

ADHUNIK POWER & NATURAL RESOURCES LIMITED

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

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

This is for your kind information & record please.

Thanking You

Your's faithfull

Kamlesh Kumar

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

Reserved Mysder 22/9/22

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

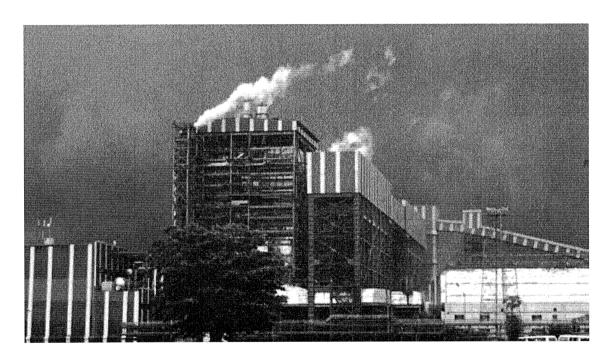
ENVIRONMENTAL STATEMENT

For

1 X 270 MW COAL BASED THERMAL POWER PLANT

(UNIT I)

FINANCIAL YEAR 2021-22



September 2022



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

FORM-V

From:

Adhunik Power & Natural Resources Limited

Village: Padampur

Dist: Saraikela-Kharsawan - 832 402

Jharkhand.

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

Environmental Statement for the financial year ending on the 31st March-2022 for Unit-I (1 x 270 MW)

PART - A

(i) Name & Address of the owner/occupier of the

Industry operation or process

Sh. G.D. Agarwal

Adhunik Power & Natural Resources

Ltd, Vill- Padampur, Adityapur-Kandra Road, Dist- Sariekela-

Kharswan, Jharkhand

(ii) Industry Category

Primary – STC Code

Primary – STC Code Secondary – STC Code : Red Category

(iii) Production Capacity - (Units-MT)

: Power(270 MWH)

(iv) Year of Establishment

(COMMERCIAL PRODUCTION DECLARED)

21st January-2013

(v) Date of Last Environmental Statement Submitted

:

21st September 2021

PART-B

Water and Raw Material Consumption

(i) Water Consumption KL/Day

Process

: 1232.4

Cooling

: 11055.79

Domestic

96.43

Name of product	Process water o	Process water consumption KL/ MW				
	During the previous financial year	During the current financial year				
	2020-21	2021-22				
Electricity	0.350	0.211				

(ii) Raw Material Consumption

Name of Raw Materials	Name of product	Consumption of raw material per MW				
		During the previous financial year 2020-21	During the current financial year 2021-22			
Coal	Power	0.6752 MT	0.6709 MT			
LDO		0.00028 KL	0.00035 KL			

PART – C

Pollution Discharged to environment / unit of output.

(Parameter as specified in the consent issued)

Pollutants	Qty. Of pollutants discharged (Mass / Day)	Concentration of Pollutants in discharges (Mass / Day)	Percentage of variation from prescribed standards with reasons		
(i) Water Unit Limit pH 5.5. to 9.0 SS < 100 mg/l Oil & Grease < 10 mg/l BOD₅ < 30 mg/l COD < 250 mg/l	tower, DM plan separator is bei Handling syster 2) Effluent genera reutilized in que suppression sys 3) Effluent genera	reutilized in quenching & dust suppression system.			
(ii) Air(Stack) PM SO2 NOx	1367.64 Kg/Day 41748.45 Kg/Day 23113.75 Kg/Day	43.5 mg/Nm3 1303 mg/Nm3 725 mg/Nm3	Concentration of PM are below the prescribed limits Stack monitoring report are enclosed as Annexure II		

Refer to MoEF notification dated 07.12.2015 and amendementto, FGD and DeNOx system installation are in progress to reduce the concentration of SO2 & NOx in Flue gases.

 $^{^{\}star}$ The Effluent Treatment facility for Unit I and Unit II is common.

<u>PART - D</u> HAZARDOUS WASTES

(As specified under Hazardous Wastes Management and Handling & Transboundary Movement Rules, 2008)

Hazardous Wastes	Total Quantity (KL).					
	During the previous financial Year	During the current financial Year				
	2020-21	2021-22				
1 From Process	Used Oil-3.786 KL	Used Oil-5.434 KL				
	Waste Oil-1.756 KL	Waste Oil-2.090 KL				
2 From Pollution						
Control Facilities						

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

PART-E

Solid Wastes

	Total Quantity (MT)				
	During the previous financial Year	During the current financial Year			
	2020-21	2021-22			
(a) From Process					
Bottom Ash	59398 MT	72718.99 MT			
(b) From Pollution Control Facility Fly Ash	336589 MT	412074.32 MT			
(c) (1) Quantity recycled or re-utilized within the unit					
(2) Sold					
(3) Disposed					
Fly Ash	336589 MT	412074.32 MT			
Bottom Ash	59398 MT	31306.3 MT			

PART - F

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

Hazardous Waste:

- 1) Solid Hazardous Waste:
 - Bio medical Waste is generated from OHC is being disposed as per CPCB Guidelines.
 - Waste generated from Canteen is used from preparing bio-compost & it is used for plantation.
 - For the collection of dry fly ash, silos have been provided with pneumatic system & Bottom ash is led to the Ash dyke through pipeline in wet slurry mode.
 - 3.765 Ton E waste are disposed through authorized recyclers/reprocessors.

2) Liquid Hazardous waste:

• In this financial year, Used Oil-5.434 KL & Waste Oil-2.090 KL have been generated from process and disposed to authorized recycler as per norms of MoEF.

PART - G

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

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

- We are using effluent water generated from Cooling tower, DM plant, IBD tank for Ash handling system instead of fresh water from River Subarnarekha.
- Extensive tree plantation is under progress as a part of green belt development, which will control the impact of Air pollution and optimize the ambient temperature of surrounding areas.
- Twin flue stack with height of 275 m are provided as per the CPCB guidelines for better dispersion of emissions and keep the concentrations within JSPCB/CPCB specified standards.
- High efficiency Electrostatic precipitators (ESPs) are provided for control of dust emissions into flue gases.
- Dust suppression system is installed at Truck tippling area.
- Dust Extraction system along with bag Filters have been installed at Coal Silo, Coal bunker, Intermediate Silo & Ash Silo to arrest the fugitive emissions.
- Roof sheeting and side cladding in conveyor galleries and TPs are installed to control fugitive dust
- The plant is designed on COC of more than 5 which is helpful in water conservation which further lead to reduction in overall fresh water intake.

- Garland drain connected with coal settling pit are installed in the Coal Stockyards for the reutilize of coal containing water.
- Mist canyons are installed around the coal stock yard for the control of fugitive dust.
- Belt washing system, coal settling pits and waste water recovery system are installed at transfer house for the dust suppression and water recovery.
- Water spraying system is installed in ash pond area for controlling the ash fugitive emissions, if any.
- Effluent Treatment Plant (ETP) and Sewage Treatment Plants (STP) are installed to control water pollution.
- Rain Water harvesting is being practiced in the plant premises, which helps in ground water recharging.
- Good housekeeping is maintained within the plant premises.
 Because of the adaptation of aforementioned methods, the quality of emissions and discharges are maintained below the permissible limits prescribed by the MoEF&CC / CPCB / JSPCB.

PART - H

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

- APNRL is regularly monitoring ambient air, stack, noise level, water quality and soil quality in and around the plant premises. All the emissions and discharges are meeting the permissible limits prescribed by MoEF / CPCB / JSPCB. It is proposed to further strengthen the monitoring and reporting process.
- Ash Water Recovery System is installed for further reuse of ash water. Green belt development within plant premises is proposed to be accelerated.
- As per New Environment Norms, we are in process to install FGD system & DeNOx system for reducing level of SO2 and Oxide of Nitrogen in Flue gases.

PART - I

Any other particulars for improving the quality of the environment:

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

- 1. Received certification for ISO 9001:2008, ISO 14001: 2004 & ISO 18001:2007 from BSI.
- 2. Training on EMS to all employees and contract labors to create Environment awareness.
- 3. Green Belt development is under progress.
- 4. Only PUC certified vehicles are engaged.

- 5. Monitoring of Ambient air quality, Surface and ground water quality, stack monitoring, soil, Noise level is being done through MoEF & NABL accredited laboratory.
- 6. Full-fledged Environmental laboratory has been installed.
- 7. Installation of Online Effluent monitoring system has been completed.
- 8. Webhosting of online environment data on CPCB/SPCB website have been completed.
- 9. Electronics Display board is provided at the main gate for public data display.
- 10. Audit by recognized organization i.e. ERM has been conducted to improve Environmental & Social Management system (EMS).
- 11. Celebration of Environmental promotional activities (Environment day, Earth Day, Water day, Ozone day).
- 12. Remote calibration facility of CEMS has been completed.

13. Solar light system has been installed in plant premises.

Date: 19/09/2022

Signature Name

Designation Address Kamlesh Kumar

Sr. Manager- Environment

Adhunik Power & Natural Resources

Limited, Village : Padampur Dist: Saraikela-Kharsawan –

832 402. Jharkhand



YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by: Certified by: ~

NABL accredited testing laboratory vide certificate Number TC-4032 Jharkhand State Pollution Control Board (JSPCB) ISO 9001:2015 & ISO 45001:2018



Test Certificate

ULR (Unique	Lab Report) No.			T	С	4	0	3	2	2	2	0	0	0	0	0	4	8	5	F
Discipline Chemical Group Pollution & Environment			S	ample	Desc	ripti	on		W	Waste Water / Effluent Water										
Report Relea	ase Date	31× Marci	1, 2022	?	***************************************			R	eport	D		*******		YE	BAEE	220:	322-1	83133	- WV	V01
W. Order/ JS	SPCB App. No.	30300057	81	***************************************		************		Work Order Date 18.12.2021												
Type of Indu	istry(if any)	Thermal F	ower.	Plant	a ja l			J	ob coc	e/ Re	of, no	١,	() 	YE	AEE	JWAJ	LWI	Mar-22	1/18	
Sampling Da	100 - 100 -	M/s Adhi VillPad Seraikela 24/03/202	ampur ı-Khar	, PG	CIL	S, Ka	ndra-	8324	02,		nle c	ollec	tion	T Rv	ΥRΔ	EEL T	eam	<u> </u>	gille.	
Sampling Pr	····	IS: 3025	Part-1) 198	7, R-	2003		_	Mode of sample collection Sample Code					220324-WW-A01			, ())			
Sampling Lo	ecation	Effluent T	reatm	ent P	lant	Outle	ť	S	Sampling Source			Effluent Water								
Sample pkg.	Condition	Sealed Pa	ck in f			/	3000 ml													
Meteorologic	cal Cond. of Field	W,C,- Cle	ar			***************************************	vañ.	RH % - 45			Te	mp	31ºC		••••••		. 15.			
Sample rece	ipt Date	24/03/202	2	Anal	ysis	Start	ed on	24	1/03/20	22		An	alvsi	con	nplete	d on	30	/03/20	22	

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

SI	Parameter	Test Method	Units	MU %	Results	Limits
1.	pH value	IS 3025 (P-11):2002	рН	2.53	8.25	5.5 – 9.0
2.	Temperature	IS 3025 (P-09)	°C	1.55	29.6	**
3.	Total suspended solids	IS 3025 (P-17):2012	mg/l	8.26	16.0	100
4.	Chloride (as CI)	IS 3025 (P-32):2003	mg/l	3.44	13.4	**
5.	BOD	IS 3025 (P-44):2009	mg/l	6.85	16.0	30
6.	COD	IS 3025 (P-58):2006 *	mg/l	4,02	120.0	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)	3
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	80.0	5
11.	Sulphate (as SO ₄ ²⁻)	IS 3025 (P-24):2003	mg/l	4.37	14.8	

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

Remarks	Sample compiles with prescribed limits.				
	All disputes are subjected to the Ranchi Jurisdiction.				
	The liability of the laboratory is limited to the invoiced amount.				
	The samples collected shall be destroyed after 15 days from the date of issue of the	certificate unless specified otherwise			
	This report cannot be reproduced, except when in full, without the written permission	n of the CEO.			
notes	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.				
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			
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).			
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.				
Limit is specified as	Environmental (Protection) Rule – 1986.				

Sample Drawn By Tested By

Angad Munda

Shivani Kumari Singh (Lab Analyst)

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		Antun 183/2		18	313/22
	• 3,	Verified by		Issued I	
		Brij Nandan Kumar		Umesh D	las -
L	***************************************	Section In-Charge		Technical M	enager

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical &
Environmental Environment

Technical Manager
Yugantar Bharati Analytical &
Email of the Engineering Laboratory

Branch Office : - Jamshedpur | Dhanbad | Hazaribag | Pakur |
Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand

Ph: 09835-97960, 098357-86677, Email - ybaeel@gmail.com; Web - https://ybaeel.in







YUGANTAR BHARATI ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

NABL accredited testing laboratory vide certificate Number TC-4032
 Jharkhand State Pollution Control Board (JSPCB)
 ISO 9001:2015 & ISO 45001:2018



Test Certificate

Accredited by:

Certified by:-

ULR (Unique Lab Report) No.	T C 4	3 2 2 2 0 0	0 0 0 4 8 6 F			
Discipline Chemical	Group Pollution & Environm	ent Sample Description	Waste Water / Effluent Water			
Report Release Date	31st March, 2022	Report ID	YBAEEL-220322-183133- WW02			
W. Order/ JSPCB App. No.	3030005781	Work Order Date	18.12.2021			
Type of Industry(If any)	Thermal Power Plant	Job code/ Ref. no.	YBAEEL/WA/L/W/Mar-22/19			
Report Issue to	M/s Adhunik Power & Natural VillPadampur, PGCILS, Kand Seraikela-Kharsawan, Jharkh	ra-832402,				
Sampling Date	24/03/2022	Mode of sample collection	By YBAEEL Team			
Sampling Protocol	IS: 3025 (Part-1) 1987, R-2003	Sample Code	220324-WW-A02			
Sampling Location	Sewage Treatment Plant Outlet	Sampling Source	Sewage Water			
Sample pkg. Condition Sealed Pack in PP Bottle Sam		Sample Quantity	3000 ml			
Meteorological Cond. of Field	W.C Clear	RH % - 43	Temp 31°C			
Sample receipt Date	24/03/2022 Analysis Started	on 24/03/2022 Analysis	s completed on 30/03/2022			

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

Parameter	Test Method	Units	MU %	Results	Limits
pH value	IS 3025 (P-11):2002	рН	2.53	7.20	6.5-9.0
Temperature	IS 3025 (P-09)	•C	1.55	29.4	***
Total suspended solids	IS 3025 (P-17):2012	mg/l	8.26	62.0	100
BOD	IS 3025 (P-44):2009	mg/l	6.85	20.0	30
Oil and grease	IS 3025 (P-39):2003	mg/l	14.6	BDL (MDL 4.0)	
Chloride (as CI)	IS 3025 (P-32):2003	mg/l	3.44	12.49	
	pH value Temperature Total suspended solids BOD Oil and grease	pH value IS 3025 (P-11):2002 Temperature IS 3025 (P-09) Total suspended solids IS 3025 (P-17):2012 BOD IS 3025 (P-44):2009 Oil and grease IS 3025 (P-39):2003	pH value IS 3025 (P-11):2002 pH Temperature IS 3025 (P-09)	pH value IS 3025 (P-11):2002 pH 2.53 Temperature IS 3025 (P-09) %C 1.55 Total suspended solids IS 3025 (P-17):2012 mg/l 8.26 BOD IS 3025 (P-44):2009 mg/l 6.85 Oil and grease IS 3025 (P-39):2003 mg/l 14.6	pH value IS 3025 (P-11):2002 pH 2.53 7.20 Temperature IS 3025 (P-09) %C 1.55 29.4 Total suspended solids IS 3025 (P-17):2012 mg/l 8.26 62.0 BOD IS 3025 (P-44):2009 mg/l 6.85 20.0 Oil and grease IS 3025 (P-39):2003 rng/l 14.6 BDL (MDL 4.0)

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	testino areas as per IS 196 196	6 (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 CEO.					
	The samples collected shall be destroyed after 15 days from the date of issue of the cell	rtificate unless specified otherw	ise			
	The liability of the laboratory is limited to the invoiced amount.		5 - 1 × 5 2 2			
	All disputes are subjected to the Ranchi Jurisdiction.		5.00			
Remarks	Sample compiles with prescribed limits.	6.00				

Sample Drawn By

Angad Munda

Tested By

Shivani Kumari Singh (Lab Analyst)

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	31631		331312	
·	Verified by		Issued by	***************************************
	Brij Nandan Kumar		'Umesh Das	**************************************
	Section In-Charge		Teçhnical Manager	
	A 41 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

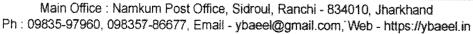
Authorized Signatory
Chemical Section
Yugantar Bharoti Analytical &
Environment | Englishment Laboratory

Technical Manager

Yugantar Bharati Analytical &
Environmental Engineering Laboratory



Branch Office : - Jamshedpur Dhanbad Hazaribag Pakur







YUGANTAR BHARATI ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by: -Certified by:-

NABL accredited testing laboratory vide certificate Number TC-4032 Jharkhand State Pollution Control Board (JSPCB)

ISO 9001:2015 & ISO 45001:2018



Test Certificate

ULR (Unique	Lab Report) No.		T	C	4	0	3	2	2 .	2	0	0	0	0	0	4	8	1	F
Discipline	Chemical	Group	Atm	iosph	eric l	olluti	on	Sam	ple [Desc	riptic	n	Stat	onar	y Sou	rce E	missio	n	•
Report Rele	ase Date	31st March, 2	022				******************************	Rep	ort IC)			YBA	EEL-	22032	2-18:	3133- S	1	***************************************
W. Order/ JS	SPCB App. No.	3030005781						Wor	k Or	der	Date		18.1	2.202	1			🕬	
Type of Indu	ustry(If any)	Thermal Pow	er Plan	ıt)		Job	code	Re	ef. no		YBA	EEL	WA/L	A/Ma	r-22/38	}	
Report Issue	e to	M/s Adhuni VillPadam Seraikela-K	pur, Po	GCIL	S, Ka	ndra	832		₋td.									y Ás	38E
Sampling Pe	eriod	21/03/2022		50 1 1		M	ode	of san	nple	colle	ection	1	В	y YBA	AEEL	Tean	1		-
Sampling Pr	rotocol	IS: 11255 & C	PCB G	uidel	ine (L	.ats/80	0/201	3-14)	-	************				1.95					
Meteorologi	cal Cond. of Field	W.C Clear				R	H %	- 45					T	emp	- 34%	;		·	NA.
Sample rece	eipt Date	23/03/2022	Ana	lysis	Start	ed on		23/03/	2022		Ar	alys	is con	nplete	ed on	2	3/03/20	22	

General Information

As observed while sam	pling	As reported by customer		
Location	Sampling port hole	Type of fuel Used	Coal	
Platform	Permanent	Quantity of Fuel Used(During Sampling)	176 Ton/Hr.	
Stack Description (Shape & Material)	Circular / RCC	Total production Capacity	274 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	
Running Oven during sampling (if any)	N/A	Total No. of Oven (if any)	N/A	

SI	Parameters	Test Method	Units	MU %	Results	Limits
1.	Stack gas Temperature	IS 11255 (Part 3)2008	k	**	403.0	
2.	Stack gas Velocity	IS 11255 (Part 3)2008	m/s		28.0	
3.	Volumetric Flow Rate	IS 11255 (Part 3)2008	Nm³/hr	••	100429.9	
3.	Particulate Matter (PM)	IS 11255 (Part 1)2009	mg/Nm³	2.12	43.5	50
4.	Sulphure Dioxide (SO ₂)	IS 11255 (Part 2)2009	mg/Nm³	3.06	1303.0	600
5.	Oxide of Nitrogen (as NO _x)	IS 11255 (Part 7)2005 RA 2012	mg/Nm³	2.70	725.0	450
7.	Carbon Monoxide (CO)	IS 13270:1992 (RA 2009)	%	-	BDL (MDL 0.2)	***

Emiss	ion Rate				<u> </u>
1.	Particulate Matter (PM)	IS 11255 (Part 1)2009	kg/hr,	43.53	
2.	Sulphure Dioxide (SO₂)	IS 11255 (Part 2)2009	kg/hr.	1303.45	**
3.	Oxide of Nitrogen (as NO _x)	IS 11255 (Part 7)2005 RA 2012	kg/hr.	725.0	

2.54.74	End of Report		
Limit is specified as	Environmental (Protection) Rule – 1985.		
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 s	ample and applicable parameter in Lal	s's Permanent Facility
notes	This report, in full or in part, shall not be used for advertising or as evidence in		
	This report cannot be reproduced, except when in full, without the written per	mission of the CEO.	
	The samples collected shall be destroyed after 7 days from the date of issue	of the certificate unless specified other	wise
	The liability of the laboratory is limited to the invoiced amount.		
그 그 그 기가 가게 하는 것이 되었다.	All disputes are subjected to the Ranchi Jurisdiction.		
Remarks	Sample compiles with prescribed limits, except parameter Sulphure Dic	oxide & Oxide of Nitrogen Serial No.	4 & 5.

Sample Drawn By - Angad Munda

- Amit Kumar Sinha (Lab Analyst)

Verified by Issued by Brij Nandan Kumar Umesh Das Section In-Charge Technical Manager

> **Authorized Signatory** Atmospharic Pollution Yugantar Bijarati Analytical & **Environmental Engineering Laboratory**

Technical Manager Yugantar Bharati Analytical & **Environmental Engineering Laboratory**

Branch Office : - Jamshedpur Dhanbad Hazaribag

Main Office: Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand Ph: 09835-97960, 098357-86677, Email - ybaeel@gmail.com; Web - https://ybaeel.in







YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by:

Jharkhand State Pollution Control Board (JSPCB)

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

Test Certificate

Discipline C	hemical	Group	Atmospheric Pollut	on Sample De	scription	Stationary Source	e Emission
Report Release	Date	31 st March, 2	2022	Report ID		YBAEEL-220322-	
W. Order/ JSP0		3030005781		Work Orde	r Date	18.12.2021	
Type of Industr	y(if any)	Thermal Power Plant Job code/ Ref. no.				YBAEEL/WA/L/A/Mar-22/38	
Report Issue to		VillPadam	k Power & Natural Re pur, PGCILS, Kandra harsawan, Jharkhand				
Sampling Period		21/03/2022	N N	llection	By YBAEEL Team		
Sampling Proto	col	IS: 11255 & (CPCB Guideline (Lats/8)				***
Meteorological	Cond. of Field	W.C Clear		H % - 45		Temp34°C	
Sample receipt	Date	23/03/2022	Analysis Started on	23/03/2022	Analys	is completed on	26/03/2022

General Information

As observed while sam	pling	As reported by customer		
Location	Sampling port hole	Type of fuel Used	Coal	
Platform	Permanent	Quantity of Fuel Used(During Sampling)	176 Ton/Hr.	
Stack Description (Shape & Material)	Circular / RCC	Total production Capacity	274 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	
Running Oven during sampling (if any)	N/A	Total No. of Oven (if any)	N/A	

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

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

Sample Drawn By

- Angad Munda

- Amit Kumar Sinha (Lab Analyst)

	Bran 23 7292	31312
• 2.8%. *	Verified by	issued by
	Brij Nandan Kumar	Umesh Das
***	Section In-Charge	Teçhnical Manager

Authorized Signatory Atmospharic Pollution Yugantar Elearati Analytical & Environmental Engineering Laboratory

Technical Manager Yugantar Bharati Analytical & **Environmental Engineering Laboratory**

Dhanbad Hazaribag Pakur 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



