		

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	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.	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.



ACT NO	32	2	30	29	JCCESSORIES	28		77.00	7000	2 5	24	23	DESIGN	5	<u> </u>	20	13		17	16	15	4			10	9	00	7	6	O	4	3.	2	GENERAL			1
	Temp. transmitter	and mounting hardware	1	Fail safe shutters	OKIES	Path length	details mounting	JIME	Luas Temperature	Ambient air temp.	Detector	Source	DESIGN CONDITIONS	Construction material and Enclosures	Error Diagnostics	Correction for contamination	Automatic misalignment detection		Power supply	Repeatability	Linearity	Resolution	Accuracy	Auto/manual calibration	Response time	Measurement averaging	Measurement Units	Min. detectable conc.	Range	Tag No.	Oty of units	Турс	Model	Males Constitution			A Company of the Comp
Make: Precision Converter  Model: PCHMR Ramge: 0 to 300 Deg C	24 VDC Supply	Included in supply.	Air purges for continuous air supply to instrument provided	Built in	A CONTRACTOR OF THE PROPERTY O	Suitable for 0.5 to 12m duct/stack inner diameter	Analyser can be mounted in Chimney at Elevation of Please refer drawing for analyser mounting flance details		Upto 850 deg.c	- 20deg.C to 60 deg.C	Silicon photocell	Modulated high intensity LED	1. The state of th		Dirty optics, Misalignment, Valve 1 closed, Valve 2 closed to indicate the error conditions.	Automatic window contamination check	-		88-264 VAC, 50-60Hz, 125 VA	+/-0.1% opacity	1)-0.1% of fill scale	t/-0 1% per month	+/-0.2% Opacity of measurement	In built automatic zero and spare calibration	90% in 5 seconds.	Eully selectable in the Tolland	Fully selectable units, mg/m3 (measured), mg/Nm3(Normalized) and	I me/m3	PEATURES	HNE10CQ003	2 No	In-Situ Non contact cross directions	DCEM2100 Dist Monitor		DATA SHEET DCEM2100 DUST MONITOR	18	
		and the second s	instrument provided	ALL PROPERTY OF THE PROPERTY O		Hamoor	y at Elevation of 91.6 Mrs.	200 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	STATES CARROLL	では、	STATE	A CONTRACTOR OF THE CONTRACTOR	A CONTROL OF THE PROPERTY OF T	P.66	bsed, Valve 2 closed to indicate	*	g signal of misalignment	ts fully configurable  VDC I Amp  CD displays with 4 km/kwynyd	The state of the s	Notice and the second s	Security and a security of the	September 1988 September 1988	THE PARTY OF THE P	aton series	1875 1875 1885 1885 1885 1885 1885 1885		ured) mg/Nm3(Normalized) and	mg/Nm3 (Fully site selectable)			100 mm	The state of the s		大学のでは、一個のでは、大学のでは、一般のでは、 1.00年のでは、	TMONITOR	REF: DCEM2109/DS/02	CODEL



## CODEL

## Ref: GCEM40A0/DS/02

e conc. Units (T90) manual ft(24hrs)		T.	DATA SHEET	H
ENERAL  Make  Model/Article No  Type  Qly  Tag No.  Min. detectable conc.  Measurement averaging  Response time (T90)  Auto & manual  calibration  Function  Accuracy  Zero /span drift(24hrs)  Accuracy  Zero /span drift(24hrs)  Repeatability  Linearity  Sensitivity  Sensitivity  Linearity  Linearity  Linearity  Linearity  Linearity  Serial Communications  Serial Communications  Serial Communications  Serial Communications  Serial Communications  Serial Communications		CO, SO2,	NOx GAS /	NALYSER
Make  Model/Article No  Type  Qty  Tag No.  Tag No.  Min. detectable conc.  Measurement averaging Response time (190)  Auto & manual calibration Function Accuracy Ac	GENI			
Range  Min. detectable conc.  Measurement averaging response time (190)  Auto & manual calibration  Function  Function  Accuracy  Accuracy  Zeno /span drift(24hrs)  Repeatability  Sensitivity  Limearity  Limearity  LCD Display  Power supply  Outputs  Serial Communications  Serial Communications  Serial Communications  Construction material	-	Make	CODEL Intern	ational Ltd., UK
Type  (Dy)  (Tag No.  Tag No.  Min. detectable conc.  Min. detectable conc.  Measurement Units  Measurement	2.	Model/Article No	GCEM4000 Se	ries Article no GCEM40A0
Range  Range  Min. detectable conc.  Min. detectable conc.  Measurement averaging Response time (T90) Auto & manual calibration Function Function Function Accuracy Zero /span drift(24hrs) Repeatability Linearity Linearity Linearity Linearity Linearity Construction Serial Communications Outputs  Serial Communications Serial Communications Construction  Serial Communications Construction  Serial Communications	<u>.</u>	Туре	Infrared Absor	otion Analyser-In-Situ type
Range  Min. detectable conc.  Measurement units  Measurement averaging Response time (T90)  Auto & manual calibration Function Accuracy Zero /span drift(24hrs) Repeatability Linearity Linearity Linearity Linearity Linearity Construction Serial Communications Serial Communications Construction Serial Communications Construction C	4	Qty	2 No.	The same of the sa
Range  Range  Min. detectable conc.  Measurement averaging Response time (190) Aus & manual calibration Function Accuracy Zero /span drift(24hrs) Sensitivity Linearity LCD Display Power supply Outputs Serial Communications Serial Communications Construction material and Factories	Çn.	Tag No.	SOx	HNE10CQ004
Range  Min. detectable conc.  Min. detectable conc.  Measurement units  Measurement averaging Response time (190)  Auto & manual calibration  Function  Accuracy  Zeno /span drift(24hrs)  Repeatability  Zeno /span drift(24hrs)  Zeno /span drift(24hrs)  Denormality  Linearity  Linearity  LCD Display  Power supply  Outputs  Serial Communications  Construction material  and Factories			NOx	HNE10CQ001
Min. detectable conc.  Measurement Units  Measurement uveraging  Response time (190)  Auto & manual callbration  Function  Accuracy  Zero /span drift(24hrs)  Repeatability  Sensitivity  Linearity  Linearity  Linearity  Lod Display  Power supply  Outputs  Serial Communications  Serial Communications  Serial Communications  Serial Communications			СО	HNE10CQ002
Min. detectable conc.  Min. detectable conc.  Measurement Units  Measurement uveraging Response time (190) Auto & manual calibration Function Function Function Repeatability Zero /span drift(24hrs) Repeatability Linearity Linearity Linearity LCD Display Power supply Outputs Serial Communications Serial Communications Serial Communications Serial Communications			,	FEATURES
Min. detectable conc.  Measurement Units  Measurement averaging Response time (T90)  Auto & manual calibration  Function  Accuracy  Zeno /span drift(24hrs)  Repetability  Sensitivity  Linearity  LCD Display  Power supply  Outputs  Serial Communications  Serial Communications  Serial Communications	, o	Range	CO: 0 to 1000p SO2: 0 to 1000p NOx: 0 to 1000	pm, 0 to 1000mg/m3, 0 to 1000mg/ pm, 0 to 1000mg/m3, 0 to 1000mg/ ppm, 0 to 1000mg/m3, 0 to 1000mg/
Min. detectable conc.  Measurement Units  Measurement averaging Response time (190) Auto & manual calibration Function Accuracy Zeno /span drift(24hrs) Repeatability Sensitivity Linearity LCD Display Power supply Outputs Serial Communications Serial Communications Serial Communications			CO2:0 to 25%	
Min. detectable conc.  Measurement Units  Measurement uveraging  Response time (T90)  Auto & manual calibration  Function  Function  Accuracy  Zero /span drift(24hrs)  Repeatability  Sensitivity  Linearity  LCD Display  Power supply  Outputs  Serial Communications  Serial Communications  Serial Communications  Serial Communications			H2O: 0 to 25%	
Min. detectable conc.  Measurement units  Measurement averaging Response time (190) Aub & manual calibration Function Accuracy Zero Ispan drift(24hrs) Repeatability Sensitivity Linearity Linearity Linearity LCD Display Power supply Outputs Serial Communications Serial Communications Serial Communications Serial Communications Construction material			Above ranges ar	e site selectable up to 3000 ppm
Measurement Units  Measurement averaging Response time (T90) Auto & manual calibration Function Accuracy Zero /span drift(24hrs) Repeatability Sensitivity Linearity Linearity LCD Display Power supply Outputs Serial Communications Construction material and Factorers	7.	Min. detectable conc.	1 ppm, 1mg/m	3, 1mg/Nm3 for CO,SO2,NOx & 0
Measurement averaging Response time (190) Auto & manual calibration Function Function Accuracy Zero Ispan drift(24hrs) Repeatability Sensitivity Linearity Linearity LCD Display Power supply Outputs Serial Communications Construction material and Factorics	ço	Measurement Units	Fully selectable	units-ppm or % by volume, mg/m3
Response time (T90)  Aub & manual calibration  Function  Accuracy  Accuracy  Accuracy  Repeatability  Sensitivity  Linearity  Linearity  LCD Display  Power supply  Outputs  Serial Communications  Serial Communications  One Tendorse	9.	Measurement averaging	Fully selectable	in range 10Sec to 1 hour
calibration  Function  Function  Accuracy  Zeno /span drift(24hrs)  Sensitivity  Linearity  LCD Display  Power supply  Outputs  Serial Communications  Serial Communications  Construction material  and Factories	10.	Response time (T90)	Detector less th	an 10 seconds. Calibration less than
callbration Function Accuracy Zeno /span drift(24hrs) Repeatability Sensitivity Linearity LCD Display Power supply Outputs Serial Communications Construction material and Factories	1	80	In built and scl	ctable
Function Accuracy Zeno /span drift(24hrs) Repeatability Sensitivity Linearity LCD Display Power supply Outputs Serial Communications Construction material and Factories				
Accuracy Zero Ispan drift(24hrs) Repeatability Sensitivity Linearity LCD Display Power supply Outputs Serial Communications Construction material and Factories	12.	Function	Continuous fun	ction
Zeno /span drift(24hrs) Repeatability Sensitivity Linearity LCD Display Power supply Outputs Serial Communications Construction material and Factories	13.	Accuracy	+/- 2% of meas	ared value for CO.SO2. NOx & 0.59
Repeatability Sensitivity Linearity LCD Display Power supply Outputs Serial Communications Serial Communications and Factories	14.	Zero /span drift(24hrs)	Over all drift le	ss than +/-2% per month
Sensitivity Linearity LCD Display Power supply Outputs Outputs Serial Communications Construction material and Facelerase	15.	Repeatability	Less than 2% o	Span
Linearity LCD Display Power supply Outputs  Serial Communications Construction material and Factories	16.	Sensitivity	1 ppm for CO.	SO2,NOx, 0.5% for CO2 H2O
LCD Display Power supply Outputs  Serial Communications Construction material and Facileties	17.	Linearity	Less than 2%	
Power supply Outputs Serial Communications Construction material and Facultion	18.	LCD Display	LCD with back	light
Outputs  Serial Communications Construction material and Facilities	19.	Power supply	240VAC, 50-60	Hz, +/-10% 400VA
Serial Communications Construction material	20.	Outputs	Analog: 5 x 4-2 Keypad for CO.	0 mA isolated, max. 500 Ohms, full SO2,NOx in ppm & CO2,H2O in %
Serial Communications Construction material			Logic: 5 x Volt 1x data invalid	free contacts, SPCO rated at 50 volt output (System fault)
Construction material	21.	Serial Communications	RS232/RS485 N	Modbus O/P
	22	Construction material and Enclosures	Electronic Hous	ings (DDU): Corrosion resistant, epo

DESIGN CONDITIONS
23. Infrared source
24. Infrared detector
25. Ambient air temp.
26 Flue gas temp.

Heater cartridge assembly

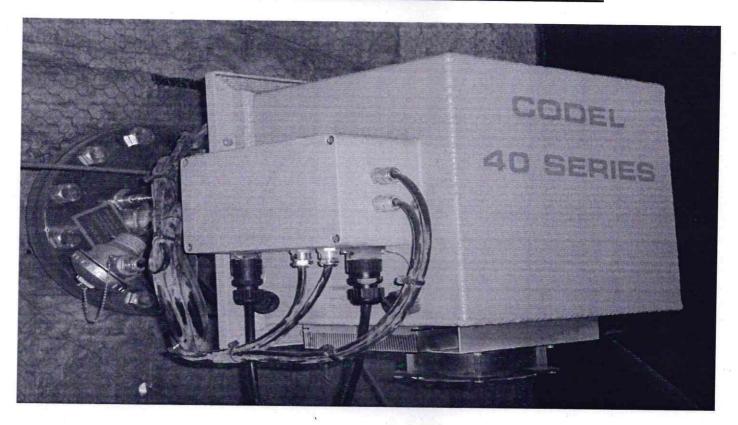
Lead selenid detecter

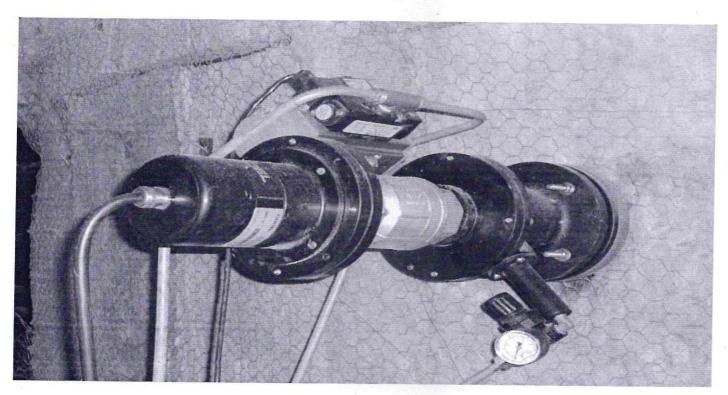
Transceiver unit 0 to 70 °C, Electronic unit (PSU & DDU) 0 to 60 °C

Up to 350 deg.C

	4	8 8	8 %	31	30	29	ACCES	28	27	000
Plant instrument air	I emperature transmitter	Pressure transmitter	Zero/span gas calibration tubes	Air dryer unit	Zero Calibration	Standard span gas for calibration	ACCESSORIES	Stack width	Analyser mounting details	COLUMN COLUMN COLUMN COLUMN
5 LPM @3 bar pressure continuous	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	Mounted on GCEM40A0 probe Make: Druck Range: I. doar absolute with 4-20mA output Input supply: 24VDC operated	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.	Maximum Pressure : 10 bar Maximum temperature : 57 deg.C Air dryer unit to dry down the compressed air to -20 deg.c	For zero calibration we use plant compressed air,	Make: Chemiron Science Laboratory, Mumbai Material: Aluminium Cylinder Capacity: 10 lit W.C Filled with: 50bpm CO, 50bpm SO2, 50bppm NO and balance Nitrogen (N2) Cylinder with SS regulator, necessary tubing's & fittings. Filled pressure: filled at 120-130kg/cm2	ommore for succession fuller diameter of more than 2000mm.	Suitable for direct/Stock impossible of the Suitable for direct/Stock impossible of the Suitable of the Suitab	_	

## **Continuous emission monitoring system**







Jharkhand State Pollution Control Board, JSPCB Accredited by

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	0	0	4	2
Discipline: C	hemical		.5	1		Gro	up: A	tmosp	heric	Pollut	ion	S	ub-Gr	oup:	Stack	Emiss	ion	
Report Issue	Date: 3	1-03-2	2023		- 5	**	1		T	est Re	port N	o.: RN						
Sample ID: 2	30330AF	20500	)1			Mar A		<b>門開 N. </b> (2)				iption:			ATTENDED TO A			
Challan No./	P.O. No.	: 303	0006	457		12	T.	1	C	hallan	Date/	P.O. D	ate.:	06-12	-2022		4.3	
	LL PAC				(20 <sup>4</sup> )		19(5)		-	uetom	er Re	preser	ntativ	e: Ka	mlesh	lha		
Turna af Ind.										HETAM	AP HA	nresei	ntativ	e. Ka	miesh	lha		
Type of Indu				1926	ALC: N					The state of the s				-	mean	Ulla		
Sample Drav	wn by: IE	EM Te	am	ar.	2042.4	1 0 10			S	amplir		e: 28-		-	mean	Jila		-5
Sample Drav Protocol: CP	vn by: IE CB Guide	EM Te eline (	am LATS	5/80/2	2013-14	l) & IS	Meth	od 112	S	amplir				-	Micon	Ulla		45
Sample Drav	vn by: IE CB Guide	EM Te eline (	am LATS	5/80/2		l) & IS emp.(°	P. Control of Co.		S	amplir eries	ng Dat		03-20	23		: NE -	sw	
Sample Drav Protocol: CP	vn by: IE CB Guide ological	EM Te eline ( I <b>Info</b> i	eam LATS rmati	5/80/2 ion	A. Te		C): 28	R.	\$55 So H. (%	amplir eries ): 61	ng Dat	e: 28-0	03-20	23	W.D.	: NE -		

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	
<b>Construction Material</b>	Metal	Production Capacity	
Sampling Port	Available	Pollution Control Device (if any)	ESP

#### **Test Result**

SI. No.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	389	
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	21.8	4 (224)
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm³/hr.	822601.9	67. 75
4.	Particulates Matter (PM)	IS 11255 (Part-1)	mg/Nm <sup>3</sup>	42.36	50
5.	Sulphur Dioxide (SO <sub>2</sub> )	IS 11255 (Part-2)	mg/Nm³	1157.6	600
6.	Oxides of Nitrogen (NO <sub>2</sub> )	IS 11255 (Part-7)	mg/Nm <sup>3</sup>	526.96	450
7.	Carbon Monoxide (CO)	IS 13270:1992	%	BDL(MDL-0.2)	A10.200

Dust	Kg/hr	35.85
Sulphur Dioxide	Kg/hr	952.24
Oxide of Nitrogen	Kg/hr	433.48

Env. Condition of Lab.	Laboratory is ma IS 196:1966(C).	intaining Temperature		Humidity 65±5 % in all testing area as
Abbreviation	MDL: Minimum D	etection Limit, BDL: Be	low Detection Limit	
Limit is Specified	4.0			
Remark		- 37	- R 185	

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr. Singh & team

#### Specific Contractual Notes: -

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

thorized Signatory (Shreya C. Jain Dy. Quality Mana Director



Accredited by Jharkhand State Pollution Control Board, JSPCB

ISO 9001:2015 (Quality Management System )

ISO 45001:2018 (Occupational Health & Safety Management System )



Test Report

Discipline: Chemical	Group: At	mospheric Pollution	Sub-Group	: Stack Emission
Report Issue Date: 31-03-2023	Test Report No.: RN-230320001S1			
Sample ID: 230330AP05001	Sample Descrip			
Challan No./P.O. No.: 3030006457		Challan Date/P		A. C.
ADHUNIK POWER & NA				
VILL PADMPUR, PGCIL		32402	ay'	
VILL PADMPUR, PGCIL Type of Industry: Power Plant		32402 Customer Rep		amlesh Jha
VILL PADMPUR, PGCIL Type of Industry: Power Plant Sample Drawn by: IEM Team	S/S, KANDRA-8:	32402 Customer Rep Sampling Date		amlesh Jha
VILL PADMPUR, PGCIL Type of Industry: Power Plant Sample Drawn by: IEM Team	S/S, KANDRA-8:	32402 Customer Rep Sampling Date		amlesh Jha
VILL PADMPUR, PGCIL Type of Industry: Power Plant	S/S, KANDRA-8:	Customer Rep Sampling Date d 11255 Series	: 28-03-2023	amlesh Jha

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

SI. No.	Parameters	Test Methods	Unit	Result	Limits
1.	Flue Gas Temperature	IS 11255 (Part-3)	°K	389	420
2.	Flue Gas Velocity	IS 11255 (Part-3)	m/s	21.8	
3.	Flue Gas Volumetric Flow Rate	IS 11255 (Part-3)	Nm³/hr.	822601.9	1000
4.	Mercury (Hg)	(LATS/80/2013-2014)	mg/Nm³	BDL(MDL-0.03)	0.03

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	
Remark	

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr. Singh & team

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Quality Checked Comments athorized Signatory

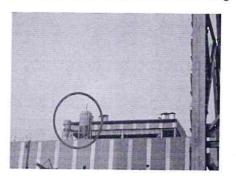
(Shreya Sonat Randi Director



Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001 Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony,



Bag Filter installed at Coal mill building



**Dust suppression through Tanker** 



Closed type coal conveying system



Bag Filter installed at Ash silo



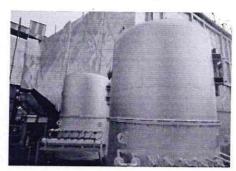
Fixed type DS system for coal Conveyor DE system at Coal Crusher House



Fixed type dust suppression system



Bag filter at buffer hopper





Fixed type DS system at Coal Yard



## **Adhunik Power & Natural Resource Limited**

FLY ASH GENERATION & UTILIZATION REPORT (2022-23)

		Ash	Generati	on and Uti	lization			Mode of A	sh Utilizatio	on
SI. No.	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	DPC	RMC	Legacy Ash In Reclamation of Low Lying Area /Brick Plant
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(12)
1	APRIL	195270	41.97	81957.9	66569.94	81.2%	6493.49	56528.1	3548.4	,
2	MAY	253516	46.57	118060.0	82846.76	70.2%	4058.37	75643.7	3144.7	
3	JUNE	223998.1	43.06	96455.6	81987.25	85.0%	3643.77	73484.9	4858.6	
4	JULY	177268	44.66	79159.8	67285.81	85.0%	1960.79	61244.8	4080.2	
5	AUG	236245.5	39.44	93167.6	77746.45	83.4%	1802.39	72883.3	3060.7	
6	SEP	228920.8	46.32	106041.3	89956.42	84.8%	3193.78	82747.03	4015.6	
7	ОСТ	176628	43.66	77113.4	65546.39	85.0%	2733.98	57935.3	4877.2	
8	NOV	92391	43.38	40076.0	34064.60	85.0%	1209.97	28136.6	4718.1	25811.7
9	DEC	203746	43.75	89130.1	75760.62	85.0%	996.61	70382.4	4381.7	80405.7
10	JAN .	217296	43.87	95320.4	81022.32	85.0%	4596.26	72261.9	4164.1	55.55.7
11	FEB	216946	41.06	89073.9	75712.85	85.0%	5361.52	62518.3	7833.0	
12	MAR	161397	40.33	65083.8	55321.19	85.0%		44664.4	6121.5	



Certified By

## Institute for Environmental Management

Accredited by Jharkhand State Pollution Control Board, JSPCB
National Accreditation Board for Testing Laboratory (NABL) vide TC-11515

ISO 9001:2015 (QMS) & ISO 45001:2018



#### Test Report

ULR No.: T C 1	1 5	1 !	2	3	0	0	0	0	0	0	0	4	8
Discipline: Chemical	Group	: Pollution	& Env	ronmer	nt		Sul	o-Gro	up: V	Vaste	Water	-	
Report Issue Date: 31-03-2023		V #		Tes	t Rep	ort No	.: RN-	2303	20001	LWWO	3		
Sample ID: 230330PE03001		11				Descri						nd)	575 74
Challan No./P.O. No.: 3030006457	30	TIAL				Date/F						4.0	
ADHUNIK POWER & I					),								
VILL PADMPUR, PGC				102								T	
VILL PADMPUR, PGC Type of Industry: Power Plant				402 Custor	ner R			_	amles	sh Jha		3	200
VILL PADMPUR, PGC Type of Industry: Power Plant Sample Drawn by: IEM Team	ILS/S,	KANDRA		102	ner R			_	amles	sh Jha			
VILL PADMPUR, PGC Type of Industry: Power Plant Sample Drawn by: IEM Team	ILS/S,	KANDRA		402 Custor	ner R			_	amles	sh Jha		37 	3
VILL PADMPUR, PGC Type of Industry: Power Plant Sample Drawn by: IEM Team	d 3025	KANDRA		402 Custor	ner R			_	amles	sh Jha			
VILL PADMPUR, PGC Type of Industry: Power Plant Sample Drawn by: IEM Team Protocol: CPCB Guideline& IS Metho	d 3025	KANDRA	\-8324	402 Custor	mer R ng Da		-03-20	023		sh Jha		v	

----Test Result----

SI. No.	Tested Parameters	Unit	Method No.	Limits	Results
511 1101	rested rarameters	Othe	Wethou No.	Lillins	Results
1.	pH value at 25°C		IS 3025 (Part-11)	5.5 to 9.0	7.23
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	42.0
3.	Chromium	mg/l	APHA 3111 B.2017	- CO - SEE	BDL (MDL - 0.04)
4.	Lead	mg/l	APHA 3111 B.2017		BDL (MDL - 0.07)
5.	Mercury	mg/l	APHA 3112 C.2017		BDL (MDL - 0.008)
6.	Arsenic	mg/l	APHA 3114 C.2017	0.2	BDL (MDL - 0.012)

----End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Punya Harsit Dadel

Sample Drawn By: Rahul Kumar Singh & Team

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Quality Checked by Authorized Signatory

(Shreya Saha)

On Quality Manage

Director



Accredited by Jharkhand State Pollution Control Board, JSPCB

ISO 9001:2015 (Quality Management System )

ISO 45001:2018 (Occupational Health & Safety Management System )



Testing Ended: 31-03-2023

#### Test Report

Discipline: Chemical	Group: Pollution &	Environment	Sub-G	roup: Waste Water	
Report Issue Date: 31-03-2023	.60	Test Report No.: RN-230320001WW03			
Sample ID: 230330PE03001			ste Water (Ash Pond)		
Challan No./P.O. No.: 3030006457		Challar	Date/P.O. Date.	: 06-12-2022	
	MATHONI DECOL	DOCCITO			
ADHUNIK POWER & VILL PADMPUR, PGO  Type of Industry: Power Plant		32402	Representative:	Kamlesh Iha	
		32402 Customer	Representative:	Kamlesh Jha	
VILL PADMPUR, PGO Type of Industry: Power Plant Sample Drawn by: IEM Team	CILS/S, KANDRA-8	32402 Customer	Representative: Date: 28-03-2023	Kamlesh Jha	
VILL PADMPUR, PGO Type of Industry: Power Plant	CILS/S, KANDRA-8	32402 Customer		Kamlesh Jha	

----Test Result--SI. No. **Tested Parameters** Unit Method No. Limits Results IS 3025 (Part-39) 1. Oil & Grease mg/l 20 BDL (MDL - 4.0) 2. Temperature IS 3025 (Part-29) mg/l 28

Testing Started: 29-03-2023

---End of Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).	ai.
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit	2 19 Table
Limit is Specified	As per the Environmental (Protection) Rule - 1986	
Remark	Sample Comply with prescribed specification.	X The

Tested By: Punya Harsit Dadel

Sample Drawn By: Rahul Kumar Singh & Team

Sample Receiving date: 29-03-2023

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Quality Checked by ixonment to involve Signatory

(Shreya Sonal)

(Shreya Sonal)

Dy. Quality Manage Rancii Director





Jharkhand State Pollution Control Board, ISPCB Accredited by

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	0	0	4	7
Discipline: Chemical	Group	: Pollut	ion &	Enviro	nmer	nt		Su	b-Gro	up: V	Vaste	Water		
Report Issue Date: 31-03-2023		42.	alf.		Tes	t Rep	ort No	-	7.4501	-				
Sample ID: 230330PE02001	100	"_df_d		100	-		escri	-			-			7.5
Challan No./P.O. No.: 3030006457	400	7 81		5X*			ate/F						9.	
ADHUNIK POWER &						).								
VILL PADMPUR, PG				32402	2						er		e P	
VILL PADMPUR, PGO Type of Industry: Power Plant				32402 C	2 ustor	ner R	epres	-		amles	sh Jha		Ġ,	
VILL PADMPUR, PGO Type of Industry: Power Plant Sample Drawn by: IEM Team	CILS/S,	KAND	RA-8	32402 C	2 ustor	ner R	epres te: 28	-		amles	sh Jha		*	
VILL PADMPUR, PGO Type of Industry: Power Plant Sample Drawn by: IEM Team	CILS/S,	KAND	RA-8	32402 C	2 ustor	ner R		-		amles	sh Jha		(3) 	
VILL PADMPUR, PGO Type of Industry: Power Plant Sample Drawn by: IEM Team	CILS/S,	KAND	RA-8	32402 C	2 ustor	ner R		-		amles	sh Jha			
VILL PADMPUR, PGO Type of Industry: Power Plant Sample Drawn by: IEM Team Protocol: CPCB Guideline& IS Metho	od 3025	KAND	PRA-8	32402 C Sa	2 ustor	ner R ng Da		-03-2	023			i E - SV	V.	

Testing Started: 29-03-2023

- 9		lest	Result	VOV _50	VO3886
SI. No.	Tested Parameters	Unit	Method No.	Limits	Results
1.	pH value at 25°C		IS 3025 (Part-11)	5.5 to 9.0	7.69
2.	Total Suspended Solids (TSS)	mg/l	IS 3025 (Part-17)	100	26.0
3.	Chemical Oxygen Demand (COD)	mg/l	IS 3025 (Part-58)	250	12.0
4.	Phosphate (as PO <sub>4</sub> )	mg/l	IS: 3025(Part-31)		0.58
5.	Copper	mg/l	APHA 3111 B.2017	1.074	BDL (MDL - 0.2)
6.	Chromium	mg/l	APHA 3111 B.2017		BDL (MDL - 0.04)
7.	Zinc	mg/l	APHA 3111 B.2017	565 <b>-2</b> 65 (19	BDL (MDL - 0.04)

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Punya Harsit Dadel

Sample Drawn By: Rahul Kumar Singh & Team

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Accredited by Jharkhand State Pollution Control Board, JSPCB ISO 9001:2015 (Quality Management System) Certified by ISO 45001:2018 (Occupational Health & Safety Management System )



#### Test Report

Discipline: Chemical	Group: Pollution & Environmen	t Sub-Group: Waste Water
Report Issue Date: 31-03-2023	Test	Report No.: RN-230320001WW02
Sample ID: 230330PE02001		ple Description: Waste Water (ETP)
Challan No./P.O. No.: 30300064		lan Date/P.O. Date.: 06-12-2022
legited to:	STANDARD PROCESS	

#### 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: 28-03-2023

Protocol: CPCB Guideline &IS Method 3025 Part-01

Sampling Location: ETP Outlet

Field Meteorological Information A. Temp.(°C): 28 R.H. (%): 61 W.C.: Clear W.D.: NE - SW

Sample Receiving date: 29-03-2023 Testing Started: 29-03-2023 Testing Ended: 31-03-2023

---Test Result-

SI. No.	Tested Parameters	Unit	Method No.	Limits	Results
1.	Oil & Grease	mg/l	IS 3025 (Part-39)	10	BDL (MDL - 4.0)
2.	Iron	mg/l	APHA 3111 B.2017	3.0	0.96
3.	Temperature	mg/l	IS 3025 (Part-29)	#	28

----End of Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Punya Harsit Dadel

Sample Drawn By: Rahul Kumar Singh & Team

Specific Contractual Notes: thorized Signatory 1. The laboratory accepts responsibility for content of this report. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue Total liability of Institute for Environmental Management will be limited to invoiced amount only. 6. In case of feedback/ complaints, please send an email at qm.lemeco@gmail.com C. Jain)

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Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001

Dy. Quality Manag

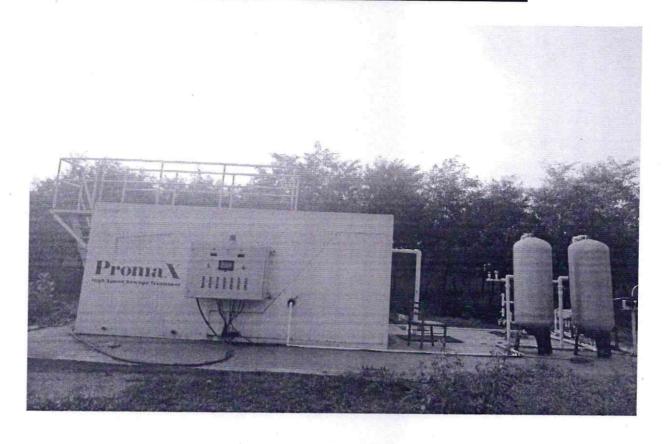
Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony, Ranchi-834002, Jharkhand, India Ph - 8407804254, 8407804251, Email - iem2012@rediffmail.com

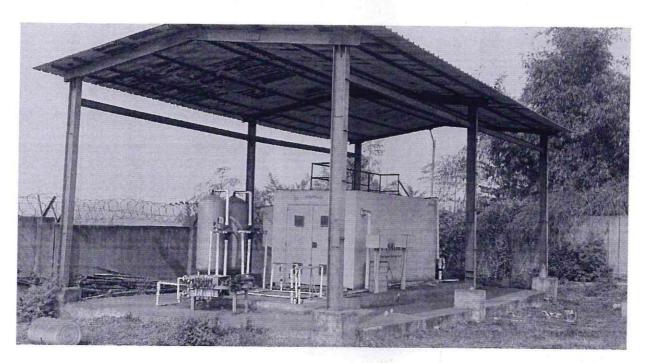
ISO 45001:2018

Director

ISO 9001:2015

## **Sewage Treatment Plant**







#### Government of India

Ministry of Commerce & Industry पेट्रोनियम तथा विक्योत्क सुरक्षा संगठन (वैसो) Petroleum & Explosives Safety Organisation (PESO) ओ मोइन, तोसरा पाला, सोता परिचर, मेन रोड, सुगीला ऑटोबोचाइल के पोठे

মান- 834001 ° Srl 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

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

भेवा 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 दिनक/Dated : 24/02/2023

2 4 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 चे विकास विभाग के होति का कि आधिकार में अनुप्रति में P/HQ/JH/15/1065 (P257355)

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.

नहोत्रम/Sir (s),

कृतवा आवंके पत्र क्रमांक OIN1307334 दिनांक 23/02/2023 का अवलोकर करें।

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

अनुवाति शंबवा P/HQ/JH/15/1065 (P257355) दिलांक 23/12/2011 को दिलांक 31/12/2026 एक नवीलीकृत कर इस यह के साथ आसीत की जा ही है।

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

कुरवा चेट्रोतिकन निवस 2002 के अधीन बनाए गए निवस 148 में दी गई प्रक्रिया का कवाई से पासर करें। अनुक्रीर के मबीकाण हेतु समावद करोगांकों को अनुक्रीर की बेधता समाप्त होने की तिथि से कन से कन 30 दिन पूर्व कर्णालय में उत्तित को

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.

कृष्या गवती दें। Please acknowledge the receipt.

भवतेष /Yours faithfully,

(Ashendra Singh)) তথ মুক্স হিফোকৈ নিথ্যক Dy. Chief Controller of Explosives নক/Ranchi

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

(अधिक जानकारी जैसे आवेदन की स्थिति, गुरुक तथा अन्य विवरण के लिए हमारी देवसाइट: http://peso.gov.in देखें)

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

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

#### नवीनीकरण के पृष्ठांकर के लिए स्थान SPACE FOR ENDORSEMENT OF RENEWALS

पेट्रोक्किम अधिविक्स, १९३४ के उपनरमों या उनके अभीन बनाए गए नियमों या इस अनुकृषि की सर्वो का उन्हांपन म होने की देशा में यह अनुकृषि किस में बिना किसी कुट के दस वर्ष एक नवीकृत की या 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.	নরীভ্যুদ কী লায়িছ Daie of Renewal	सम्मप्ति की तर्म Date of Expiry of lic	f Signature and office stamp of the licencing
1).		31/12/2013	Sd/-
Tp.		31/12/2013	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
4).	24/02/2023	31/12/2026	Ranchi  Ashendra Singh  Dy. Chief Controller of Explosives Ranchi

मदि अनुत्रति परिन्य इसमें उपास्त्र विगरण और गतों के अनुष्य नहीं पए जाते है और जिन किस्सी और शतों के अर्थान यह अनुत्रति पर्यू की पूर्व है उनसे से किसी का उल्लंबन होने की दशा में यह अनुति रह की जा सकती है और अनुत्रतिवारी प्रथम अपाय के लिए सावारण कारावास से, जो रहन साम तक हो सकता है, या जुननि से, जो एक हवार रुपये तक हो सकता है, या दोनों से, और प्रयोक पहातवार्ती अपाय के लिए सावारण कारावास से जो तीन मास तक हो सकता है, या जुननि से, जो एक हवार रुपये तक हो सकता है, या दोनों से, रुप्ताय कोरावास के लिए सावारण कारावास से जो तीन मास तक हो सकता है, या जुननि से, जो एक हवार रुपये तक हो सकता है, या दोनों से, रुप्ताय 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.

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Government of India

Ministry of Commerce & Industry पेट्रोनियम तथा विक्योटक मुख्या संगठन (पैसो) Petroleum & Explosives Safety Organisation (PESO) श्री मोइन, तीमरा पाला, सीता पॉल्स, पेन रोड, मुक्तीला ऑटोमोबाइल के पाँछे संगी- 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

tion /No.: P/HQ/JHM5/1065 (P257355)

धेवा 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

State: Jharkhand PIN: 832105 दिनक/Dated : 24/02/2023

2 4 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 के देविता पेट्रीकिया में C आधिकार में अनुस्थित में शिन्य प्राप्तिक से PIHQ/JH/15/1065 (P257355)

Existing Petroleum Class C Installation at 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) - Ronowal regarding.

महोदय /Sir (s),

कृतपा आपके पत्र क्रमांक OIN1307334 दिनांस 23/02/2023 का अवलेकर की।

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

अनुवासि संख्या P/HQ/JH/15/1065 (P257355) विताल 23/12/2011 को विताल 31/12/2026 तक नवीनीकृत कर इस प्रश्न के साथ अग्राविस की जा रहे है।

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

कृष्या चेट्रोलिक्स निषम 2002 के अधीन बनाए गए निषम 148 में दो गई प्रक्रिया का कवाई से पासन करें। अनुक्रीर के नामकाण हेनु समस्य कार्याओं को अनुक्रीर की बैचना संगाध होने की तिथि से कम से कन दे कर से कर निर्माण कर्णा 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 Ilcence so as to reach this office on or before the date on which Licence expires.

कृषया पावती दें।

Please acknowledge the receipt.

भवदीय Mours faithfully.

(Ashendra Singh)) তথ্য বুজৰ বিকোলে বিধ্যক Dy. Chief Controller of Explosives কৰ্ম/Ranchi

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

(अधिक जानकार्त नेसे आवेदन की स्थिति, गुरूक तथा अन्य विकास के लिए तथारी 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 Test Report No. : BFT/10835 Branch Plant Date of Sample Drawn : 20/07/19 Source of Sample : TK105 Date of Sample Receipt 21/07/19 Tank No : TK105 . Date of Sample Testing Qty of Sample/ : 1ltr uml / tk70/868.3 b.no.36/2019 Density/Type of Sample Date of Report 22/07/19 Catg / Evnt / Actyty : Aft Receipt thru Dedicated P/L Date of Printing ; 22/07/19 Receipt/Despatch Mode JDE Sample Number 865213 Sample Drawn by : RAMAKRISHNA Batch No

' Specifications Test Line Characteristics Units Test Method Min Max Result Value Number 5 DENSITY@ 15°C Ka/m3 IS 1448 [ P:16] KINEMATIC VISCOSITY @ 40°C 867.8 8 oSi IS 1448 P :25 2,500 15.000 7 FLASH POINT - PMCC 4.850 'C IS 1448 P 121 8 79 WATER CONTENT % Vo! IS 1448 P:40 250 100 TOTAL SULPHUR % Mass ASTM D 4294 1.50 47 10 FOUR POINT SUMMER

IS 1448 P :10

Remarks:

Sample S.No.BFT/271 meets specification as por IS-15770.2003 [Renthmod2014] in the puone parameters

'C

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 advartising 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



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	0	.0	3	8
Discipline: Chemical	Group:	Water		10	1	Sul	-Gro	up: Gr	ound	Wate	r	
Report Issue Date: 31-03-2023	15° 1		Te	est Re	port N	lo.: RN	-230	32000	1GW1	241		
Sample ID: 230330WA02001	- 4 1		200			iption				P		-
Challan No./P.O. No.: 3030006457	TA	6/33*	CI	nallan	Date	P.O. D	ate.:	06-12	-2022	2		-25
ADHUNIK POWER & NATUR				D.								
VILL PADMPUR, PGCILS/S,			02	N.			灣小			100		
VILL PADMPUR, PGCILS/S, Type of Industry: Power Plant			)2 Cı	ustom		prese			mlesh	) Jha		
VILL PADMPUR, PGCILS/S, Type of Industry: Power Plant Sample Drawn by: IEM Team	KANDRA		)2 Cı	ustom		prese e: 28-0			mlesh	) Jha		
VILL PADMPUR, PGCILS/S, Type of Industry: Power Plant	KANDRA		)2 Cı	ustom					mlesh	Jha		
VILL PADMPUR, PGCILS/S, Type of Industry: Power Plant Sample Drawn by: IEM Team	KANDRA		)2 Cı	ustom					mlesh	) Jha		
VILL PADMPUR, PGCILS/S, Type of Industry: Power Plant Sample Drawn by: IEM Team Protocol: CPCB Guideline & IS Method 3025	KANDRA 5 Part-01	\ <u>-</u> 8324(	)2 Cı	ustom		e: 28-0		23	mlesh		w	

#### ----Test Result----

SI.	Tested Parameter	Unit	Method No.	L	imit	Results
No.	resteu Falametei	Oint	ivietiou ivo.	Acceptable	Permissible	Results
1.	pH value at 25°C		IS 3025 (Part-11)	6.5 - 8.5	No Relaxation	6.88
2.	Turbidity	NTU	IS:3025 (Part-10)	1 3 5	5	4.18
3.	Colour	Hazen	IS 3025 (Part-04)	5	15	5.0
4.	Odour		IS:3025 (Part-05)	Agreeable	Agreeable	Agreeable
5.	Total Dissolved Solids (TDS)	mġ/l	IS 3025 (Part-16)	500	2000	372.0
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	134.0
7.	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part-23)	200	600	20.0
8.	Total Hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part-21)	200	600	154.0
9.	Ammonical Nitrogen (as N)	mg/l	IS 3025 (Part-34)	0.5	No Relaxation	BDL(MDL-0.1)
10.	Chloride (as Cl <sup>-</sup> )	mg/l	IS:3025 (Part-32)	250	1000	52.48
11.	Free Residual Chlorine	mg/l	IS:3025 (Part-26)	0.2	1.0	BDL(MDL-2.0)
12.	Sulphate (as SO <sub>4</sub> )	mg/l	IS:3025 (Part-24)	200	400	26.11
13.	Magnesium (as Mg)	mg/l	APHA 3500	30	100	4.86
14.	Sodium (as Na)	mg/l	IS 3025 (Part-45)			741
15.	Potassium (as K)	mg/l	IS 3025 (Part-45)			4.56

#### ---END Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2021
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

## Specific Contractual Notes: 1. The laboratory accepts responsibility for content of this report. 2. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue 5. Total liability of Institute for Environmental Management will be limited to invoiced amount only. 6. In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization. Quality Checked by nonmental orized Signatory (Shreya Sonal) (Shreya Sonal) Director



Accredited by Jharkhand State Pollution Control Board, JSPCB

ISO 9001:2015 (Quality Management System )

ISO 45001:2018 (Occupational Health & Safety Management System )



#### **Test Report**

Discipline: Chemical	Group:	Water	Sub-0	Group: Ground Water
Report Issue Date: 31-03-2023		Test	Report No.: RN-2	
Sample ID: 230330WA02001			ple Description: 0	
Challan No./P.O. No.: 3030006457	* "11.4"		an Date/P.O. Da	
ADHUNIK POWER & NA				
VILL PADMPUR, PGCILS	S/S, KANDRA	A STATE OF THE PARTY OF THE PAR	omor Pontocont	etivat Kamlash Ila
Type of Industry: Power Plant	S/S, KANDRA	Cust		ative: Kamlesh Jha
		Cust	omer Represent oling Date: 28-03	
Type of Industry: Power Plant Sample Drawn by: IEM Team	3025 Part-01	Cust		
Type of Industry: Power Plant Sample Drawn by: IEM Team Protocol: CPCB Guideline & IS Method 3	3025 Part-01 GE	Cust		

#### ----Test Result----

SI.	Tested Parameter	Unit	Method No.	L	imit	Results
No.	1 GOLGA T ATAMICKE	Oine	Mictiod No.	Acceptable	Permissible	Results
1.	Taste		IS:3025 (Part-07)	Agreeable	Agreeable	Agreeable
2.	Nitrate (as NO <sub>3</sub> )	mg/l	IS:3025 (Part-34)	45	No Relaxation	1.26
3.	Fluoride (as F-)	mg/l	APHA 4500	1.0	1.5	0.68
4.	Sulfide	mg/l	IS:3025 (Part-29)	0.05	No Relaxation	BDL(MDL-1.0)

---END Report----

Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % i area as per IS 196:1966(C).	n all testing
MDL: Minimum Detection Limit, BDL: Below Detection Limit	2 M
IS 10500 :2021	
Sample Comply with prescribed specification.	ं ग्रह्मात्रवर्ष
	MDL: Minimum Detection Limit, BDL: Below Detection Limit

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

Specific Contractual Notes: 
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5. Total liability of Institute for Environmental Management will be limited to invoiced amount only.

6. In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com

On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is Issued by the Director of the Organization.

Quality Checked by wormer unit or ized Signatory

(Shreya Sonal)

(Shreya Sonal)

Dy. Quality Manage

Director



ISO 45001:2018



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	С	1	1	5	1	5	2	3	0	0	0	0	0	0	0	4	To
Discipline: Ch	emical	1	Gro	up: Re	esidue	s and C	Contai	minan	its in V	Vater		Sub-Gro	oup:	race	Metal	s elen	nents	1.
Report Issue I	)ate: 31	L-03-2	023			1.7			Test R	eport	No	.: RN-23	SHALL ASSESSED.					No.
Sample ID: 23	0330RC	0200	1			407.4						tion: Gr			7 min 2 t			.79
Challan No./P	.O. No.	: 3030	00064	57		11						.O. Date	-		14.0	-		E I
	HUNIF									<b>)</b> .	The second							
AD VIL	L PAI	MPL	JR, P					3240	2		Pani	recentat	ivo: l	Camlo	eh Ih	45		
AD VIL Type of Indust	L PAE	Ver Pla	JR, P ant					3240	2 Custo	mer F		resentat		Kamle	sh Jh	а		
AD VIL	.L PAE ry: Pov n by: IE	ompl ver Pla M Te	JR, P ant am	GCIL	S/S, I			3240	2 Custo	mer F		resentat 28-03-2		Kamle	sh Jh	a		
AD VIL Type of Indust Sample Draw	L PAE ry: Pow n by: IE ethod 8	Ver Plant M Te	JR, P ant am B Gui	GCIL deline	S/S, I			3240	2 Custo	mer F		-		Kamle	sh Jh	a		Z. Z.
AD VIL Type of Indust Sample Draw Protocol: IS M	ry: Pov n by: IE ethod 8 tion: Si	Ver Plante M Te & CPC HRIRA	JR, P ant am B Gui MPU	deline	S/S, I	KAND	RA-8	3240	2 Custo	mer F ing Da	ate:	-	023	Kamle	1		- SW	

#### ----Test Result----

		101 CN 101			
SI.No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.05 - 1.5	0.06
2.	Chromium	mg/l	APHA 3111 B.2017	0.05 - No Relaxation	BDL (MDL- 0.04)
3,	Lead	mg/l	APHA 3111 B.2017	0.01 - No Relaxation	BDL (MDL- 0.03)
4.	Zinc	mg/l	APHA 3111 B.2017	05 - 15	BDL (MDL- 0.04)
5.	Nickel	mg/l	APHA 3111 B.2017	0.3 - No Relaxation	BDL (MDL- 0.03)
6.	Mercury	mg/l	APHA 3111 C.2017	0.001 - No Relaxation	BDL (MDL - 0.008)
7.	Total Arsenic	mg/l	APHA 3111 C.2017	0.01 - No Relaxation	BDL (MDL - 0.012)
8.	Manganese	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL - 0.08)

#### ----End Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per IS 10500:2021
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

#### Specific Contractual Notes: -

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- Total liability of Institute for Environmental Management will be limited to invoiced amount only.
   In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com

On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Quality Checked Surfament Quality Checked Signatory

(Shreya Sonal Control of Surfament Contr



Jharkhand State Pollution Control Board, JSPCB Accredited by ISO 9001:2015 (Quality Management System) Certified by ISO 45001:2018 (Occupational Health & Safety Management System)



#### Test Report

<b>Discipline: Chemical</b>	Group: Residues and Contain	minants in Water	Sub-Group: Tr	ace Metals elements
Report Issue Date: 31-03			No.: RN-23032000	
Sample ID: 230330RC020	001		ription: Ground V	
Challan No./P.O. No.: 30	30006457		/P.O. Date.: 06-12	
VILL PADMI	OWER & NATURAL RESOU PUR, PGCILS/S, KANDRA-8	32402	nresentative: Ko	omloch lha
VILL PADMI Type of Industry: Power	PUR, PGCILS/S, KANDRA-8 Plant	32402 Customer Re	epresentative: Ka	amlesh Jha
VILL PADMI Type of Industry: Power Sample Drawn by: IEM	PUR, PGCILS/S, KANDRA-8 Plant Team	32402 Customer Re	epresentative: Ka e: 28-03-2023	amlesh Jha
	PUR, PGCILS/S, KANDRA-8 Plant Team PCB Guideline	32402 Customer Re		amlesh Jha
VILL PADMI Type of Industry: Power Sample Drawn by: IEM Protocol: IS Method & CF	PUR, PGCILS/S, KANDRA-8 Plant Team PCB Guideline RAMPUR VILLAGE	32402 Customer Re		w.D.: NE - SW

SI.No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Iron	mg/l	APHA 3111 B.2017	1.0 - No Relaxation	0.18

--- End Report---

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per IS 10500:2021
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

Specific Contractual Notes: -

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Quality Checked

Signatory

(Shreya So

Dy. Quality Manage

Director



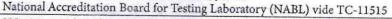


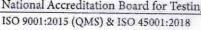


Certified By

#### Institute for Envi ronmental Management

Jharkhand State Pollution Control Board, JSPCB Accredited by







#### Test Report

ULR No.: T C 1 1	5 1	5 2	3	0	0	0	0	To	n	10	3	9
Discipline: Chemical	Grou	: Water				Su	b-Gro	up: G	round	Wate		13
Report Issue Date: 31-03-2023	N. T.		Te	st Rei	port N	N. 100 - N. 100 -			1GW2			
Sample ID: 230330WA02002	NAF		100		Descr				1000	AL.		IA-
Challan No./P.O. No.: 3030006457	7 64	145						-	2-2022	)	-	AT V
ADHUNIK POWER & NAT				D.		· 一次						
VILL PADMPUR, PGCILS/			02				<b>X</b> (			100	100	
VILL PADMPUR, PGCILS/ Type of Industry: Power Plant			02 Cu	stom				_	ımlesh	) Jha		
VILL PADMPUR, PGCILS/ Type of Industry: Power Plant Sample Drawn by: IEM Team	S, KANDE		02 Cu	stom	er Re g Date			_	mlesh	ı Jha	¥0	
VILL PADMPUR, PGCILS/ Type of Industry: Power Plant	<b>'S, KANDF</b> 025 Part-01		02 Cu	stom				_	mlesh	ı Jha		
VILL PADMPUR, PGCILS/ Type of Industry: Power Plant Sample Drawn by: IEM Team Protocol: CPCB Guideline & IS Method 30	25 Part-01	A-8324	02 Cu	stom		e: 28-(		23		ı Jha		

400.00	<b>Test</b>	Da	ceste	
	LEST		SUII	

SI.		11.22	- rest kesuit-		imit		
No.	Tested Parameter	Unit	Method No.	Acceptable	Permissible	Results	
1.	pH value at 25°C		IS 3025 (Part-11)	6.5 - 8.5	No Relaxation	6.76	
2.	Turbidity	NTU	IS:3025 (Part-10)	1	- 5	4.20	
3.	Colour	Hazen	IS 3025 (Part-04)	5	15	5.0	
4.	Odour		IS:3025 (Part-05)	Agreeable	Agreeable	Agreeable	
5.	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part-16)	500	2000	359.0	
6.	Calcium (as Ca+2)	mg/l	IS 3025 (Part-40)	75	200	52.91	
7.	Total Alkalinity (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part-23)	200	600	15.0	
8.	Total Hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part-21)	200	600	162.0	
9.	Ammonical Nitrogen (as N)	mg/l	IS 3025 (Part-34)	0.5	No Relaxation	BDL(MDL-0.1)	
10.	Chloride (as Cl-)	mg/l	IS:3025 (Part-32)	250	1000	54.98	
11.	Free Residual Chlorine	mg/l	IS:3025 (Part-26)	0.2	1.0	BDL(MDL-2.0)	
12.	Sulphate (as SO <sub>4</sub> )	mg/l	IS:3025 (Part-24)	200	400	29.33	
13.	Magnesium (as Mg)	mg/l	APHA 3500	30	100	7.29	
14.	Sodium (as Na)	mg/l	IS 3025 (Part-45)			6.82	
15.	Potassium (as K)	mg/l	IS 3025 (Part-45)			3.89	

----END Report--

oratory is maintaining Temperature $27\pm2^{\circ}$ C and Relative Humidity $65\pm5$ % in all testing as per IS $196:1966(C)$ .
L: Minimum Detection Limit, BDL: Below Detection Limit
0500 :2021
ple Comply with prescribed specification.
1

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

#### Specific Contractual Notes: me Authorized Signatory Quality Checked b 1. The laboratory accepts responsibility for content of this report. This report shall not be reproduced except in full, without written approval of the MD. 3. This report is intended for only guidance and not for legal purpose or for advertisement. 4. Any complaint about this report should be communicated in writing within 7 days of its issue 5. Total liability of Institute for Environmental Management will be limited to invoiced amount only. 6. In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com (Shreya Sona C. Jain) On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report Dy. Quality Manage is issued by the Director of the Organization. Director



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ISO 9001:2015 (Quality Management System )

ISO 45001:2018 (Occupational Health & Safety Management System )



#### **Test Report**

Discipline: Chemical	Group: Water		Sub-Group: Ground Water
Report Issue Date: 31-03-2023		Test Report No	o.: RN-230320001SW2
Sample ID: 230330WA02002	- 19 m		ption: GW (Bore well)
Challan No./P.O. No.: 3030006457	* # # # T	The second secon	P.O. Date.: 06-12-2022
	NATURAL RESOURCE		
VILL PADMPUR, PGC	NATURAL RESOURCE CILS/S, KANDRA-83240	2	Proportatives Komlack the
VILL PADMPUR, PGC		Customer Rep	presentative: Kamlesh Jha
VILL PADMPUR, PGC Type of Industry: Power Plant Sample Drawn by: IEM Team	CILS/S, KANDRA-83240	2	
VILL PADMPUR, PGC Type of Industry: Power Plant	OILS/S, KANDRA-83240 and 3025 Part-01	Customer Rep	

## Testing Started: 29-03-2023 ----Test Result----

SI.	Tested Parameter	Unit	Method No.	L	imit	Results
No.			motified No.	Acceptable	Permissible	Results
1.	Taste		IS:3025 (Part-07)	Agreeable	Agreeable	Agreeable
2.	Nitrate (as NO <sub>3</sub> )	mg/l	IS:3025 (Part-34)	45	No Relaxation	0.68
3.	Fluoride (as F-)	mg/l	APHA 4500	1.0	1.5	0.50
4.	Sulfide	mg/l	IS:3025 (Part-29)	0.05	No Relaxation	BDL(MDL-1.0

----END Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing
Eliv. Condition of Lab.	area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	IS 10500 :2021
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

Sample Receiving Date: 29-03-2023

Specific Contractual Notes: -

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Quality Checked by won mensy thorized Signatory

Testing Ended: 31-03-2023

(Shreya Sona)

Dy. Quality Manag

S. C. Jain)

Director







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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.:	O I	C	1	1	5	1 5	2	3	0	0	0	0	n	0	0	11	1
Discipline: Cl	iemical		Gro	up: Re	sidues	and Con	tamin	ants in \	Water	٦	Sub-Gr	onn.	Trace	Metal	selem	ents	1
Report Issue	Date: 31	-03-2		-1-,	in the second second	v j					.: RN-23				3 CICII	ients	_
Sample ID: 23	30330RC	02002	2		577		700				tion: Gr					TTT	
Challan No./I	.O. No.	3030	00645	57		T JA					.O. Date					K	
					,	ANDRA	0027	-02			98-						
I VDP of Indus		or Dia	nt					0		CANTE OF THE							_
Type of Indus								Custo					Kamle	sh Jha	3		
Sample Draw	n by: IE	М Те	am	leline							resentat 28-03-2		Kamle	sh Jha	3		
Sample Draw Protocol: IS M	n by: IE lethod 8	M Tea	am 3 Guid										Kamle	sh Jha	)		
Sample Draw Protocol: IS M Sampling Loca Field Meteore	n by: IE lethod 8 ation: KA	M Tea CPCE ADAM	am 3 Guid PUR V	/ILLAG	E	(°C): 28	F		ing Da	ite:		023	Kamle		a D.: NE	- SW	

	A GREAT PERSON	4500000	Test Nesuit		
SI.No.	<b>Tested Parameter</b>	Unit	Method No.	Limits	Results
1.	Copper	mg/l	APHA 3111 B.2017	0.05 - 1.5	0.09
2.	Chromium	mg/l	APHA 3111 B.2017	0.05 - No Relaxation	BDL (MDL- 0.04)
3.	Lead	mg/l	APHA 3111 B.2017	0.01 - No Relaxation	BDL (MDL- 0.03)
4.	Zinc	mg/l	APHA 3111 B.2017	05 - 15	BDL (MDL- 0.04)
5.	Nickel	mg/l	APHA 3111 B.2017	0.3 - No Relaxation	BDL (MDL- 0.03)
6.	Mercury	mg/l	APHA 3111 C.2017	0.001 - No Relaxation	BDL (MDL - 0.008)
7.	Total Arsenic	mg/l	APHA 3111 C.2017	0.01 - No Relaxation	BDL (MDL - 0.012)
8.	Manganese	mg/l	APHA 3111 B.2017	0.1 - 0.3	BDL (MDL - 0.08)

----End Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % i area as per IS 196:1966(C).	n all testing
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit	- 18
Limit is Specified	As Per IS 10500:2021	34754 T
Remark	Sample Comply with prescribed specification.	- 14

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

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Quality Checked

(Shreya Sona

zed Signatory

C. Jain) Director

Dy. Quality Manage



## Institute for Environmental Management Accredited by | Jharkhand State Pollution Control Board, JSPCB

Accredited by Jharkhand State Pollution Control Board, JSPCB

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



#### **Test Report**

Discipline: Chemical	Group	: Residues and Contai	minants in Water	Sub-Group: Tra	ace Metals elements
Report Issue Date: 31-03	3-2023	100	Test Report N	lo.: RN-23032000	
Sample ID: 230330RC020	002	V67 JF		iption: Ground W	ATT COLUMN
Challan No./P.O. No.: 30	30006457	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Challan Date	P.O. Date.: 06-12	2-2022
		MATHDAI DECOIL	DOCCUTO		
VILL PADMI	PUR, PGC	NATURAL RESOU CILS/S, KANDRA-8	32402	unresentative' Ka	amlesh Iha
VILL PADMI Type of Industry: Power	PUR, PGO Plant		32402 Customer Re	presentative: Ka e: 28-03-2023	amlesh Jha
VILL PADMI Type of Industry: Power Sample Drawn by: IEM	PUR, PGO Plant Team	CILS/S, KANDRA-8	32402	The second secon	amlesh Jha
VILL PADMI Type of Industry: Power Sample Drawn by: IEM Protocol: IS Method & CI	PUR, PGO Plant Team PCB Guidel	CILS/S, KANDRA-8	32402 Customer Re	The second secon	amlesh Jha
	PUR, PGO Plant Team PCB Guidel AMPUR VIL	ine LAGE	32402 Customer Re	The second secon	amlesh Jha

#### Test Recult

SI.No.	Tested Parameter	Unit	Method No.	Limits	Results
1.	Iron	mg/l	APHA 3111 B.2017	1.0 - No Relaxation	0.22

---End Report----

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL: Below Detection Limit
Limit is Specified	As Per IS 10500:2021
Remark	Sample Comply with prescribed specification.

Tested By: Anshu Gupta

Sample Drawn By: Rahul Kr. Singh & Team

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Quality Checked by within vized Signatory

(Shreya Sonal)

(Shreya Sonal)

Dy. Quality Manager

Panchi

Director



RO (SO 45001:2018



National Accreditation Board for Testing Laboratory (NABL) vide TC-11515

Certified By ISO 9001:2015 (QMS) & ISO 45001:2018



#### **Test Report**

ULR No.:	T	С	1	1 5	1 5	2	3	0	0	0	0	0	0	0	4	9
Discipline: Cl	nemical		Grou	p: Atmo	spheric Po	lution	Sub-	Grou	p: An	nbient	Noise	Leve	ls (Exc	ludin	g Vibr	ation)
Report Issue	Date: 3	1-03-2	023		5 #			-	-	.: RN				8		
Sample ID: 2	30330A	P0200	1	4.97	47.0	178		-		ption:				No.		1.3
Challan No./	P.O. No	: 3030	006457	KIR.	<b>€</b> □●/₺□	The state of	Chall	an D	ate/F	.O. D	ate.: 0	06-12-	2022		1	35"
Type of Indus	-		100	JIL3/3,	KANDRA	1-0324		ome	r Rep	resen	tative	: Kan	nlesh .	Jha		
Sample Drav		40.00		101101			The second second	ALCOHOL ST.		The state of the s			The second second			
Protocol: CPC				hod 998	9-1981		Samp	Jung	Date	: 27-03	3-202.	3 10 2	5-03-2	023		C. C.
Sampling Loc	A. EURISEC			The second secon	4.1301					b.			4016	1	E <sub>M</sub> S <sup>1</sup>	
Field Masses	ological	Commence of the Commence of th			200	7	V Carry and A							-	A STATE OF THE PARTY OF	
Field Meteor	viugicai	Inform	nation	A. Tei	np.(°C): 28	R.F	1. (%): 6	1	W.C.:	Clear	150	3	W.D.:	NE -	SW	

#### ----Test Result---

SI. No	Parameter	Method	Unit	Day	Time	Night	Limits	
				1 m	10 m	1 m	10 m	
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	54.4	53.8	47.3	46.7	D-75 N-70

#### ----End of Reports----

#### Note: -

- 1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
- 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 5.A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

6.Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

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Quality Checked by Contrient Authorized Signatory

(Shreya Sonatory

Dy. Quality Manage Ranchi

Director



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National Accreditation Board for Testing Laboratory (NABL) vide TC-11515

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#### **Test Report**

ULR No.:	T	C	1	1	5	1	5	2	3	0	To	0	0	0	0	0	5	0
Discipline: Ch	emical		Gr	oup:	Atmos	pherio	Pollu	ition	Sub	-Grou	ıp: Ar	nbient	Noise	Leve	ls (Exc	luding		
Report Issue	Date: 3	1-03-2	023		7	4 46	All Property and the second					.: RN					,	2.01.7
Sample ID: 23	30330AF	20200	2		787	APP.	100		-	Acres de la companya del la companya de la companya		ption:					11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	
Challan No./F	.O. No.	: 3030	00064	57		LA	10-6	A PERSONAL PROPERTY AND ADDRESS OF THE PERSONAL	10,000 10,000	and the same of	The same of the same of	.O. D					- 5	
									ES LT	U.		2	-					
VII	L PAC	MPU	R, P						02		14	9-1				48		
VII Type of Indus	L PAC try: Pov	MPU ver Pla	R, P						02 Cus	tome	Contract of the last	resen						
VII Type of Indus Sample Draw	L PAC try: Pov n by: IE	MPU ver Pla EM Te	R, P ent am	GCIL	.S/S,	KANI	DRA-		02 Cus	tome	Contract of the last	resen: 27-0						, e <sup>5</sup>
VII Type of Indus	L PAC try: Pov n by: IE	MPU ver Pla EM Te	R, P ent am	GCIL	.S/S,	KANI	DRA-		02 Cus	tome	Contract of the last	21 2 WHAT SHIP						
Type of Indus Sample Draw Protocol: CPC	L PAC try: Pov n by: IE B Guide	MPU ver Pla M Te line &	R, P ant am IS M	GCIL lethod	.S/S,	KANI	DRA-		02 Cus	tome	Contract of the last	21 2 WHAT SHIP						
VII Type of Indus Sample Draw	L PAC try: Pov n by: IE B Guide ation: N	MPU wer Pla EM Te lline & ear Re	R, P ant am IS M eserve	GCIL lethod	. <b>S/S</b> ,	KANI	DRA-	8324	02 Cus	tome pling	Date	21 2 WHAT SHIP	3-202:	3 to 28	3-03-2		sw	

----Test Result----

SI. No	Parameter	Method	Unit	Day	Time	Nigh	Limits	
		$\sim -\phi$		1 m	10 m	1 m	10 m	
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	55.6	56.7	47.7	47.3	D-75 N-70

#### ----End of Reports----

#### Note: -

- 1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
- 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 5.A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- 6.Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

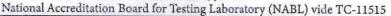
Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

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#### **Test Report**

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	0	0	5	1
Discipline: Cl	nemical		Gro	up: A	tmos	oheric	Pollu	ition	Sub	-Grou	ıp: An	bient	Noise	Leve	ls (Exc	ludin	y Vibra	tion)
Report Issue	Date: 3	1-03-2	023	-	A	- Mr.	1				ort No					D.		
Sample ID: 2	30330A	P02003	3		100	APP A			Sam	ple D	escrip	tion:	Ambi	ent N	oise			30
Challan No./	P.O. No.	: 3030	00645	57	i i	LA	BAR.		Cha	llan C	ate/P	.O. D	ate.: 0	6-12-	2022		- 1.5	
	DHUNII									U.							*	
VI	LL PAD	DMPU	R, PG						)2	1799-53-07		* d						
VI Type of Indus	LL PAC stry: Pov	<b>OMPU</b> wer Pla	R, PG						Cus	tome	r Rep		AC VALDED COM	The second second	100 PER 100 PE			
VI Type of Indus Sample Drav	LL PAE stry: Pov vn by: If	OMPU wer Pla EM Tea	R, PG int am	CIL	S/S, I	KANE			Cus	tome	r Rep Date:		AC VALDED COM	The second second	100 PER 100 PE			
VI Type of Indus Sample Drav	LL PAE stry: Pov vn by: If	OMPU wer Pla EM Tea	R, PG int am	CIL	S/S, I	KANE			Cus	tome	and the same of th		AC VALDED COM	The second second	100 PER 100 PE			
VI Type of Indus Sample Drav Protocol: CPC	LL PAE stry: Pov vn by: II CB Guide	OMPU wer Pla EM Tea eline &	R, PG int am IS Me	CIL	S/S, I	KANE			Cus	tome	and the same of th		AC VALDED COM	The second second	100 PER 100 PE			
VI Type of Indus	LL PAE stry: Pov vn by: IE CB Guide ation: N	ompu wer Pla EM Tea eline & lear Ol	R, PG int am IS Me	thod	9989	KANE	RA-	83240	Cus	tome	and the same of th	27-0	3-202	3 to 28	8-03-2		sw	

#### ----Test Result---

SI. No	Parameter	Method	Unit	Day	Time	Night	Time	Limits
46				1 m	10 m	1 m	10 m	
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	59.3	50.8	46.3	44.9	D-75 N-70

#### ----End of Reports----

#### Note: -

- 1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
- 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 5.A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- 6.Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

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On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Quality Checked by commend thorized Signatory

(Shreya Sonatory

Dy. Quality Manager Planchi Director



Certified By

## Institute for Environmental Management

Accredited by Jharkhand State Pollution Control Board, JSPCB
National Accreditation Board for Testing Laboratory (NABL) vide TC-11515

ISO 9001:2015 (QMS) & ISO 45001:2018



#### Test Report

ULR No.:	· T	С	1 1	5	1 5	2	3	0	0 0	0	0	To	0.	5	7
Discipline: Ch	emical		Group:	Atmos	pheric Pollu	ition	Sub-C	iroup:	Ambie	nt Nois	e Leve	Is (Exc			ation)
Report Issue I	Date: 3	1-03-2		Ā					No.: R				, admig	VIDIO	zeion
Sample ID: 23	0330A	P0200	4	200	AP Jak	TEX.	CONTRACTOR OF THE PARTY OF THE		cription			100			
Challan No./P	.O. No	: 3030	0006457		LA/A-S	Jan T	Company Company Company	A	e/P.O.					7	1
Type of Indus				L3/3,	KANDRA-	0324	The second second	mer F	Represe	entative	e: Kan	nlesh .	lha		-
							The second second	mer F	Represe	entative	e: Kan	nlesh ,	Jha		
Sample Draw	n by:	EM Te	am			200	Samp	ling Da	ate: 27-	03-202	3 to 2	8-03-2	023	OF	57.7
Protocol: CPC	B Guide	eline &	IS Metho	d 9989	9:1981				33 Th	Ę.				- 3	
Sampling Loca	ition: N	lear M	ain Gate	, indi							o.	- allea	F 16	(U	
Field Meteoro	logical	Inforr	nation	A. Ten	np.(°C): 28	R.H	. (%): 61	W	.C.: Clea	ar		W.D.:	NE - S	SW	
Sample Receiv	ing Da	te: 30-	-03-2023		esting Start	ed: 30	0-03-202			ting En		A CONTRACTOR OF THE PARTY OF TH	200		
100 Ya. 425 Mark CHI.C.			-			AND DESCRIPTION OF THE PARTY OF	1000	Maria Malana	THE REAL PROPERTY.	CHEST CHEST	OTTOWN TO SEE	7-10 70 76			

---Test Result---

SI. No	Parameter	Method	Unit	Day	Time	Night	Limits	
				1 m	10 m	1 m	10 m	
1.	Equivalent Sound Level (Leq)	IS 9989:1981	dB(A)	53.7	54.5	48.5	51.7	D-75 N-70

#### ----End of Reports----

#### Note: -

- 1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
- 2. Night time shall mean from 10.00 p.m. to 6.00 a.m.
- 3. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- 4. dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.
- 5.A "decibel" is a unit in which noise is measured. "A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
- 6.Leq: It is an energy mean of the noise level, over a specified period.

Env. Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit
Limit is Specified	As per Noise Pollution (Regulation and Control) Rules - 2000
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

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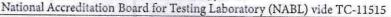
On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

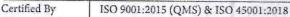
Quality Checked by monmer thorized Signatory

(Shreya Sonal & Ranch Director



Accredited by Jharkhand State Pollution Control Board, JSPCB







#### **Test Report**

ULR No.:	T	C	1	1	5	1	5	2	3	0	0	0	0	0	10	In	3	1
Discipline: Ch	emical		ANT.			Group	: Atm	osphe	eric Po	llutio	n		Sub-G	iroun:	Ambi	ent A		_
Report Issue	Date: 3:	1-03-2	2023		1/2		1		1		-			20001/	CONTRACTOR OF CONTRACTOR	Si Chicara		
Sample ID: 23	30330AF	20100	)4		B		Page 1							ent Air				.00
Challan No./I	.O. No.	: 303	000645	7		1.4		uici .			-			6-12-2		-	7	
Type of Indus	LL PAC try: Pov	-		, OILC	,,	IVAIN	JNA-	0324	_	tomer	r Rep	resen	tative	: Kam	lesh .l	ha		
	A CONTRACTOR OF THE PARTY OF TH	A DESCRIPTION OF THE PERSON OF	A CONTRACTOR OF THE PARTY OF TH											A CONTRACTOR OF THE PARTY OF	lesh J	SECTION AND ADDRESS OF THE PARTY OF THE PART		
Sample Draw	The state of the s	THE RESERVE AND ADDRESS OF THE PARTY OF THE			WT			100	Sam	pling	Date:	27-03	-2023	to 28	-03-20	023		. 0.
Protocol: CPC	B Guide	line(N	NAAQM	15/36/	201	2-13) 8	RISIV	1etho	d 5182	Serie	es		T.	Ne Const	-		ħ	
Sampling Loc							1						el-	9	altika		36	
Jamping Loc										THE PARTY NAMED IN	District Co.							
Field Meteor	ological	Infor	mation	A.	Ten	np.(°C	: 28	R.H	. (%):	61	W.C.	: Clea	r , h	7	W.D.	:NE	SW	

#### ----Test Results---

		. cor itcourts			
SI. No.	Parameters	Test Method	Unit	Result	Limits
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006 RA 2017	µg/m³	74.17	100
2.	Particulate Matter (PM2 5)	IS 5182 Part 24: 2019	µg/m³	43.68	60
3.	Sulphure Dioxide (SO <sub>2</sub> )	IS 5182 Part 02: 2001 RA 2017	µg/m³	34.80	80
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part 06: 2006 RA 2017	µg/m³	64.91	80
5.	Ammonia	IS 5182 Part 25: 2018	μg/m³	31.81	400
· 6.	Ozone (O <sub>3</sub> )	IS 5182 Part 09: 1974	µg/m³	37.74	100 (1 Hr.)
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m³	BDL (MDL-2)	
8.	Lead (Pb)	IS 5182 Part 22: 2004	μg/m³	0.26	1,0
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m³	BDL (MDL-4)	
10.	Benzene (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11: 2006	µg/m³	BDL (MDL- 0.06)	

#### ----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule – 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

#### Specific Contractual Notes: -

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Quality Checked Kwommen Anthorized Signatory

(Shreya Sortal Control of Contr



Jharkhand State Pollution Control Board, JSPCB Accredited by ISO 9001:2015 (Quality Management System) Certified by ISO 45001:2018 (Occupational Health & Safety Management System )



#### Test Report

Discipline: Chemical	Group: Atmosp	heric Pollution	Sub-Group: Ambient Air			
Report Issue Date: 31-03-2023		Test Report No.	: RN-230320001A4			
Sample ID: 230330AP01004		Sample Description: Ambient Air				
Challan No./P.O. No.: 303000645	ANALY Facility	Challan Date/P.O. Date.: 06-12-2022				
Issued to:	A STATE OF THE REAL PROPERTY.		F			

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: 27-03-2023 to 28-03-2023

Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series

Sampling Location: Switch Yard (Core Zone)

Field Meteorological Information	A. Temp.(°C): 28 R.H. (%): 61	W.C.: Clear	W.D.: NE - SW
Sample Receiving Date: 30-03-2023	Testing Started: 30-03-203	23 Testing En	ded: 31-03-2023

#### ----Test Results--

SI. No.	Parameters	Test Method	Unit	Result	Limits
1.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m³	BDL (MDL-0.18)	<b>136 - 9</b>
2	Carbon Monoxide	IEM/SOP/Air-01:2022	mg/m³	BDL(MDL-1.8)	100

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule - 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

Specific Contractual Notes: -

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Quality Checked b nme Shorized Signatory

(Shreya Sona

Dy. Quality Manag

Jain)





Corporate office - A-8, Modi Heights, Opp.-All India Radio Station, Ratu Road, Ranchi, Jharkhand - 834001 Laboratory Site - H.No. - A-13, Saket Vihar, Near Sohrai Bhawan, Harmu Housing Colony,





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	10	0	3	2
Discipline: Ch	emical		eN.			Group:	Atm	osph	eric Po	llutio	า		Sub-G	roup:	Ambi	ent Ai	r	1
Report Issue	Date: 3	1-03-2	023		3				Test	Repo	rt No			0001				
Sample ID: 23	0330AF	20100	5		67		ar d	MY						ent Air				
Challan No./P	.O. No.	: 3030	000645	57		E A			Control Control		-			6-12-2			100	
	HUNII L PAE									TD.								
AD VII	L PAI	MPU	JR, PC						02									
AD VII Type of Indus	L PAE	Ver Pla	JR, PC						02 Cus	tomer				: Kaml				
AD VII Type of Indus Sample Draw	L PAE try: Pov n by: IE	ompu ver Pla M Te	JR, PC ant am	GCILS	s/s,	KAND	RA-	8324	02 Cus Sam	tomer	Date:			: Kaml				5
AD VII Type of Indus Sample Draw	L PAE try: Pov n by: IE	ompu ver Pla M Te	JR, PC ant am	GCILS	s/s,	KAND	RA-	8324	02 Cus Sam	tomer	Date:			-				5
AE VII Type of Indus Sample Draw Protocol: CPC	L PAE try: Pov n by: IE B Guide	MPU ver Pla M Te line(N	IR, PO ant am IAAQM	SCILS 45/36,	<b>S/S,</b> /201	KAND	RA-	8324	02 Cus Sam	tomer	Date:			-				
AD VII	try: Pow n by: IE B Guide ntion: Sa	ver Pla EM Te line(N ati Ste	IR, PO ant am IAAQM el (CHI	AS/36, P Area	S/S, /201 a)	KAND	RA-	8324 letho	02 Cus Sam	tomer pling Serie	Date:		-2023	-	-03-20		SW	

#### ----Test Results----

SI. No.	Parameters	Test Method	Unit	Result	Limits
1,	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006 RA 2017	µg/m³	94.95	100
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24: 2019	µg/m³	54.60	60
3.	Sulphure Dioxide (SO <sub>2</sub> )	IS 5182 Part 02: 2001 RA 2017	µg/m³	41.42	80
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part 06: 2006 RA 2017	µg/m³	76.16	80
5.	Ammonia	IS 5182 Part 25: 2018	µg/m³	47.72	400
6.	Ozone (O <sub>3</sub> )	IS 5182 Part 09: 1974	μg/m³	31.78	100 (1 Hr.)
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m³	BDL (MDL-2)	400
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m³	0.35	1.0
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m³	BDL (MDL-4)	CANAL CALL
10.	Benzene (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11: 2006	µg/m³	BDL (MDL- 0.06)	and Live

#### ----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule – 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

#### Specific Contractual Notes: -

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Quality Checked by Authorized Signatory

mys the

nreya Son B. C. Jain)

Dy. Quality Manager | Director



Accredited by Jharkhand State Pollution Control Board, JSPCB ISO 9001:2015 (Quality Management System) Certified by ISO 45001:2018 (Occupational Health & Safety Management System )



#### Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air
Report Issue Date: 31-03-2023	Test Report No	.: RN-230320001A5
Sample ID: 230330AP01005	Sample Descrip	otion: Ambient Air
Challan No./P.O. No.: 3030006457	Challan Date/P	.O. Date.: 06-12-2022
lesued to:		

ADHUNIK POWER & NATURAL RESOURCES LTD. VILL PADMPUR, PGCILS/S, KANDRA-832402

	presentative: Kamlesh Jha
Sample Drawn by: IEM Team Sampling Date	: 27-03-2023 to 28-03-2023

Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series

Sampling Location: Sati Steel (CHP Area)

Field Meteorological Information	A. Temp.(°C): 28	R.H. (%): 61	W.C.: Clear	W.D.: NE - SW
Sample Receiving Date: 30-03-2023	Testing Sta	rted: 30-03-202	3 Testing End	ded: 31-03-2023

#### ----Test Results----

SI. No.	Parameters	Test Method	Unit	Result	Limits
1.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	ng/m³	BDL (MDL-0.18)	1 to 1
2	Carbon Monoxide	IEM/SOP/Air-01:2022	mg/m³	BDL(MDL-1.8)	-

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in all testing area as per IS 196:1966(C).
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule – 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

Specific Contractual Notes: -

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Quality Checked orized Signatory

(Shreya So Dy. Quality Mana

Jain)

Director







Jharkhand State Pollution Control Board, ISPCB Accredited by 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	10	1.	5	1	5	2	3	0	To	0	10	To	0	0	T <sub>3</sub>	3
Discipline: Ch	emical		No.			Group	: Atm	osphe	eric Po	llution	1 <u> </u>	1	Sub-	Group	: Ambi			] 3
Report Issue	Date: 31	L-03-2	2023		.5.	- 46	7		1	SOLD SECTION AND ADDRESS.	100	.: RN		20001		Circ 7 ti		
Sample ID: 23	30330AF	20100	06		67	AP J								ent Ai				
Challan No./	.O. No.	: 303	000645	7		Lill		J.C	A STREET, STRE	or and a second	The state of the			06-12-			- 8	-
AI VI	HUNIK	PO	WER &	& NA	TUF	RAL R KANI	ESO DRA-	URCI 8324	ES LT	D.			100 (S) 100 (S)					
VI	LL PAC	MP	JR, PG	& NA	TUF S/S,	RAL R KANI	ESO DRA-	URCI 8324	02									6
VI Type of Indus	LL PAC try: Pow	MPU ver Pl	JR, PG ant	& NA	TUF S/S,	RAL R KANI	ESO DRA-	URCI 8324	02 Cus	tomer					nlesh J			
VI Type of Indus Sample Draw	LL PAC try: Pow 'n by: IE	ver Pl	JR, Po ant eam	CILS	S/S,	KANI	DRA-	8324	O2 Cust	tomer	Date:				nlesh J 3-03-20			
VI Type of Indus Sample Draw Protocol: CPC	try: Pow n by: IE B Guide	ver Pl M Te line(N	JR, PG ant eam NAAQN	SCILS 15/36,	3/ <b>S</b> , /201	2-13) 8	DRA-	8324	O2 Cust	tomer	Date:							
VI Type of Indus Sample Draw Protocol: CPC	try: Pow n by: IE B Guide	ver Pl M Te line(N	JR, PG ant eam NAAQN	SCILS 15/36,	3/ <b>S</b> , /201	2-13) 8	DRA-	8324	O2 Cust	tomer	Date:							
VI Type of Indus	try: Pow n by: IE B Guide ation: Ba	ver Pl M Te line(N achel	JR, PG ant eam NAAQM or Host	1S/36,	/201 ore Z	2-13) 8	DRA-	8324 lethoo	O2 Cust	tomer pling Serie	Date:	27-0	3-202		3-03-20		SW	

#### --- Test Results----

SI. No.	Parameters	Test Method	Unit	Result	Limits
1.	Particulate Matter (PM <sub>10</sub> )	IS 5182 Part 23:2006 RA 2017	µg/m³	74.71	100
2.	Particulate Matter (PM <sub>2.5</sub> )	IS 5182 Part 24: 2019	µg/m³	52.50	60
3.	Sulphure Dioxide (SO <sub>2</sub> )	IS 5182 Part 02: 2001 RA 2017	μg/m³	43.91	80
4.	Nitrogen Dioxide (NO <sub>2</sub> )	IS 5182 Part 06: 2006 RA 2017	µg/m³	78.76	80
5.	Ammonia	IS 5182 Part 25: 2018	µg/m³	23.86	400
6.	Ozone (O <sub>3</sub> )	IS 5182 Part 09: 1974	µg/m³	32.35	100 (1 Hr.)
7.	Arsenic (As)	USEPA IO 3.2: 1999	ng/m³	BDL (MDL-2)	
8.	Lead (Pb)	IS 5182 Part 22: 2004	µg/m³	0.28	1.0
9.	Nickel (Ni)	IS 5182 Part 26: 2020	ng/m³	BDL (MDL-4)	
10.	Benzene (C <sub>6</sub> H <sub>6</sub> )	IS 5182 Part 11: 2006	µg/m³	BDL (MDL- 0.06)	

#### ---End of Report----

Env.Condition of Lab. Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 % in testing area as per IS 196:1966(C).	
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit
Limit is Specified	As per the Environmental (Protection) Rule – 1986
Remark	Sample Comply with prescribed specification.

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

#### Specific Contractual Notes: -

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Quality Checke orized Signatory

(Shreya So Dy. Quality Manage

C. Jain)

Director



Accredited by Jharkhand State Pollution Control Board, JSPCB ISO 9001:2015 (Quality Management System)

ISO 45001:2018 (Occupational Health & Safety Management System ) Test Report

Discipline: Chemical	Group: Atmospheric Pollution	Sub-Group: Ambient Air	
Report Issue Date: 31-03-2023	Test Report N	Test Report No.: RN-230320001A6	
Sample ID: 230330AP01006	Sample Descr	Sample Description: Ambient Air	
Challan No./P.O. No.: 3030006457		Challan Date/P.O. Date.: 06-12-2022	
lesued 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: 27-03-2023 to 28-03-2023

Protocol: CPCB Guideline(NAAQMS/36/2012-13) & IS Method 5182 Series

Sampling Location: Bachelor Hostel (Core Zone)

Certified by

Field Meteorological Information | A. Temp. (°C): 28 R.H. (%): 61 W.C.: Clear W.D .: NE - SW Sample Receiving Date: 30-03-2023 Testing Started: 30-03-2023 Testing Ended: 31-03-2023

-- Test Results----

SI. No.	Parameters	Test Method	Unit	Result	Limits
1.	Benzo (a) Pyrene (Bap) Particulate Phase Only	IS 5182 Part 12: 2004	art 12: 2004 ng/m³ BDL (MDL-0.18)		_
2	Carbon Monoxide	IEM/SOP/Air-01:2022	mg/m³	BDL(MDL-1.8)	1

----End of Report----

Env.Condition of Lab.	Laboratory is maintaining Temperature 27± 2°C and Relative Humidity 65±5 9 testing area as per IS 196:1966(C).	6 in all
Abbreviation	MDL: Minimum Detection Limit, BDL:Below Detection Limit	
Limit is Specified	As per the Environmental (Protection) Rule - 1986	444
Remark	Sample Comply with prescribed specification.	37.046

Tested By: Akanksha Sourabh

Sample Drawn By: Rahul Kr Singh & Team

Specific Contractual Notes: -

The laboratory accepts responsibility for content of this report.

This report shall not be reproduced except in full, without written approval of the MD.

This report is intended for only guidance and not for legal purpose or for advertisement.

Any complaint about this report should be communicated in writing within 7 days of its issue

Total liability of Institute for Environmental Management will be limited to invoiced amount only. In case of feedback/ complaints, please send an email at qm.iemeco@gmail.com

On the basis of Quality Checked and Technical data verified by the Authorized signatory, the report is issued by the Director of the Organization.

Quality Checked by

(Shreya Sonal

Dy. Quality Manag

Rethorized Signatory







#### RESOURCES LIMITED ADHUNIK POWER & NATURA

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:

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REGD. OFFICE

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

Website

: www.adhunikgroup.com



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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
7	Horticulture officer Ravi Prakash Sharma Graduate		Environment Manager

DGM(HR)

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Ref: MOE&F, RNC/HYC/KKJ/261122/01

Dated: 26.11.2022

To.

Regional Office (ECZ), Ministry of Environment, Forest and Climate Change, Bungalow No. A-2, Shyamali Colony, Ranchi – 834002

Sub:- Submission of Half yearly compliance status report (Unit I) for the period – April 2022 to September 2022 -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 2022 to September 2022.

This is for your reference and record, please.

Thanking you,

For Adhunik Power & Natural resources Limited

(Authorized Signatory)

Encl: As Above

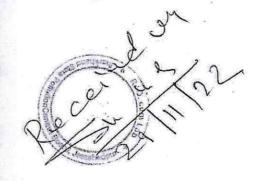
Copy to:

1. Central Pollution Control Board, Kolkata

2. Member Secretary, Jharkhand State Pollution Control Board, Harkhand

3. Regional Officer, JSPCB, Jamshedpur





W RAI-CO

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Ref No APNRL/JSPCB/ES/2021-22/01

Date: 20th Sep 2022

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 29<sup>th</sup> 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 2021-22.

This is for your kind information & record please.

**Thanking You** 

Your's faithfull

Sr. Manager (Environment)

Encl: As mentioned above

CC: 1. Regional Office (ECZ),

Ministry of Environment, Forest and Climate Change, Bungalow No. A-2, Shyamali Colony, Ranchi – 834002

2. Regional Officer

Jharkhand Pollution Control Board

Jamshedpur, Jharkhand

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