

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/271121/01

Dated: 27.11.2021

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 2021 to September 2021 -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 2021 to September 2021.

This is for your reference and record, please.

Thanking you,

For Adhunik Power & Natural resources Limited

(Authorized Signatory)

Encl: As Above

Copy to:

1. Central Pollution Control Board, Kolkata

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

3. Regional Officer, JSPCB, Jamshedpur







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

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

REGD. OFFICE

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

Website

: www.adhunikpower.com

REPORT

FOR 1X270 MW COAL BASED POWER PLANT (Unit I)



APRIL 2021 - SEPTEMBER 2021

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

Adhunik Power & Natural Resources Limited

Vill: Padampur, Behind PGCIL Substation, Kandra Chouka Road, Saraikela-Kharsawan, Jharkhand

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

Period Of Compliances:	April 2021	to September 2021
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	Period Of Compliances: April 2021 to September 2021							
SI No	EC Conditions	Status as on 30st September 2021						
1	No additional land in excess of 119 ha shall be acquired for any activity/facility of this project.	Total Land acquired for Unit I is well within the land mentioned in Environment Clearance.						
2	EC is subject to obtaining clearance under the Wildlife Protection Act, 1972 from the competent authority	WLMP Prepared and approval has been obtained from PCCF. Complied						
3	EC is subject to final order of the Hon'ble Supreme court of India in the matter of Goa foundation Vs Union of India in Writ. Petition (Civil) no. 460 of 2004 as may be applicable to this project.	Not applicable.						
4	Project proponent should contribute @ Rs. 20000/ha for project area as proportionate cost to the regional Wildlife Conservation plan and a copy of the plan should be submitted to the ministry.	As in Sl. No. 2 the Wild Life Management Plan (WLMP) prepared has already been approved by PCCF, Ranchi on May'10.2010. 1st installment already submitted. Complied						
5	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.45 % and 46 % respectively at any given time. In case of variation of coal quality at the time of issuance of LOA, a fresh reference shall be made to MoEF for suitable amendment to EC condition wherever necessary	The Sulphur content in used coal conforms the limits. As per the Environment (Protection) Amendment Rules, 2020 dated 21 May 2020, Use of coal by Thermal Power Plants, without stipulations as regards ash content or distance shall be permitted.						
6	A single stack of 220 m height shall be provided with continuous online monitoring equipment's for Sox, Nox and PM. Exit velocity of flue gases shall not be less than 25 m/sec. Hg emission from stack may also be monitored on periodic basis.	Twin flue chimney of 275m height has constructed for proper dispersion of gases. Online monitoring equipment has installed in chimney. Photographs with details of CEMS enclosed as Annexure I Hg concentration in flue gases is well within prescribed limits.						
7	High efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emissions does not exceed 50 mg/Nm3	High efficient ESPs of 32 fields has been installed to ensure control Particulate matter emission in flue gas. Stack monitoring report for the month of September 2021 enclosed as Annexure II.						
8	Adequate dust extraction system such as cyclones/bag filters and water spray in dusty areas such as in coal handling and ash handling points, transfer area and other vulnerable dusty areas shall be provided.	Necessary mitigation measures in accordance with EMP and EC conditions has taken to control fugitive emissions from ash storage/transfer and coal handling plant such as installation and operation of bag filters collectors, use of water spray systems and enclosed conveyors with well designed, extraction and filtration equipment on transfer points. Photographs Attached as Annexure III.						
9	Fly ash shall be collected in dry form and storage facility (Silos) shall be provided. 100 % fly ash utilization shall be ensured from 4th year onwards. Unutilized ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the	Agreements made with cement plants, brick plants etc to ensure 100% utilization of fly ash from 4th year onwards. Fly Ash generation & Utilization report (April 2021-September 2021) 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						

	bottom ash as also in the effluents	pond is being done periodically. Bottom ash
	emanating from the existing ash pond. No ash shall be disposed off in low lying area.	analysis report & effluent analysis report of ash pond for the month of September 2021 enclosed as Annexure V & Annexure VI respectively.
10	Ash pond shall be lined with impervious lining. Adequate safety measures shall be implemented to protect the ash dyke from getting breached.	Complied
11	Closed cycling cooling system with natural cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.	The project design involves closed cycle cooling systems with induce draft cooling towers. The effluent generated from process operation is being treated in a Guard pond to ensure conformance to CPCB standards and recycled in plant process. Treated effluent analysis report of ETP for the month of September 2021 enclosed as Annexure VII.
12	No ground water shall be extracted for project work at any stage.	We adhere.
13	Natural drainage system within the project site should not be disturbed.	Natural drainage system has not been disturbed.
14	The treated effluents conforming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not get mixed.	The project is designed with zero discharge provisions and there is separate arrangement for storm water and effluent water. Complied
15	A sewage treatment plant shall be provided and the treated sewage shall be used for raising green belt /plantation.	STP 60 KLD capacity (03 No) has installed within plant premises to treat sewage waste. Photographs enclosed as Annexure VIII .
16	Rainwater harvesting should be adopted CGWA shall be consulted for finalization of appropriate rain water technology within a period of three months from the date of clearance and details shall be furnished	The Rain water harvesting report has submitted and approved from CGWA Ranchi. 13 No Rain water harvesting system has been constructed in accordance with the approved rain water harvesting plan.
17	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires of coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to RO of the Ministry at Bhubaneswar.	The design of coal yard along with provision of fire safety measures viz. fire hydrants, water sprinklers has installed and submitted to the Ministry. Complied
18	Storage facilities of auxiliary liquid fuel such as LDO and HFO/LSHS shall be made in the plant area in consultation with dept. Of Explosive, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5 %. DMP shall be prepared to meet any eventuality in case of an accident taking place due to storage oil.	Approval received on dated 15/12/2011. License No. P/HQ/JH/15/1065 (P257355), valid upto 31 st Dec 2022 for LDO storage installation (under Petroleum Class "C") for operations. Copy of Approval are enclosed as Annexure IX . Disaster management plan (DMP) has been prepared to handle the any eventuality in case of an accident taking place due to storage of oil. APNRL is using liquid fuel with sulfur content variation between 0.80 -1.5% which is provided by HPCL. Copy of Test report are enclosed as Annexure X .

	T-0.1	Designation of the second seco
19	Regular monitoring of ground water in and around to ash pond area including heavy metals (Hg, Cr, As, Pb) shall be carried out, records maintained and six monthly report shall be furnished to RO of ministry. The 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.	Regular monitoring of ground water in and around ash pond area including heavy metals is being carried out. Ground water analysis report of upstream & downstream of ash pond compared with baseline data for the month of September 2021 enclosed as Annexure XI.
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.	A thick green belt of adequate width is being developed.68123 nos. (Area covered-30.9 Hac) of plantation has been completed in and outside along the periphery of the power plant to arrest any dust emissions and help in attenuation of noise. Total Survival rate of Plant are 85.6 %. Name of Plant Species- Neem, , Seesam, Mango, Jamun etc.
21	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Plant is under operation however first aid center comprising of competent medical staff (6 no's) and equipped with necessary medical facilities is made available onsite to provide emergency medical aid to both contract workers and company staff.
22	Noise level emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite PPE like ear plug/ear muff etc shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to 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 September 2021 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 September 2021 is enclosed as Annexure XIII.
24	Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care crèche etc, The housing may be in the form of temporary structure to be removed after the completion of the project.	Plant is in operational condition and local labors are coming from nearby villages.
25	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days	

	from the date of this clearance letter, informing that the project has been accorded EC and copies of clearance letter are available with the SPCB/committee and may also be seen at Website of the MoEF at http://envfor.nic.in.	
26	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat Zila Praised/Municipal Corporation, urban local body and the local NGO, is any from whom suggestion/representation, if any were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.	Complied.
27	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	A Environmental Management Cell is being operational onsite to ensure effective implementation of specific EMPs. Organization chart of Environmental Management Cell enclosed as Annexure XIV.
28	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the RO of MoEF the respective zonal office of CPCB and the SPCB the criteria pollutant level namely SPM, RSPM, SO2, NOx (ambient level as stack emission) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	The updated compliance status of the stipulated EC conditions along with monitored data has been displayed at the company website. The monitoring data (SPM, RSPM, SO2, NOx) for both ambient air quality and chimney emissions is being displayed at the main gate of the company. Status of compliance of the stipulated EC conditions has been uploaded on company website for the period of April 2020 to September 2020.
29	The project proponent shall also submit six monthly report on the status of compliance of the stipulated condition including result of monitored data (both in hard copy as well by email) to the respective RO of MoEF, the respective zonal office of CPCB and the SPCB.	Last six monthly reports (Oct 2020 to March 2021) for the project along with environmental monitoring data submitted to MoEF RO at Ranchi vide letter No MOE&F,RNC/HYC/KKJ/26521/01 dated 27 th May 2021 . Acknowledgement copy of same enclosed as Annexure XV.
30	The environmental statement for each financial year ending 31st March in form-V as is mandated to be submitted by the project proponent to the concern SBCB as prescribed under the Environment Protection Rules, 1986 as amended subsequently shall also be put on the website of the company along with the status of the compliance of EC condition and shall also be sent to the respective RO of MoEF by email.	The last environmental statement for financial year (2020-2021) in Form V has submitted dated 20 th Sep 2021. Acknowledgement copy of same enclosed as Annexure XVI.
31	RO of the MoEF located at Bhubaneswar will monitor the implementation of the stipulated conditions. A complete set-up of documents including EIA report EMP along with the additional information submitted from time to time shall be forwarded to the RO for their use during monitoring. Project	The updated compliance status of the stipulated EC conditions along with monitored data has been displayed at the company website. The monitoring data (SPM, RSPM, SO2, NOx) for both ambient air quality and chimney emissions is being displayed at the main gate of the company. However Half yearly progress report is being sent to RO office, Ranchi on

	proponent will upload the compliance status their website and update the same from 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.	regular basis as per the requirement & uploaded on company website.
32	Separate fund shall be allocated for implementation of environmental protection measures along with item wise break up this cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should be reported to the ministry.	Adequate budgetary provision has been made by the APNRL for execution of environmental management plan.
33	The project authorities shall inform the RO as well as the ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work and commissioning of plant.	Complied
34	Full cooperation shall be extended to the Scientists/officers from the ministry / RO of the ministry at Bhubaneswar/the CPCB/the SPCB who would be monitoring the compliance of environmental status.	We ensure.



	Miles of the Confession of the	
Tal All High St. La		il CODE
Cana.	D.	REF: DCEM2100/D ATA SHEET DCEM2100 DUST MONITOR
GENE	RAL	
Le min	Make	Codel, UK
3.	Model Type	DCEM2100 Dust Monitor In-Situ Non contact cross duet type
4	Qty of units	2 No
5.	Tag No.	HNEI0CQ003
		FEATURES
6	Range	0-100% Opacity , 0-999mg/m3, 0-999mg/Nm3 (Fully site
7 8	Min. detectable conc. Measurement Units	I mg/m3 Fully selectable units-, mg/m3 (measured), mg/Nm3(Not opacity(%))
9	Measurement averaging	Fully selectable in range 10sec to 30 days
10	Response time	90% in 5 seconds.
11	Auto/manual calibration	In built automatic zero and span calibration
12	Accuracy Drift	4/-0.2% Opacity of measurement
13	Resolution	Less than 1% per month +/-0.1% opacity
15	Linearity	1/- 0.1% opacity
16	Repeatability	+/-0.1% opacity
17	Power supply	88 - 264 VAC , 50-60Hz, 125 VA
18	Remote/Local control unit	Isolated 2x 4-20 mA, 500 ohms outputs fully configurable 3 x Volt free SPCO contact rated at 50 VDC 1 Amp.
19	Automatic misalignment detection	2 Line X 32 character alpha-numeric LCD displays with 4 Provided in the instrument as a warning signal of misalign
20	Correction for contamination	Automatic window contamination check
21	Error Diagnostics	Dirty optics, Misalignment, Valve 1 closed, Valve 2 close the error conditions.
22	Construction material and Enclosures	Fully sented aluminum enclosures to IP 66
DESIGN 23	CONDITIONS Source	Modulated high intensity LED
24	Detector	Silicon photocell
25	Ambient air temp.	- 20deg.C to 60 deg.C
26	Gas Temperature	Upto 850 deg.c
	CTIONS & DIMENSIONS	
27	Analyzer mounting details	Analyser can be mounted in Chimney at Elevation of Please refer drawing for analyser mounting flange details.
28	Path length	Suitable for 0.5 to 12m duct/stack inner diameter
ACCESS 29	Fail safe shutters	i temperatura de la compania del compania del compania de la compania de la compania de la compania del compa
30	Air Purges	Built in Air purges for continuous air supply to instrument provide
31	Interconnecting cables and mounting hardware	Included in supply:
32	Temp. transmitter	24 VDC Supply Make: Precision Converter
responsible to	.4.E. 131.B. cc	Model: PCHMR Range: 0 to 300 Deg C





			Ref: GCEM40A0/DS/02						
	D	ATA SH	EET						
	CO, SO2, I	NOx GA	S ANALYSER						
GENE	RAL								
1.	Make	CODEL In	iternational Ltd., UK						
2.	Model/Article No	GCEM400	0 Series Article no GCEM40A0						
3.	Туре	Infrared A	nfrared Absorption Analyser-In-Situ type						
4.	Qty	2 No.							
5.	Tag No.	SOx	HNE10CQ004						
		NOx	HNE10CQ001						
		CO	HNE10CQ002						
			FEATURES						
6.	Range	CO: 0 to 10	000ppm, 0 to 1000mg/m3, 0 to 1000mg/Nm3						
J.	Kange	SO2:0 to 1	1000ppm, 0 to 1000mg/m3, 0 to 1000mg/Nm3,						
		NOx:0 to	1000ppm, 0 to 1000mg/m3, 0 to 1000mg/Nm3,						
		CO2:0 to 2							
		H2O:0 to	25%						
		The second second	es are site selectable up to 3000 ppm						
7.	Min, detectable conc.	1 ppm, 1mg/m3, 1mg/Nm3 for CO,SO2,NOx & 0.5% for CO2,H2O.							
8.	Measurement Units		Fully selectable units-ppm or % by volume, mg/m3 (measured) and						
0.	Wedstroment Onits	mg/Nm3 (Normalised to temperature, pressure, H2O & CO2)							
9.	Measurement averaging	Fully selectable in range 10Sec to 1 hour							
10.	Response time (T90)		Detector less than 10 seconds, Calibration less than 200 seconds.						
11.	Auto & manual	The second secon	d selectable						
5100.77	calibration	many monanta origin							
12.	Function	Continuou	s function						
13.	Accuracy	+/- 2% of	measured value for CO,SO2, NOx,& 0.5% for CO2 & H2O						
14.	Zero /span drift(24hrs)	Over all di	rift less than +/-2% per month						
15.	Repeatability	Less than	2% of span						
16.	Sensitivity	1 ppm for	CO,SO2,NOx, 0.5% for CO2,H2O						
17.	Linearity	Less than	2%						
18.	LCD Display	LCD with	back light						
19.	Power supply	240VAC,	50-60Hz, +/-10% 400VA						
20.	Outputs	Keypad for configurate Logic: 5 x	x 4-20 mA isolated, max. 500 Ohms, full configurable from or CO,SO2,NOx in ppm & CO2,H2O in % to DCS fully site ole. Volt free contacts, SPCO rated at 50 volt 1A & valid output (System fault)						
21.	Serial Communications	RS232/RS	S485 Modbus O/P						
22.	Construction material and Enclosures	Electronic	Housings (DDU): Corrosion resistant, epoxy coated m housing sealed to IP 66						

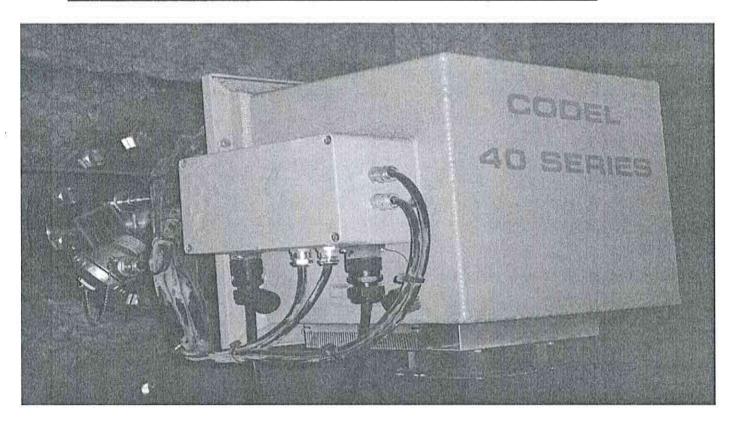
DESIG	GN CONDITIONS	
23.	Infrared source	Heater cartridge assembly
24.	Infrared detector	Lead selenid detecter
25.	Ambient air temp.	Transceiver unit 0 to 70 °C, Electronic unit (PSU & DDU) 0 to 60 °C
26	Flue gas temp.	Up to 350 deg.C

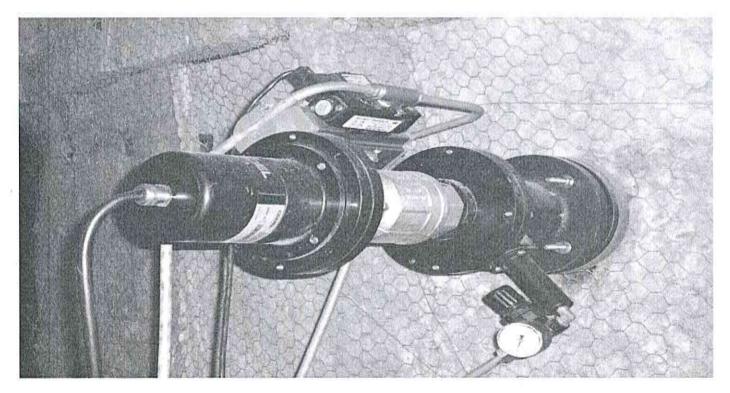




27	Analyser mounting details	Please refer drawing for analyser mounting flange details. Mounting location on Chimney at 91 Mtrs Elevation.
28	Stack width	Suitable for duct/Stack inner diameter of more than 2000mm.
ACCE	SSORIES	
29	Standard span gas for calibration	Make: Chemtron Science Laboratory, Mumbai Material: Aluminium Cylinder Capacity: 10 ltr W.C Filled with: 500ppm CO, 500ppm SO2, 500ppm NO and balance Nitrogen (N2) Cylinder with SS regulator, necessary tubing's & fittings. Filled pressure: filled at 120-130kg/cm2
30	Zero Calibration	For zero calibration we use plant compressed air.
31	Air dryer unit	Maximum Pressure: 10 bar Maximum temperature: 57 deg.C Air dryer unit to dry down the compressed air to -20 deg.c.
32	Zero/span gas calibration tubes	For zero calibration, client to provide plant instrument air line up to probe (10 mm OD connection) For span gas calibration, 20 mtr length SS tube of 10mm OD with necessary fittings from Cylinder to probe.
33	Pressure transmitter	Mounted on GCEM40A0 probe Make: Druck Range: 1.6bar absolute with 4-20mA output Input supply: 24VDC operated
34	Temperature transmitter	Mounted on GCEM40A0 probe Make: Peak Sensor Limited, Washington Type: K type thermocouple Range: 0 - 600 deg.C with 4-20mA output Input supply: 24VDC operated
35	Plant instrument air Consumption	5 LPM @3 bar pressure continuous 10LPM @3 bar pressure during zero calibration

Continuous emission monitoring system







ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Certified by: -

Accredited by: - | Jharkhand State Pollution Control Board (JSPCB)

An ISO 9001:2015 & ISO 45001:2018

ANALYTICAL TEST REPORT

URL (Unique Lab Report) No.		T	С	7	8	1	3	2	1	2	0	0	0	0	7	6	8
Discipline Chemical	Group	Atm	osph	eric l	ollut	ion	San	nple	Des	cripti	on			y Sou			
Report Release Date	18th October, 2	021				Report ID					YBAEEL-210911-101515- S01						
W. Order/ JSPCB App. No.	3030005309						Work Order Date					200 7 7 7	2.202			-	
Type of Industry(If any)	Thermal Powe	r Plan	t			110	Job	cod	e/R	ef. n	o	YB/	AEEL	WAIL	IAIO	t-21	01
Report Issue to	VillPadamp	s Adhunik Power & Natural Resources Ltd. IPadampur, PGCILS, Kandra-832402, raikela-Kharsawan, Jharkhand					wit 1										
Sampling Period	28/09/2021	Mode				ode of sample collection					By YBAEEL Team						
Sampling Protocol	IS: 11255 & CI	CB G	uidel	ine (l	_ats/8	0/20	13-14)		37					100.00			
Meteorological Cond. of Field	W.C Cloudy				F		- 65					Accessed to the later		-27°C			
Sample receipt Date	01/10/2021	An	alysis	Star	ted or	1	01/10	1202	1	1	naly	siș co	mple	ted or	1 1	2/10	/2021

General Information

As observed while sam	pling	As reported by cus	stomer
Location	Sampling port hole	Type of fuel Used	Coal
Platform	Permanent	Quantity of Fuel Used(During Sampling)	103 Ton/Hr.
Stack Description (Shape & Material)	Circular / RCC	Total production Capacity	270 MW
Sampling port	Available	Height of Stack from ground level	275mtr.
Stack Identification	Unit - I	Inner Diameter of Stack	4.2 mtr.
Height of port hole from Ground level	90 mtr.	Pollution Controlling Device (if any)	ESP (for PM)
Running Oven during sampling (if any)	N/A	Total No. of Oven (if any)	N/A

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

SI	Parameters	Test Method	Units	MU %	Results	Limits
1.	Stack gas Temperature	IS 11255 (Part 3)2008	k		388.0	
2.	Stack gas Velocity	IS 11255 (Part 3)2008	m/s	-	26.8	
3.	Volumetric Flow Rate	IS 11255 (Part 3)2008	Nm³/hr	1.00	998206.4	•
3.	Particulate Matter (PM)	IS 11255 (Part 1)2009	mg/Nm³	2.12	36.8	50
4.	Sulphure Dioxide (SO ₂)	IS 11255 (Part 2)2009	mg/Nm³	3.06	1128.3	600
5.	Oxide of Nitrogen (as NO _x)	IS 11255 (Part 7)2005 RA 2012	mg/Nm³	2.70	580.0	450
7.	Carbon Monoxide (CO)	IS 13270:1992 (RA 2009)	%		BDL (MDL 0.2)	•
9.	Mercury (as Hg)*	Lat's/80/2013-14	mg/Nm³		BDL (MDL 0.003)	0.03

Emission Rate

1.	Particulate Matter (PM)	IS 11255 (Part 1)2009	kg/hr.	36.73	3.00
2.	Sulphure Dioxide (SO ₂)	IS 11255 (Part 2)2009	kg/hr.	1126.28	
3.	Oxide of Nitrogen (as NO _x)	IS 11255 (Part 7)2005 RA 2012	kg/hr.	579.0	

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

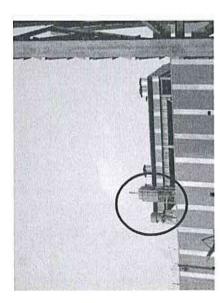
Authorized Signatory Verified by Atmospharic Pollution Umesh Das Brij Nandan Kumar Amit Kumar Sinha Yugantar Bhareti Analytical Rechnical Manager Section In-Charge Lab Analyst EnvironiHezaribagiineering Laborpakur Branch Office : - Jamshedpur Dhanbad

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

ISO 45001:2018

Bag Filter installed at Ash silo Bag Filter installed at Coal mill building

Bag filter at buffer hopper

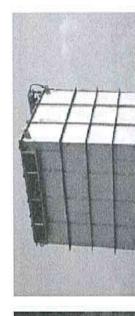


Dust suppression through Tanker



Fixed type DS system for coal Conveyor

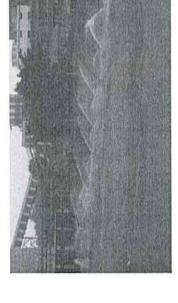
DE system at Coal Crusher House



Fixed type DS system at Coal Yard



Closed type coal conveying system



Fixed type dust suppression system





Adhunik Power & Natural Resource Limited

FLY ASH GENERATION & UTILIZATION REPORT (2021-22)

		Ash G	enerat	ion and Uti	lization			Mode o	f Ash Uti	lization	(
SI. No.	Months	Coal Consumed	Ash Contents of Coal (%)	Fly Ash Generation		%age Utilization	In Making of Fly Ash Based bricks /Blocks /Tiles etc	In manufacturing of Portland Pozzolana Cement	RMC	Fly Ash In Reclamation of Low Lying Area	Bottom Ash In Reclamation of Low Lying Area & Brick Plant
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)	(11)
1	APRIL	243925	39.38	96051.25	96051.25	100.0%	10574.90	50300.9	3477.0	17290.8	14407.7
2	MAY	193395	39.16	75739.19	75739.19	100.0%	4859.80	29912.2	2551.1	27055.2	11360.9
3	JUNE	213058	45.11	96114.99	96115.0	100.0%	4555.87	40141.9	3691.7	33308.3	14417.2
4	JULY	246475	48.00	118299.3	118299.3	100.0%	4119.92	27285.3	3595.1	65554.1	17744.9
5	AUG	177834.7	51.93	92344.64	92344.6	100.0%	4500.68	18187.3	3570.1	52234.9	13851.7
6	SEP	152138	42.53	64710.73	64710.7	100.0%	3393.18	33497.9	3539.7	14573.4	9706.6



ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Certified by: -

Accredited by: - | Jharkhand State Pollution Control Board (JSPCB)

An ISO 9001:2015 & ISO 45001:2018

ANALYTICAL TEST REPORT

URL(Unique Lab Report) No.			T	С	7	8	1	3	2	1	3	0	0	0	0	0	1	7	3	
Discipline Chemical	Group	Pollut	tion	& Er	vironr	nent	Sample Description							ASH						
Report Release Date	18th Octo	18th October, 2021 Report ID YBAEEL-2109							1091	0911-101515 - S0										
W. Order/ JSPCB App. No.	3030005	309		1015				Worl	Ord	er Da	te			27.02						
Type of Industry(If any)	Thermal	Power	Pla	nt	2-0	a)10\	'YO'	Job	ode	Ref.	no.			YBA	ELM	IAIL	ISIS	ep-	21/0	2
Report Issue to	M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand							l To	-		1.4									
Sampling Date	pling Date 30/09/2021						-	Mode of sample collection												
Sampling Protocol	pling Protocol IS : 3025 (Part-1) 1987, R-2003					Sample Code							210930-S-E02							
Sampling Location	Hopper					Mark Control	11.7	Sam	oling	Sou	ce	18.			om As	-12/4	k			
Sample pkg. Condition	Sealed Pack in Zipper Bag						Sealed Pack in Zipper Bag Samp					Sample Quantity				2.5 Kg Approx.				
Meteorological Cond. of Field	W.C 0	lear				1	RH %	- 60					9/	Temp.	- 330	0				
Sample receipt Date	30/09/2	021	Ar	nalys	is Star	ted or	1	30/09	1202	1	Ar	alysi	s co	mplete	ed on	1	2/1	0/20	021	111111111111111111111111111111111111111

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

SI	Parameter	Test Method	Units	MU %	Results
1.	Iron (as Fe)	USEPA 3050 B :1996/APHA 3111 B	ppm	2.73	14.32
2.	Zinc (as Zn)	USEPA 3050 B :1996/APHA 3111 B	ppm	4.44	0.2
3.	Copper (as Cu)	USEPA 3050 B :1996/APHA 3111 B	ppm	10.18	BDL (MDL 0.03)
4.	Lead (as Pb)	USEPA 3050 B :1996/APHA 3111 B	ppm	2.82	BDL (MDL 0.02)
5.	Nickel (as Ni)	USEPA 3050 B :1996/APHA 3111 B	ppm	4.10	BDL (MDL 0.02)
6.	Cadmium (as Cd)	USEPA 3050 B :1996/APHA 3111 B	ppm	9.57	1.0
7.	Chromium (as Cr)	USEPA 3050 B :1996/APHA 3111 B	ppm	5.44	0.36
8.	Arsenic (as As)	USEPA 3050 B :1996/APHA 3112 B	ppm		0.02
9.	Mercury (Hg)	USEPA 3050 B :1996/APHA 3111 B	ppm	2	0.05
10.	Unburn Carbon	IS 1727:1967	- %		2.4
11.	Selenium (as Se)	USEPA 3050 B :1996/APHA 3111 B	ppm	l #k	14.32

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

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

Verified by Tested by Shivani Kr. Singh BrijNandan Kumar Section In-Charge

Authorized Signatory

Pollution & Environment Pollution de Environment "Umesh Des Yugantar Bharati Analyticaechnical Manager

Issued by

Branch Office : - | Jamshedpur

ISO 45001:2018

Lab Analyst

Dhanbad

Environmental Engineering Laborato Hazanbag Pakur Pakur

150 9001:2015

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in



ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by: - Jharkhand State Pollution Control Board (JSPCB)

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



ANALYTICAL TEST REPORT

URL(Unique L	ab Report) No.			T	С	7	8	1	3	2	1	3	0	0	0	0	0	7	0	
Discipline	Chemical	Group	Poll	ition	& En	viron	ment	S	Sample Description						Waste Water / Effluent Water					
Report Relea	ase Date	18th Octo	ber, 20	ber, 2021 Report ID YBAEEL-210911-10151									5 – W	W01						
W. Order/ JS	SPCB App. No.	30300053	309				Work Order Date 27.02.2021)21				.11.6			
Type of Indu	istry(if any)	Thermal	Power	Plant			Job code/ Ref. no.						321105	YE	BAEE	_/WA/	LIWIS	Sep-2	21/06	
Report Issue	0 - 3	VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand						tion	By YBAEEL Team											
Sampling Pr		IS: 3025		1108	7 P.	2003		-	ample		-	,01100		-		ww-				77
Sampling Lo	and make the law and	Ash Pon		1130	, K.	2003		Sampling Source					Effluent Water							
Sample pkg.	. Condition	Sealed P	ack in	PP B	ottle	(4)	255	Sample Quantity					3000 ml							
Meteorologi	cal Cond. of Field	W.C CI	lear					R	Н%-	60			===0	Te	mp	33°C				
Sample rece	eipt Date	30/09/20	21	Ana	lysis	Start	ed on	3	0/09/2	021		A	nalysi	s cor	nplet	ed on	12	2/10/2	2021	

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

SI	Parameter	Test Method	Units	MU %	Results	Limits
1.	pH value	IS 3025 (P-11):2002	pН	2.53	7.62	6.5 - 8.5
2.	Temperature*	IS 3025 (P-09)	DC.	1.55	25.6	
3.	Total suspended solids	IS 3025 (P-17):2012	mg/l	8.26	54.0	100
4.	Oil and grease	IS 3025 (P-39):2003	mg/l	14.60	6.2	20.0
5.	Arsenic (as As)	APHA 3114 B 23rd edition 2017	mg/l	7.86	BDL (MDL 0.003)	
6.	Chromium (as Cr)	APHA 3111 B 23rd edition 2017	mg/l	7.14	0.11	160 F T.
7.	Lead (as Pb)	APHA 3111 B 23rd edition 2017	mg/l	6.26	BDL (MDL 0.02)	
8.	Mercury (as Hg)	APHA 3112 B 23rd edition 2017	mg/l	25.0	BDL (MDL 0.003)	100 L

Environmental (Protection) Rule – 1986.

Abbreviation

Env. Condition of Lab

Specific contractual notes

All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Leb's Permanent Facility

This report, in full or in part, shall not be used for advertising or as evidence in any court of law.

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The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise

The liability of the laboratory is limited to the invoiced amount.

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

All disputes are subjected to the Ranchi Jurisdiction
Remarks Sample Comply with prescribed limits

150 45001:2018

Tested by Verified by Authorize Signature Issued by BrijNandan Kumar Pollution & Umesh Das Lab Analyst Section In-Charge, Vanature Branch Office: - Jamshedpur Dhanbad Environment Pakur

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in



ISO 45001:2018

YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Accredited by: -Certified by: -

Jharkhand State Pollution Control Board (JSPCB)

An ISO 9001:2015 & ISO 45001:2018

ANALYTICAL TEST REPORT

URL(Unique Lab	Report) No.	58/		T	С	7	8	1	3	2	1	3	0	0	0	0	0	7	13	3		
Discipline C	Chemical	Group	Poll	ıtion	& En	viron	ment	Sa	imple	Des	cripti	on		Wa	Waste Water / Effluent Water					ter		
Report Releas	e Date	18th Octo	ber, 20	21				R	eport	D		A STATE OF		YE	AEE	-210	911-	11-101515 – WW0				
W. Order/ JSP	CB App. No.	30300053	309			= 180		W	ork O	rder	Date	te 27.02.2021							3.11			
Type of Indust	try(if any)	Thermal	Power	Plan	t			Jo	b coc	le/R	ef. no			YE	AEE	_/WA/	L/W	Sep-	21/0	8		
Report Issue to	- 197	VillPac	iampu Ia-Kha	r, PC	GCIL	S, Ka	tural Resources Ltd. Kandra-832402, arkhand Mode of sample collection By YBAEEL Team					n	62	AST -								
Sampling Prot		IS: 3025		1) 19	87. R-	2003		_	ample	-		A Kur		-	-	WW-I	_			T. T. V.		
Sampling Loca		Effluent		-			et Sampling Source Effluent Wa						Wate	Nater			977					
Sample pkg. C	Condition	Sealed P	ack in	PP E	ottle	7		S	ample	Qua	intity			30	00 m	10 ml						
Meteorologica	al Cond. of Field	W.C CI	lear					R	Н%-	60				Te	mp	33°C				أعررن		
Sample receip	ot Date	30/09/20	21	Ana	alysis	Start	ed on	3	0/09/2	021		A	nalysi	s cor	nplet	ed on		2/10/	202	1		

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

SI	Parameter	Test Method	Units	MU %	Results	Limits
1.	pH value	IS 3025 (P-11):2002	pH	2.53	8.62	5.5 - 9.0
2.	Temperature*	IS 3025 (P-09)	°C	1.55	25.5	
3.	Total suspended solids	IS 3025 (P-17):2012	mg/l	8.26	36.0	100
4.	Chloride (as CI)	IS 3025 (P-32):2003	mg/l	3.44	15.0	
5.	BOD	IS 3025 (P-44):2009	mg/l	6.85	17.5	30
6.	COD	IS 3025 (P-58):2006	mg/l	4.02	116.0	250
7.	Chromium (as Cr)	APHA 3111 B 23rd edition 2017	mg/l	7.14	BDL (MDL 0.02)	2
8.	Copper (as Cu)	APHA 3111 B 23rd edition 2017	mg/l	16.09	BDL (MDL 0.01)	1.113
9.	Lead (as Pb)	APHA 3111 B 23rd edition 2017	mg/l	6.26	BDL (MDL 0.02)	0.1
10.	Zinc (as Zn)	APHA 3111 B 23rd edition 2017	mg/l	6.57	0.07	5
11.	Sulphate (as SO ₄ 2-)	IS 3025 (P-24):2003	mg/l	4.37	14.2	

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

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

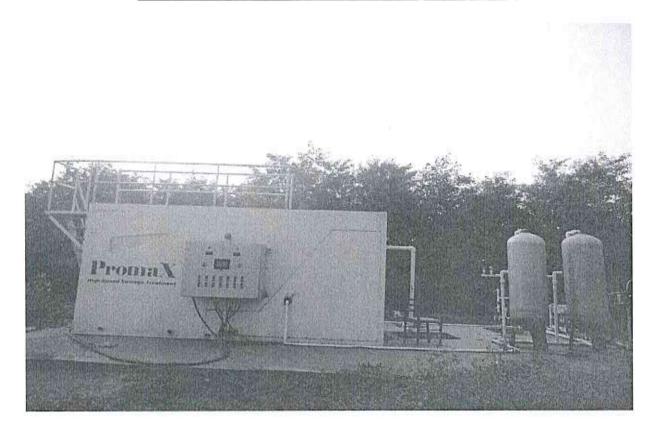
Authorized Signatory Pollution & Environment Issued by Verified by Tested by Yugantar Sharati Analyticai ilmesh Des BrijNandan Kumar Shivani Kr. Singh raineering Lab Jechnical Manager Lab Analyst renmental E: Hazaribag

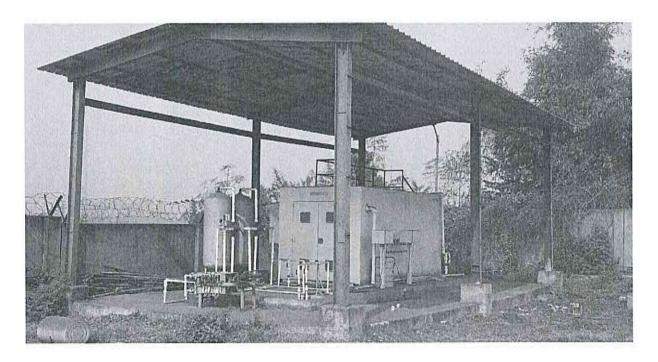
Dhanbad

Branch Office : - Jamshedpur Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

ISO 9001:2015

Sewage Treatment Plant





परुप XV (पथम अनुस्पी का अनुष्छेद 6 देखिए) FORM XV (see Article 6 of the First Schedule)

अधिष्ठापनों में पेट्रोलियम के आयात और अंडारकरण के लिए अनुनस्ति LICENCE TO IMPORT AND STORE PETROLEUM IN AN INSTALLATION

अनुजन्ति सं. (Licence No.) : P/HQ/JH/15/1065(P257355)



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 को केवल इसमें यथा विभिद्धिन्दु वर्ग और माजाओं में पेट्रोलियम 5000.00 KL आयात करने के लिए और उसका, नीचे वर्णित और अनुमोदित नक्शा संख्या P/HQ/JH/15/1065(P257355) तारीख 23/12/2011 जो कि इससे उपाबद हैं, में दिखाए गए स्थान पर अध्यारकरण के लिए पेट्रोलियम अधितियम, 1934 के उपबंधों या उसके अधीन बनाए गए नियमों तथा इस अनुनन्ति की अतिरिक्त शर्तों के अधीन रहते हुए, यह अनुनन्ति अनुद्धत्त की जाती हैं।

Licence is hereby granted to M/s. Adhunik Power & Natural Resources Ltd., Village-Padampur,Bohind PGCIC Substation., Adityapur-Kandra Road., Taluka: Adityapur(Gamharia), District: SARAIKELLA KHARSWAN, State: Jharkhand, PIN: 832105 valid only for the importation and storage of 5000.00 KL Petroleum of the class and quantities as herein specified and storage thereof in the place described below and shown on the approved plan No P/HQ/JH/15/1065 (P257355) dated 23/12/2011 attached hereto subject to the provisions of the Petroleum Act, 1934 and the rule made thereunder and to the further conditions of this Licence.

यह अनुजन्ति 31st day of December 2022 तक प्रवृत्त रहेगी । The Licence shall remain in force till the 31st day of December 2022

पेट्रोलियम का विवरण /Description of Petroleum	अनुजन्त सात्रा (किसोतीटर्स में) /Quantity licenced in KL
वर्गे क प्रपूंज मेट्रोलियम /Petroleum Class A in bulk	NIL
र्ग क प्रपंज पेट्रोतियम से भिन्न /Petroleum Class A, otherwise than in bulk	NIL
र्ग य प्रपुज पेट्रोतियम /Petroleum Class B in bulk	NIL
र्ग छ प्रपुंज पेट्रोतियम से भिन्न /Petroleum Class B, otherwise than in bulk	NIL
र्ग ग प्रपुंज पेद्रोतियम /Petroleum Class C in bulk	5000.00 KL
वर्ग ग प्रपुंज पेट्रोतियम से भिन्न /Petroleum Class C,otherwise than in bulk	NIL
क्त क्षमता /Total Capacity	5000.00 KL

December 15, 2011

Chief Controller of Explosive

1). Amendment dated - 23/12/2011

अनुजय्त परिसरों का विवरण और अवस्थान DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

अनुजन्त परिसर जिसकी विन्यास सीमाएं अन्य विशिष्टयां संलग्न अनुमोदित नक्शों में दिखाई गई हैं Plot No: Plot No. 161,, Behind PGCIL.Substation adityapur, Kandra Road, Village- Padampur, District: SARAIKELLA KHARSWAN, State: Jharkhand, PIN: 999999 स्थान पर अवस्थित है तथा उसमें निम्नतिखित Two Petroleum ClassCAboveground storage tanks,logetherwith other connected facilities. सम्मितित हैं |

The licensed premises, the layout , boundaries and other particulars of which are shown in the attached approved plan are situated at Plot No: Plot No. 161,, Behind PGCIL.Substation adityapur, Kandra Road, Village- Padampur, District: SARAIKELLA KHARSWAN, State: Jharkhand, PIN: 999899 and consists of Two Petroleum ClassCAboveground storage tanks,togetherwith other connected facilities.

पेज सं. 2

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

3)

नवीनीकरण के पृथ्वांकन के लिए स्थान SPACE FOR ENDORSEMENT OF RENEWALS

समाप्ति की तारीख नवीकरण की तारीख पेटोलियम अधिनियम, १९३४ के उपवन्धों या उनके अधीन अनुजापन प्राधिकारी के हस्ताक्षर और स्टाम्प Date of Date of Signature and office stamp of the licencing बनाए गए नियमों या इस अनुज्ञप्ति की धर्ती का Expiry of license Renewal उल्लंधन न होने की दशा में यह अनुजन्ति फ़िस में विना किसी छूट के दस वर्ष तक नवीकृत की जा सकेगी। This licence shall be renewable without any concession in fee for terr 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 1) 31/12/2013 Sd/-PESO ADMIN 23/09/2013 31/12/2018 2).

18/02/2019

31/12/2018 Sd/R.P.Singh
Jt. Chief Controller of Explosives
For Dy. Chief Controller of Explosives
Ranchi

LC-2

31/12/2022 K. Thiagarajan
Dy. Chief Controller of Explosives

चप मुख्य विरफोटक नियंत्रक, रॉभी Dy Chief Controller of Explosives, Ranchi

यदि अनुजन्ति परितर इसमें उपायद विवरण और शर्ती के अनुरूप नहीं पाए जाते हैं और जिन नियमों और शर्ती के अधीन यह अनुजन्ति संजूर की गई है उनमें से किसी का उन्लंबन होने की दशा में यह अनुजन्ति रह की जा सकती हैं और अनुजन्तिधारी प्रथम अपराध के लिए साधारण कारावात से, जो एक मास तक हो सकता है, या जुमीने से, जो एक हजार रुपये तक हो सकता है, या दोनों से, और प्रत्येक पश्चातवर्ती अपराध के लिए साधारण कारावास से जो तीन मास तक हो सकता है, या जुमीने से, जो पांच हजार रुपये तक हो सकता है, या दोनों से, दण्डनीय होगा।

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

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

Test Report No. : BFT/14486 Customer / Supplier / : NBOT-BONDED TANKS-PSD Date of Sample Drawn 11/06/21 **Branch Plant** Date of Sample Receipt 11/06/21 Source of Sample : TK104 (TMB SAMPLES) Date of Sample Testing Tank No 11/06/21 : TK104 . : 3 X 1 \ T - 845.6, M - 845.6, B - 845.5, Qty of Sample/ Density/Type of Sample Date of Report : 11/06/21 : 11/06/21 Catg / Evnt / Actvty : Aft Receipt thru Dedicated P/L Date of Printing JDE Sample Number : 1051882 Receipt/Despatch Mode : LDO\PL\VR\35\2021\VBOT\104\09

Batch No

Sample Drawn by

: RAJU

Specifications

Test Line Number	Characteristics	Units	Test Method	Min	Max	Result Value
1	APPEARANCE		VISUAL	DARK	DARK	DARK
2	DENSITY@ 15°C -TOP	kg/m3	IS 1448 [P :16]	=32722	200 (000 S) (#)	845.4
3	DENSITY@ 15°C - MIDDLE	kg/m3	IS 1448 [P :16]	*		845.4
4	DENSITY@ 15°C - BOTTOM	kg/m3	IS 1448 [P :16]	*	*	845.4
5	DENSITY@ 15°C	kg/m3	IS 1448 [P :16]			845.4
6	KINEMATIC VISCOSITY @ 40° C	cSt	IS 1448 P :25	2.500	15.000	3.720
7	FLASH POINT - PMCC	°C	IS 1448 P :21	66	72	75
В	WATER CONTENT	% Val	IS 1448 P:40	14	.250	.100
9	TOTAL SULPHUR	% Mass	ASTM D 4294	¥	1.50	.65
10	POUR POINT SUMMER	°C	IS 1448 P :10		21	-9

Remarks:

Sample S.No.BFT/151 meets specification as per IS-15770:2008(Reaffirmed2014)in the above parameters.

Notes: 1) The sample is drawn by client and results relate to sample tested

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

Tested By: 35323320

Authorised Signatory 35323320

VELAMURI DATTATREYA

VELAMURI DATTATREYA

*** END OF TEST REPORT ***

Page No.: 1 of 1



ISO 45001:2018

YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Accredited by: Certified by:-

Accredited by: - | Jharkhand State Pollution Control Board (JSPCB)

An ISO 9001:2015 & ISO 45001:2018

ANALYTICAL TEST REPORT

URL(Unique Lab Report) No.		T	C	7	8	1	3	2	1	1	0	0	0	0	1	4	2							
Discipline Chemical	Group		Water			Sample Description						Ground Water												
Report Release Date	18th October,	2021	21			R	Report ID						YBAEEL-210911-101515 - GW											
W. Order/ JSPCB App. No.	3030005309					Work Order Date					27.02.2021						404							
Type of Industry(If any)	Thermal Pow	er Pla	nt			Job codel Ref. no. YB						AEEL	MAII	LICIS	ep-2	1/04	11==0							
Sampling Date	VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection					By YBAEEL Team																		
Sampling Protocol	IS: 3025 (Par	t-1) 19	987, R-	2003		_	ample		-			210930-GW-E02												
Sampling Location	Hariharpur B	and the same of the last	and the same of the last			Sampling Source				Ground Water														
ample pkg. Condition Sealed Pack in PP			Sealed Pack in PP Bottle						ick in PP Bottle					Sample Quantity				3000 ml						
						RH % - 60				Temp 33°C					10	500								
Meteorological Cond. of Field	W.C Clear							••				14/21/7	p.	33 0										

******Tost Results ****

SI	Parameter	Test Method	Units	MU %	Results	Limits
1.	pH value	IS 3025 (P-11):2002	рН	1.77	6.63	6.5-8.5
2.	Colour	IS 3025 (P-04):1983	Hazen		<5	15
3.	Taste*	IS 3025 (P-07):			Agree.	Agreeable
4.	Conductivity	IS 3025 (P-14):2013	µs/cm	1.90	464.0	440
5.	Total Alkalinity (es CaCO ₃)	IS 3025 (P-23):2003	mg/l	3.68	102.0	600
6.	Total Hardness (as CaCO ₃)	IS 3025 (P-21):2009	mg/l	1.35	164.0	600
7.	Total dissolved solids	IS 3025 (P-16):2006	mg/l	2.85	200.0	2000
8.	Chloride (as CI)	IS 3025 (P-32):2003	mg/l	3.41	18.5	1000
9.	Fluoride (as F-)	APHA 4500 F-C 23rd edition 2017	mg/l	12.22	0.3	1.5
10.	Nitrate (as NO ₃ -)	APHA 4500 NO ₃ - (B) 23 rd edition 2017	mg/I	11.33	12.07	45
11.	Calcium (as Ca ²⁺)	IS 3025 (P-40): 2003	mg/I	4.19	45.6	200
12.	Magnesium(asMg ²⁺)	IS 3025 (P-46):2003	mg/l	1.90	12.15	100
13.	Sulphate (as SO ₄ 2-)	IS 3025 (P-24):2003	mg/l	5.42	30.0	400
14.	Arsenic (as As)	APHA 3114 B 23rd edition 2017	mg/l	10.34	BDL (MDL 0.003)	0.05
15.	Copper (as Cu)	APHA 3111 B 23 rd edition 2017	mg/l	11.11	BDL (MDL 0.01)	1.5
16.	Iron (as Fe)	APHA 3111 B 23rd edition 2017	mg/I	2.34	0.04	0.3
17.	Lead (as Pb)	APHA 3111 B 23rd edition 2017	mg/l	10.64	BDL (MDL 0.02)	0.01
18.	Zinc (as Zn)	APHA 3111 B 23rd edition 2017	mg/l	15.35	0.18	15
				Annual Control of the		

Tested by
Pem Kumar
Lab Analyst
Branch Office: - Jamshedpur

Verified by
Verified by
Pem Kumar
BrijNandan Kumar
Authorized Signatory
Umesh Des
Section In-Charge. Chemical Section
Yugantar Bharari Analytical 8
Environmentaring Appearing Laboratekur

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

ISO 9001:2015



ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



0.05

0.014

Accredited by: -

Chromium (as Cr)

150 45001:2018

Accredited by: - Jharkhand State Pollution Control Board (JSPCB)

APHA 3111 B 23rd edition 2017

An ISO 9001:2015 & ISO 45001:2018

ANALYTICAL TEST REPORT

URL(Unique	Lab Report) No.	B) =	T	C	7	8	1	3	2	1	1	0	0	0	0	1	4	2		
Discipline	Chemical	Group		Wate	r		S	ample	Des	cript	ion	FILE	Ground Water							
Report Release Date 18th October, 2021				Report ID							YBAEEL-210911-101515 - GW									
W. Order/ J	SPCB App. No.	3030005309		-			V	Vork O	rder	Date	•		27	.02.20)21					
Type of Ind	lustry(If any)	Thermal Pow	er Pla	int			J	ob cod	le/R	ef. n	0.		YE	BAEE	LWA!	LICIS	ep-2	1/04	1	
Report Issu	ue to	M/s Adhunik VillPadamp Seraikela-Kh	our, F	GCIL	S, Ka	ndra-	8324		td.						- Kp	u XI		c 5.5		
Sampling I	Date	30/09/2021					N	lode o	fsar	nple	colle	ction	By	YBA	EEL	eam	27 69			
Sampling F	Protocol	IS: 3025 (Par	t-1) 1	987, R	-2003		Sample Code							210930-GW-E02						
Sampling L	ocation	Hariharpur Be	ore w	ell		UNIT	S	Sampling Source						- Ground Water						
Sample pk	g. Condition	Sealed Pack	n PP	Bottle	2		S	ample	Qua	antity	1		30	00 m	1300					
Meteorolog	gical Cond. of Field	W.C Clear					F	KH % -	60		4770040		Te	mp	33°C					
Sample red	ceipt Date	30/09/2021	A	nalysi	Start	ted on	3	0/09/2	021		A	nalysis	s con	nplete	d on	12	/10/2	2021		
19. Cad	mium (as Cd)	APHA 311	1 B 2	3rd edit	lon 20)17		mg	1	5	.0	BD	L (M	DL 0.	02)		0.	003		
20. Mer	cury (as Hg)	APHA 3112	2 B 2	3 rd edi	ion 20	017	mg/l			8.47 BDL			L (M	DL 0.0	003)		0.	001		

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

mg/l

12.53

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

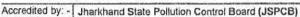
Tested by
Pem Kumar
Lab Analyst
Branch Office: - Jamshedpur

Verified by
Verified by
Pem Kumar
BrijNandan Kumar
Authorized
Signatory
Umesh Das
Section In-Charge
Chemical Section
Technical Manager
Yugantaz abag
Technical Manager

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand
Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in



ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



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ANALYTICAL TEST REPORT

Λ.	T	C	7	8	1	3	2	1	4	0	0	0	0	0	. 5	8	
Group		Wat	er		Sample Description						Ground Water						
Report Release Date 18th October, 2						Report ID					YBAEEL-210911-101515 - GW02						
3030005309						Wor	Or	der D	ate		27.02	.2021					
Thermal Powe	r Plar	ıt	Job code/ Ref. no. YBAEEL/WA/L/M/Sep-							-21/)3	-					
VillPadamp Seraikela-Kh	ur, P	GCIL	S, Ka	ndra- khand	832	402,		o aali	lantia		P. V	PACC	I Tor			., -	
		diam'r		_	_			e cor	ecuo	1							_
IS: 1622:1982	, R - 2	019			Sam	ple Co	de				2109	30-GV	V-E02				_
Hariharpur Bo	re we	II		Sampling Source				-Ground Water									
Sealed Pack in	PP E	3ottle		Sample Quantity				250 ml									
W.C Clear	1200			RH % - 60				2000			Te	mp	33°C				
30/09/2021	A	nalvs	is Sta	Started on 04/10/20				1	1	Analy	sis c	omple	eted o	n	06/1	0/202	1
	18th October, 2 3030005309 Thermal Powe M/s Adhunik VillPadamp Seraikela-Kh 30/09/2021 IS: 1622:1982 Hariharpur Bo Sealed Pack in W.C Clear	18th October, 2021 3030005309 Thermal Power Plan M/s Adhunik Power VillPadampur, Pomeron Pom	18th October, 2021 3030005309 Thermal Power Plant M/s Adhunik Power & I VillPadampur, PGCIL- Seraikela-Kharsawan, 30/09/2021 IS: 1622:1982, R - 2019 Hariharpur Bore well Sealed Pack in PP Bottle W.C Clear	18th October, 2021 3030005309 Thermal Power Plant M/s Adhunik Power & Natur VillPadampur, PGCILS, Ka Seraikela-Kharsawan, Jharl 30/09/2021 IS: 1622:1982, R - 2019 Hariharpur Bore well Sealed Pack in PP Bottle W.C Clear	18th October, 2021 3030005309 Thermal Power Plant M/s Adhunik Power & Natural RevillPadampur, PGCILS, Kandra-Seraikela-Kharsawan, Jharkhand 30/09/2021 IS: 1622:1982, R - 2019 Hariharpur Bore well Sealed Pack in PP Bottle W.C Clear Ri	18th October, 2021 3030005309 Thermal Power Plant M/s Adhunik Power & Natural Resour VillPadampur, PGCILS, Kandra-832- Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode IS: 1622:1982, R - 2019 Sam Hariharpur Bore well Sam Sealed Pack in PP Bottle Sam W.C Clear RH %	Group Water Sam 18th October, 2021 Repo 3030005309 Worl Thermal Power Plant Job of M/s Adhunik Power & Natural Resources L VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sa IS: 1622:1982, R - 2019 Sample Co Hariharpur Bore well Sampling S Sealed Pack in PP Bottle Sample Qu W.C Clear RH % - 60	Group Water Sample II 18th October, 2021 Report II 3030005309 Work Ord Thermal Power Plant Job code M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample IS: 1622:1982, R - 2019 Sample Code Hariharpur Bore well Sampling Sour Sealed Pack in PP Bottle Sample Quantit W.C Clear RH % - 60	Group Water Sample Description 18th October, 2021 Report ID 3030005309 Work Order D Thermal Power Plant Job code/ Ref M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample coll IS: 1622:1982, R - 2019 Sample Code Hariharpur Bore well Sampling Source Sealed Pack in PP Bottle Sample Quantity W.C Clear RH % - 60	Group Water Sample Description 18th October, 2021 Report ID 3030005309 Work Order Date Thermal Power Plant Job code/ Ref. no. M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection IS: 1622:1982, R - 2019 Sample Code Hariharpur Bore well Sampling Source Sealed Pack in PP Bottle Sample Quantity W.C Clear RH % - 60	Group Water Sample Description 18th October, 2021 Report ID 3030005309 Work Order Date Thermal Power Plant Job code/ Ref. no. M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection IS: 1622:1982, R - 2019 Sample Code Hariharpur Bore well Sampling Source Sealed Pack in PP Bottle Sample Quantity W.C Clear RH % - 60	Group Water Sample Description Group 18th October, 2021 Report ID YBAE 3030005309 Work Order Date 27.02 Thermal Power Plant Job code/ Ref. no. YBAE M/s Adhunik Power & Natural Resources Ltd. VIIIPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection By YI IS: 1622:1982, R - 2019 Sample Code 2109. Hariharpur Bore well Sampling Source Group Sealed Pack in PP Bottle Sample Quantity 250 m W.C Clear RH % - 60 Te	Group Water Sample Description Ground Water Report ID YBAEEL-2 3030005309 Work Order Date 27.02.2021 Thermal Power Plant Job code/ Ref. no. YBAEEL/W M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection By YBAEE IS: 1622:1982, R - 2019 Sample Code 210930-GW Hariharpur Bore well Sampling Source Ground W Sealed Pack in PP Bottle Sample Quantity 250 ml W.C Clear RH % - 60 Temp	Group Water Sample Description Ground Water 18th October, 2021 Report ID YBAEEL-210911 3030005309 Work Order Date 27.02.2021 Thermal Power Plant Job code/ Ref. no. YBAEEL/WA/L/M M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection By YBAEEL Tea IS: 1622:1982, R - 2019 Sample Code 210930-GW-E02 Hariharpur Bore well Sampling Source Ground Water Sealed Pack in PP Bottle Sample Quantity 250 ml W.C Clear RH % - 60 Temp 33°C	Group Water Sample Description Ground Water 18th October, 2021 Report ID YBAEEL-210911-101 3030005309 Work Order Date 27.02.2021 Thermal Power Plant Job code/ Ref. no. YBAEEL/WA/L/M/Sep M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection By YBAEEL Team IS: 1622:1982, R - 2019 Sample Code 210930-GW-E02 Hariharpur Bore well Sampling Source -Ground Water Sealed Pack in PP Bottle Sample Quantity 250 ml W.C Clear RH % - 60 Temp 33°C	Group Water Sample Description Ground Water 18th October, 2021 Report ID YBAEEL-210911-101515 - 3030005309 Work Order Date 27.02.2021 Thermal Power Plant Job code/ Ref. no. YBAEEL/WA/L/M/Sep-21/0 M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection By YBAEEL Team IS: 1622:1982, R - 2019 Sample Code 210930-GW-E02 Hariharpur Bore well Sampling Source Ground Water Sealed Pack in PP Bottle Sample Quantity 250 ml W.C Clear RH % - 60 Temp 33°C	Group Water Sample Description Ground Water 18th October, 2021 Report ID YBAEEL-210911-101515 – GW0 3030005309 Work Order Date 27.02.2021 Thermal Power Plant Job code/ Ref. no. YBAEEL/WA/L/M/Sep-21/03 M/s Adhunik Power & Natural Resources Ltd. VillPadampur, PGCILS, Kandra-832402, Seraikela-Kharsawan, Jharkhand 30/09/2021 Mode of sample collection By YBAEEL Team IS: 1622:1982, R - 2019 Sample Code 210930-GW-E02 Hariharpur Bore well Sample Quantity 250 ml W.C Clear RH % - 60 Temp 33°C

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

SI	Parameter	Test Method	Units	Results	Limits
1.	Total coliform	APHA 9221B 23rd Edition 2017	MPN/100 ml	BDL (MDL 1.1)	Shall not to be
2.	Fecal coliform APHA 9221E 23	APHA 9221E 23rd Edition 2017	MPN/100 ml	BDL (MDL 1.1)	Detectable in any
3.	E coli	APHA 9221-F 23rd Edition 2017	MPN/100 ml	BDL (MDL 1.1)	100 ml sample

End of Report*

Limit is specified as	IS 10500; 2012							
Abbreviation	MDL: Minimum detection limit, BDL: Below detection limit,							
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).							
Specific contractual	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility.							
notes	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.							
	This report cannot be reproduced, except when in full, without the written permission of the Lab In-charge.							
	The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise							
	The liability of the laboratory is limited to the invoiced amount.							
	All disputes are subjected to the Ranchi Jurisdiction.							
Remarks	Sample Comply with prescribed limits							

Mukesh Kumen or ized Signatory
Section In Charge oio Ioon Section Issued by Tested by Madhuri Sinha Umesh Das Dhanbad Yugantar Bij Hazaribag aboratory
ost Office Sidnamerial Englished aboratory Lab Analyst Technical Manager Pakur Branch Office : - Jamshedpur

Main Office : Namkum Post Office Sidro முக்கி - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in



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YUGANTAR BHARATI

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ANALYTICAL TEST REPORT

URL(Unique Lab Report) No.		T	C	7	8	1	3	2	1	1	0	0	0	0	1	4	1	_
Discipline Chemical	Group		Water	ŕ	-3-10	S	ample	Desc	ripti	on		Ground Water						
Report Release Date	18th October,	2021		Report ID				0	YBAEEL-2109					911-101515 - GW0				
W. Order/ JSPCB App. No.	3030005309					Work Order Date					27	.02.20	21				3 162	
Type of Industry(If any)	Thermal Pow	er Pla	nt			Job codel Ref. no. YBAEEL/WA/L/C/Se						JC/Sep-21/04						
Report Issue to Sampling Date	VillPadamp Seraikela-Ki	our, F	GCIL	S, Ka	ndra-					n By YBAEEL Team						/ (*)		
Sampling Protocol	IS: 3025 (Par	t-1) 1	987. R-	2003		-	ample							GW-E				
Sampling Location	Srirampur Bo	-		errenanana I	13.71	-	Sampling Source						. Ground Water					
Sample pkg. Condition	Sealed Pack i	n PP	Bottle			Sample Quantity				30	00 ml	, W	ave a land					
Meteorological Cond. of Field	W.C Clear					R	Н%-	60				Te	mp	33°C				in.
Sample receipt Date	30/09/2021	Ar	alysis	Start	ed on	n 30/09/2021 Analysis			lysis completed on 12/10/2021									

SI	Parameter	Test Method	Units	MU %	Results	Limits
1.	pH value	IS 3025 (P-11):2002	pН	1.77	6.67	6.5-8.5
2.	Colour	IS 3025 (P-04):1983	Hazen	In:	10.0	15
3.	Taste*	IS 3025 (P-07):		F F	Agree.	Agreeable
4.	Conductivity	IS 3025 (P-14):2013	µs/cm	1.90	534.0	**
5.	Total Alkalinity (as CaCO ₃)	IS 3025 (P-23):2003	mg/l	3.68	186.0	600
6.	Total Hardness (as CaCO ₃)	IS 3025 (P-21):2009	mg/l	1.35	178.0	600
7.	Total dissolved solids	IS 3025 (P-16):2006	mg/l	2.85	248.0	2000
8.	Chloride (as CI)	IS 3025 (P-32):2003	mg/l	3.41	20.0	1000
9.	Fluoride (as F-)	APHA 4500 F-C 23rd edition 2017	mg/l	12.22	0.6	1.5
10.	Nitrate (as NO ₃ -)	APHA 4500 NO ₃ - (B) 23 rd edition 2017	mg/l	11.33	2.5	45
11.	Calcium (as Ca2+)	IS 3025 (P-40): 2003	mg/l	4.19	56.0	200
12.	Magnesium(asMg ²⁺)	IS 3025 (P-46):2003	mg/l	1.90	9.23	100
13.	Sulphate (as SO ₄ 2-)	IS 3025 (P-24):2003	mg/l	5.42	14.1	400
14.	Arsenic (as As)	APHA 3114 B 23rd edition 2017	mg/l	10.34	BDL (MDL 0.003)	0.05
15.	Copper (as Cu)	APHA 3111 B 23rd edition 2017	mg/l	11.11	BDL (MDL 0.01)	1.5
16.	Iron (as Fe)	APHA 3111 B 23 rd edition 2017	mg/i	2.34	0.02	0.3
17.	Lead (as Pb)	APHA 3111 B 23rd edition 2017	mg/l	10.64	BDL (MDL 0.02)	0.01
18.	Zinc (as Zn)	APHA 3111 B 23rd edition 2017	mg/l	15.35	0.17	15

- Amodumery	Dodluma 101201	18/10/21
Tested by	Verified by	issued by
⇒ Pern Kumar	BrijNandan Kumar Authorized	Signatory Umesh Das
Lab Analyst	Section In-Charge , Chemica	I Section Technical Manager
Branch Office : - Jamshedpur	Dhanbad _ Yuganizanbag	ati Analytiga 8

- Jamshedpur Dhanbad Fuyironmental Lituineering Laboratory
Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

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ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



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ANALYTICAL TEST REPORT

ISO 45001:2018

URL(Unique Lab Report) No.		T	C	7	8	1	3	2	1	1	0	0	0	U	1	4_	11	_
Discipline Chemical	Group		Water	r		Sa	mple	Des	cripti	on		-	Ground Water					
Report Release Date	18th October,	2021				Re	port	D	6			YI	BAEEL	-2109	11-10	11515	5 – G	W01
W. Order/ JSPCB App. No.	3030005309					W	ork O	rder	Date			-	.02.20					
Type of Industry(If any)	Thermal Power	er Pla	nt		- 2	Jo	b co	ie/R	ef. no),		Y	BAEEL	JWAJL	ICIS	ep-21	1/04	
Report Issue to	M/s Adhunik VillPadamp Seraikela-Kh	ur, F	GCIL	S, Ka	ndra-8	324	es L 02,	td.			ĘV.						, nº	5
Sampling Date	30/09/2021	13				M	ode o	f sar	nple	colle	ction	В	y YBA	EEL T	eam			
Sampling Protocol	IS: 3025 (Par	t-1) 1	987, R	-2003		S	ample	Coc	le	1		2	10930-	GW-E	01			
Sampling Location	Srirampur Bo					S	ampli	ng S	ource)		- G	round	Water	r	,iii		
Sample pkg. Condition	Sealed Pack i	n PP	Bottle			S	ample	Qua	intity	7		3	000 ml					
Meteorological Cond. of Field	W.C Clear					R	Н%-	60				T	emp	33ºC				J.
Sample receipt Date	30/09/2021	A	nalysis	Start	ted on	3	0/09/2	021		A	nalys	s co	mplete	d on	12	/10/2	2021	
19. Cadmium (as Cd) APHA 3111			1 B 23 rd edition 2017			mg/l 5.0		.0	В	DL (I	IDL 0.	02)		0.	003			
	5550		7 74		182 T		-				No.	N /8	IDL A	1021		^	004	

19.	Cadmium (as Cd)	APHA 3111 B 23rd edition 2017	mg/l	5.0	BDL (MDL 0.02)	0.003
20.	Mercury (as Hg)	APHA 3112 B 23rd edition 2017	mg/l	8.47	BDL (MDL 0.003)	0.001
21.	Chromium (as Cr)	APHA 3111 B 23rd edition 2017	mg/l	12.53	BDL (MDL 0.02)	0.05

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

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

TAMMAY Issued by Verified by Tested by Authorized Signatory Umesh Das BrijNandan Kumar Section In-Charge Chemical Section Technical Manager

- Jamshedpur Dhanbad Yuganar Bharati Analytical & Priving and Engineering Lab Paker

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Pern Kumar Lab Analyst

Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in



ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by: - | Jharkhand State Pollution Control Board (JSPCB)

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



ANALYTICAL TEST REPORT

URL (Unique Lab Ro	eport) No.		T	C	7	8	1	3	2	1	4	0	0	0	0	0	5	7
Discipline Bio	ological	Group Water Sample Description Ground Water																
Report Release I	Date	18th October,	ber, 2021						rt IC)			YBAI	EEL-2	1091	1-101	515 -	- GW01
W. Order/ JSPCE	3 App. No.	3030005309 Work Order Date 27.02.2021																
Type of Industry	(if any)	Thermal Power Plant						Job	ode	/ Ref	. no.		YBAI	EEL/V	VAILI	///Se	p-21/)3
Report Issue to		M/s Adhunik VillPadamp Seraikela-Kh 30/09/2021	ur, P	GCIL	S, Ka	ndra khanc	-832 1	402,		o coll	action	, [By V	PAEC	I To	100		. Ne
Sampling Date		-	12.19	72.72			Mode of sample collection					1	By YBAEEL Team 210930-GW-E01					
Sampling Protoc	col	IS: 1622:1982	R - 2	2019			Sam	ple Co	de				2109	30-G\	W-E01			
Sampling Locati	ion	Srirampur Bo	e we	1			Sam	pling S	our	ce			Grou	nd W	ater			
Sample pkg. Condition Sealed Pack in PP Bot				Bottle	10		Sam	ple Qu	antit	y			250 r	nl	ost.			
Meteorological (Cond. of Field	W.C Clear				R	H %	- 60		RH % - 60 Temp 33°C								
Mereorological																		

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

SI	Parameter	Test Method	Units	Results	Limits
1.	Total coliform	APHA 9221B 23rd Edition 2017	MPN/100 ml	BDL (MDL 1.1)	Shall not to be
2.	Fecal coliform	APHA 9221E 23rd Edition 2017	MPN/100 ml	BDL (MDL 1.1)	Detectable in any
3.	E coli	APHA 9221-F 23rd Edition 2017	MPN/100 ml	BDL (MDL 1.1)	100 ml sample

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

Limit is specified as	IS 10500: 2012
Abbreviation	MDL: Minimum detection limit, BDL: Below detection limit,
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C)
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Remarks	Samples Comply with prescribed limits

Modlum Scular

Tested by

Verified by

Machuri Sinhs

Lab Analyst

Branch Office: Jamshedpur

Dhanbad Victobiological Section

Vicantal Bhat Section

Pakur

Main Office: - | Jamshedpur | Dhanbad Microbioleg: Hazanbag;al & Pakur | Pakur

ISO 9001:2015



ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



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Jharkhand State Pollution Control Board (JSPCB)

An ISO 9001:2015 & ISO 45001:2018

ANALYTICAL TEST REPORT

URL (Unique L	ab Report) No.	189e	T	C	7	8	1	3	2	1	2	0	0	0	0	7	6	6
Discipline	Chemical	Group	Atn	nosphe	n	Sample Description					Work Zone Noise							
Report Rele	ase Date	18th October,	2021				152	Rep	ort IC)	JEV.		YBA	EEL-	21091	1-10	1515-	N01
W. Order / J	SPCB App. No.	3030005309						Wor	k Ord	der I	ate		27.0	2.202	1			
Type of Indu	ustry(if any)	Thermal Pow	Thermal Power Plant					Job	code	el Re	f. no.		YBA	EEL	NAIL	A/Oc	t-21/	01
Report Issu	e to	M/s Adhunik Power & Natural Reso VIIIPadampur, PGCILS, Kandra-8 Seraikela-Kharsawan, Jharkhand					-832		.td.	bii			N.	ja 1				
Sampling P	eriod	28/09/2021	29/09	/2021		N	/lode	le of sample collection By YBAEEL Team										
Sampling P	rotocol	IS: 9989:198	IS: 9989:1981 (RA 2020), CPCB (Fact						948)	WENT OF THE						-		
Meteorolog	Meteorological Cond. of Field W.C Cloudy					RH %	% - 68					Temp 28°C						
Sample rec	eipt Date	01/10/2021	An	alysis	Start	ed on	01/10/2021				A	alys	is co	nplet	ed on	1	2/10/	2021

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

SI	Locations	Parameters	Units	MU %	Day Time (6.00 a.m. to 10.00 p.m.)	Night Time (10.00 p.m. to 6.00 a.m.)	Limit
1.	Turbine Floor	Leq	dB (A)	- 1.003	81.5	84.2	12.5 %
2.	Compressor House	Leq	dB (A)	1.003	84.4	84.1	
3.	Cooling Tower	Leq	dB (A)	1.003	84.8	81.7	85
4.	Coal Crushing	Leq	dB (A)	1.003	63.8	53.4	
5.	Boiler Feed Pump	Leq	dB (A)	1.003	76.8	77.2	

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

Limit is specified as	Factory Act, 1948
Abbreviation	MDL: Minimum detection limit, BDL: Below detection limit,
Env. Condition of Lab	Leboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
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	All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples Comply with prescribed limits

Verified by Authorized Signatory Issued by
Amilt Kurnar Sinha
Lab Analyst
Branch Office: - Jamshedpur
Dhanbad
Section In-Charge
Yugantar
Pakur

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

0 9001:2015



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YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY



Certified by:-

Accredited by: - Jharkhand State Pollution Control Board (JSPCB)

An ISO 9001:2015 & ISO 45001:2018

	180 Alba / 18 FB	DESCRIPTION ASSESSMENT	ESTIMATE VALUE	DON/MOVED
ANALY	COLUMN	H SOLON A	IESSENATAS PROPERTY OF THE PRO	1 3000 11
100 th 100 to 10	12 may 200 mg	B Shows 9	S College	20 M P M

URL(Unique L	ab Report) No.		T	C	7	8	1	3	2	1	2	0	0	0	0	7	6	7
Discipline	Chemical	Group	Atm	Atmospheric Pollution					ple D	esci	riptio	n	Ambient Noise					
Report Rele	ase Date	18th October,	2021					Rep	ort ID	62	L.L.		YBA	EEL-	21091	1-10	1515-	N02
W. Order / J	SPCB App. No.	3030005309		(1)				Wor	k Ord	er D	ate		27.0	2.202	1			
Type of Indu		Thermal Pow	er Pla	nt			W	Job	code	Re	f. no.		YBA	EEL	NAIL	A/Oc	t-21/)2
Report Issu	e to	VillPadam	M/s Adhunik Power & Natural Reso VIIIPadampur, PGCILS, Kandra-83 Seraikela-Kharsawan, Jharkhand						.tu.						5			
Sampling Po	eriod	28/09/2021 -						of sar			And in case of the latest	and the same	-	y YB/	AEEL	Tean	n	
Sampling P	rotocol	IS 9989:1981	IS 9989:1981 (RA 2020) & CPCB Meth					d S.O.50 (E) dated 11/01/2						/2010				
Meteorologi	ical Cond. of Field	W.C Cloudy RI				RH %	% - 68					Temp 28°C				M		
Sample rece	Sample receipt Date 01/10/2021 Analysis Started on			10	1/10/2	021		Ar	alys	alysis completed on 12/10/202			2021					

*Test Results *****

SI	Locations	Parameters	Units	MU %	Day Time (6.00 a.m. to 10.00 p.m.)	Night Time (10.00 p.m. to 6.00 a.m.)	Limits
1.	Reservoir	Leq	dB (A)	- 1.32	55.2	53.3	
2.	Main Gate	Leq	dB (A)	1.32	61.2	56.0	Day - 75
3.	Occupational Health Centre	Leq	dB (A)	1.32	52.5	49.2	Night – 70
4.	Sati Steel	Leq	dB (A)	1.32	49.0	51.4	W.

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

Limit is specified as	Noise pollution (Regulation & Control) Rules, 2000.
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
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	All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Samples Comply with prescribed limits

Issued by Authorized Signatory Verified by ested by Brij Nandan Kumar Section In-Charge Atmosphare Pollution Umesh Das - J Jamshedpur | Dhanbad | Phanbad | Dhanbad | Amit Kumar Sinha Lab Analyst Branch Office : - Jamshedpur

Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in



ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

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



ANALYTICAL TEST REPORT

URL(Unique Lab Report) No.			T	C	7	8	1	3	2	1	2	0	0	0	0	7	6	2	
Discipline Chemical	Group	Group Atmospheric Pollution						Sam	ple l	Desc	riptio	n	Ambient Air Quality (Core Zon						
Report Release Date	18th Octobe	r, 20	21					Rep	ort II)	##E		YBA	EEL-	21091	1-10	1515	- A01	
W. Order/ JSPCB App. No.	3030005309	in that	, 6				Work Order Date 27.02.2021							der Date 27.02.2021					
Type of Industry(If any)	Thermal Po	wer	Plan	nt			===	Job	cod	el Re	f. no.	200	YBA	EEL	NAIL	AlOc	t-21	01	
Report Issue to	M/s Adhur VIIIPadar Seraikela-	npu	r, P	GCIL	S, K	andra	-83		Liu	8	li.	1	11.16						ľ
Sampling Period	28/09/2021	- 29	109/2	2021		N	lode	of sa	mple	coll	ectio	n	By YBAEEL Team						
Sampling Protocol	IS:5182 and	CP	CB	Air Ma	anua	l Volu	ne-	1(NAA	QMI	36/20	12-13	3)		11/1/					
Sampling Locations	A. B	ache	elor	Hoste	el	B.Switch Yard C. Sati Steel (CHP Area)						ea)							
Meteorological Cond. of Field	W.C Clou	dy			RH	% - 68	11107			Ter	np	28°C	11.		J.W	W.D North - South			h
Sample receipt Date	01/10/2021		An	alysis	Sta	rted o	1	01/10	202	1	An	alys	is cor	nplet	ed on	1	2/10	2021	

seeseeTest Results *****

	11.7 11.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	lest K	esuits *****	M			
200	1.0	1	8811.07	Sa	on	Limits	
Parameters	Test Methods	Units	MU %	Site A	Site B	Site C	Lilling
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006, RA 2017	µg/m³	2.68	74.1	72.5	94.3	100
Particulate matter (PM _{2.5})	IS:5182 (P-24) 2019	hā/w ₃	2.60	50.7	41.3	53.4	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2) 2001 RA 2017	µg/m³	7.84	15.2	16.9	13.0	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2017	µg/m³	4.17	29.8	37.0	28.8	80
Ammonia (NH ₃)	IS:5182 (P-25) 2018	µg/m³	3.7	20.1	29.0	47.0	400
Ozone (O3)	IS:5182 (P-09) 1974	'µg/m³	9,09	32.5	37.3	31.8	180
Carbon Monoxide (CO)	SOP No. YBAEEL/SOP/AIR/01	mg/m³		BDL (MDL 1.8)	BDL (MDL 1.8)	BDL (MDL 1.8)	04
Lead (Pb)	IS:5182 (P-22) 2004, RA 2019	µg/m³	7,95	0.01	0.03	BDL (MDL0.004)	01
Nickel (Ni)	IS:5182 (P-26) 2020	ng/m³	14.71	BDL (MDL- 4)	BDL (MDL- 4)	BDL (MDL-4)	20
Arsenic (As)	USEPA - 10 3.2	ng/m³	2.05	BDL (MDL -02)	BDL (MDL -02)	BDL (MDL -02)	06
Benzene (C ₆ H ₆)	IS:5182 (P-11) 2006	µg/m³	10.94	BDL (MDL 0.06)	BDL (MDL 0.06)	BDL (MDL 0.06)	05
Benzo (a)pyrene (BaP) Particulate Phase Only	IS:5182 (P-12) 2004	ng/m³		BDL (MDL 0.2)	BDL (MDL 0.2)	BDL (MDL 0.2)	01

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

Limit is specified as	Environmental (Protection) Rute – 1986.
Abbreviation	MDL: Minimum detection limit, BDL: Below detection limit,
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
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605057 <u>1, 1</u> 1 1 1 1 1 1	This report cannot be reproduced, except when in full, without the written permission of the Lab In-charge.
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Remarks	Samples Comply with prescribed limits

Tested by Verified by Authorized Signatory Issued by
Amit Kumar Sinha Brij Nandan Kumar Atmospharic Pollution Umesh Das
Leb Analyst Section In-Charge Yugantar Bharati Analytical edinical Manager

Branch Office: - Jamshedpur Dhanbad Environazan Labaration Pakur

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

ISO 45001:2018

ISO 9001:2015



ISO 45001:2018

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Certified by: -ANALYTICAL TEST REPORT

URL(Unique Lab Report) No.		T	C	7	8	1	3	2	1	2	0	0	0	0)	7	6	3	
Discipline Chemical	Group Atmospheric Pollution					Sample Description					Ambient Air Quality (Buffer Zor								
Report Release Date	18th October, 2021			21					0			YBAEEL-210911-101515- A02							
W. Order/ JSPCB App. No.	3030005309	3030005309 Work Order Date							27.02.2021										
Type of Industry(If any)	Thermal Pov	ver Pla	nt				Job	cod	el Re	f. no		YB	AEEL	MA	ILIA	Oct-	21/0	2	
Report Issue to	M/s Adhun VillPadam Seraikela-h	ipur, F	GCIL	S, Ka	ndra	832		Ltd.			×		- 3		- Control of the Cont				1
Sampling Period	29/09/2021 -	- 30/09	2021		M	ode	of sa	mple	col	ectio	n	By YBAEEL Team							
Camalian Dustanal	IS:5182 and	CPCB	Air Ma	nual	Volur	ne-1	(NAA	QM/	36/20	12-1	3)								
Sampling Protocol															- 1	P111			
The state of the s			ra Villa	ge	В	. Sri	rampu	ır Vi	llage				C.Pac	iami	our \	villag	e		_
Sampling Protocol Sampling Locations Meteorological Cond. of Field		ndrabe		ge RH %		277777	rampı	ır Vi	Witness of Street	-	2900		C.Pac		_	- Nor	-	Souti	1

	·	*****Test R	esults ****	•			
	T4 M-4b-de	Unite	MU %	Sa	impling Location	n	Limits
Parameters	Test Methods	Units	IVIO 76	Site A	Site B	Site C	Limito
Particulate matter (PM ₁₀)	IS:5182 (P-23) 2006, RA 2017	µg/m³	2.68	93.8	92.3	96.7	100
Particulate matter (PM25)	IS:5182 (P-24) 2019	hā\w ₃	2.60	45.3	52.8	58.2	60
Sulphure Dioxide (SO ₂)	IS:5182 (P-2) 2001 RA 2017	µg/m³	7.84	26.2	18.5	24.6	80
Nitrogen Dioxide (NO ₂)	IS:5182 (P-6) 2006 RA 2017	pg/m³	4.17	40.1	35.0	44.2	80
Ammonia (NH₃)	IS:5182 (P-25) 2018	µg/m³	3.7	31.8	24.1	89.3	400
Ozone (O3)	IS:5182 (P-09) 1974	þg/m³	9.09	31.0	30.2	31.4	180
Carbon Monoxide (CO)	SOP No. YBAEEL/SOP/AIR/01	mg/m³		BDL (MDL 1.8)	BDL (MDL 1,8)	BDL (MDL 1.8)	04
Lead (Pb)	IS:5182 (P-22) 2004, RA 2019	µg/m³	7.95	0.05	BDL (MDL0.004)	BDL (MDL0.004)	01
Nickel (Ni)	IS:5182 (P-26) 2020	ng/m³	14.71	BDL (MDL- 4)	BDL (MDL- 4)	BDL (MDL-4)	20
Arsenic (As)	USEPA - IO 3.2	ng/m³	2.05	BDL (MDL -02)	BDL (MDL -02)	BDL (MDL -02)	06
Benzene (C ₆ H ₆)	IS:5182 (P-11) 2006	µg/m³	10.94	BDL (MDL 0.06)	BDL (MDL 0.06)	BDL (MDL 0.06)	05
Benzo (a)pyrene (BaP) Particulate Phase Only	IS:5182 (P-12) 2004	ng/m³	-	BDL (MDL 0.2)	BDL (MDL 0.2)	BDL (MDL 0.2)	01

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Issued by Authorized Signatory Verified by Atmospharic Pollution Umesh Des Brij Nandan Kumar Amit Kumar Sinha Section In-Charge - Yugantar Bhashi Analytical echnical Manager Lab Analyst EnviroHazaribagnyn och Leheakury Dhanbad Branch Office : - Jamshedpur

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

150 9001:2015



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

APNRL/HR/Office Order/10 5th August'2016

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

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

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

REGD. OFFICE

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

Website

: www.adhunikgroup.com



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

05.08.2016

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 Incharge	Overall responsibility for environmental management and decision making for all environmental issues	Managing Director
03	Environment Manager	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 Incharge
04	CSR Manager	Responsibility to implement social impact improvement /mitigation measures.	Plant Incharge
05	Safety Manager	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 Incharge
06	Medical Officer	Attend all types of OPD and Emergency Patients. First Ald Treatment to all Cases. Routine Medical Examination of Company Employees. Performing & Conducting various training & awareness programs in company.	Plant Incharge
06	Chemist	To initiate environmental monitoring as per approved schedule. Prepare & Submit the monitored results and corrective measures in case monitored results are above the specified limit.	Environment Manager
07	Horticulture officer	Responsible for development of Green belt & Land Scape on vacant land of Plant premises.	Environment Manager

Sr. Manager (HR)

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

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

REGD. OFFICE

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

Website

: www.adhunikgroup.com



WORKS : Village - Padampur, Behir Adilyapur - Kandra Road, Saraikela - Khars Phone : +91 - 657 - 6628400, Fax CIN - U40101WB2005

Ref: MOE&F, RNC/HYC/KKJ/26521/01

To.

Regional Office (ECZ), Ministry of Environment, Forest and Climate Chang Bungalow No. A-2, Shyamali Colony, Ranchi – 834002 EURYZOSELITZN 1VR:01744928501812020 SFY NANOU 50 (831012)
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Sub:- Submission of Half yearly compliance status report (Unit I) for the period – October 2020 to March 2021 -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 2020 to March 2021.

This is for your reference and record, please.

Thanking you,

For Adhunik Power & Natural resource

air

(Authorized Signatory)

Encl: As Above

Copy to:

1. Central Pollution Control Board, F.

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2. Member Secretary, Jharkhand State romation control board, orial kname

Regional Officer, JSPCB, Jamshedpur

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REGD, OFFICE

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

Website

: www.adhunikpower.com



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

Ref No APNRL/JSPCB/ES/2020-21/01

Date: 20th Sep 2021

Member Secretary
Jharkhand State Pollution Control Board,
HEC Campus, Dhurva,
Ranchi, Jharkhand.

Sub- Submission of Environmental Statement (Form V) for Unit I (1 x 270 MW) of M/s Adhunik Power & Natural Resources Limited, Village-Padampur, Dist-Saraikela-Kharswan, Jharkhand.

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

Dear Sir,

In line with compliance of above referred EC letter point No XXX of general condition, Please find attached herewith Environmental statement (Form V) for the financial year 2020-21.

This is for your kind information & record please.

Thanking You

Your's faithfully

Kamlesh Kumar

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

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

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

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