

Ref: LAPL/PWR/HSE/PUB/L3/IOC/CECB/

Always inspiring
Date - 22.09.2022

To
Regional Officer,
Chhattisgarh Environment Conservation Board,
Korba, Chhattisgarh

Sub: - Environment Statement for 2x300 MW coal based thermal power plant for the FY 2021-22.

Dear Sir,

Please find enclosed herewith Environment Statement for 2x300 MW coal based power plant for the FY 2021-22 in the prescribed format Form-V.

This is for your information please.

Thanking you,

Yours Sincerely,

For Lanco Amarkantak Power Limited

Authorized Signatory

Encl: - Form- V

CC 1. The Member Secretary, CECB, Raipur

2. The Member Secretary, CPCB, Parivesh Bhavan East Arjun Nagar, Delhi-32.

3. The Additional Director, MoEFCC, Pariyavaran Bhawan, Jorbagh Road Aliganj, New Delhi.

LANCO AMARKANTAK POWER LIMITED

Corporate office: Lanco House Plot # 397, Udyog vihar Phase – 3, Gurgaon122 016, Haryana, India T+91-124-474 1000 F+91-124-474 1024

Registered office: Lanco House , Plot No-4, Software Units Layout , HITEC City, Madhapur , Hyderabad-500 081 ,A.P, India T+91-440-40-4009 0400 F+91-40-23116127 E info@lanogroup.com

ENVIRONMENTAL STATEMENT

OF

LANCO AMARKANTAK POWER LTD. Patadi, Korba C.G.

FINANCIAL YEAR ENDING THE 31ST MARCH, 2022



Prepared by: Lanco Amarkantak Power Ltd Patadi, Korba (C.G.)

ENVIRONMENTAL STATEMENT

FORM-V

(See Rule 14)

Environmental Statement for the Financial Year ending the 31st March 2022

PART-A

i. Name and address of the occupier

: Mr. Kothapalli Venkata Sudheer Babu Director Lanco Amarkantak Power Ltd

Patadi, Korba C.G.

ii. Industry Category

Primary - (STC Code) Secondary - (SIC Code)

: Red

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iii. Production Capacity (Power)

iv. Year of Establishment

: 2 X 300 MW (600 MW)

: 2009 (UNIT- I) & 2010 (UNIT- II)

v. Date of the last Environmental

Statement submitted

: September 2021



PART - B

WATER AND RAW MATERIAL CONSUMPTION

a. Water Consumption for the period (Apr'21 - March'22)

1. Process

: NIL m³/day

2. Cooling & Boiler Feed

: 25097.12 m³/day

3. Domestic

: 165.32m³/day

	Process Water Consumption per Unit of Product Output				
Name of Product	During the current year (2020-21)	During the current year (2021-22)			
Power Generation	2.176 M ³ /MWhr	2.30 M ³ /MWhr			

b. Raw Material Consumption

Name of Produ ct	Name of Raw	Unit	Consumption of Raw Ma	tion of Raw Material Per Unit of Output	
	Materials	Materials	During the current financial year (2020-21)	During the current financial year (2021-22)	
POWER	Fuel Oil	KL	395.31	557.81	
	Coal	MT	2999344	2764320	

PART - C

POLLUTION DISCHARGED TO ENVIRONMENT /UNIT OF OUTPUT

a. Water

Effluent quantity

: 2390.10 KL/day

Domestic effluent quantity : 99.40 KL/day

Average of Treated Effluent Monitoring Data for financial year 2021-22

Sr. No.	Parameters	Average of all Waste water Monitoring Results for Financial Year		Variance (exceeding allowed Quantity)
1	BOD	14.38	30 mg/L	No deviation
2	COD	45.87	250 mg/L	No deviation
3	TSS	34.44	100 mg/L	No deviation
4	Oil & Grease	<1.0	10 mg/L	No deviation





• Treated effluent is being 100% utilized in ash slurry preparation & sprinkling at coal handling plant. Plant is operating at Zero Discharge.

Average of Treated Sewage effluent Monitoring Data for financial year 2021-22

Sr. No.	Parameters	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
1	BOD	12.00	30 mg/L	No deviation
2	COD	37.00	250 mg/L	No deviation
3	TSS	26.00	100 mg/L	No deviation
4	Oil & Grease	<1.0	10 mg/L	No deviation

• Treated domestic effluent is being 100% utilized in horticulture & plantation inside the residential premises.

b. Air

		Stack 1	Emissions & Pollution I	Load (2021–22)	
Sr. No.	Stack Attac hed to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	D 11	SPM mg/Nm³	39.71	50 mg/Nm ³	No deviation
1	Boiler Unit #	SO_2 mg/Nm ³	733.69	600 mg/Nm ³	184.35 mg/Nm3
		NOx mg/Nm³	261.89	450mg/Nm ³	No deviation

		Stack	Emissions & Pollution 1	Load (2021-22)	
Sr. No.	Stack Attac hed to	Pollutant	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	D 11	SPM mg/Nm³	43.12	50 mg/Nm ³	No deviation
1	Boiler Unit # II	SO ₂ mg/Nm ³	810.10	600 mg/Nm ³	192.33 mg/Nm3
		NOx mg/Nm³	288.25	450mg/Nm ³	No deviation



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		DG Stack #	#1 Emissions & Pollutio	on Load (2021-22)	
Sr. No.	Stack Attac hed to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	DO	Particulate Matter	36	75 mg/Nm ³	No deviation
1	DG No.#	Carbon monoxide	41	150 mg/Nm ³	No deviation
	1	Oxide of Nitrogen	215	710 mg/Nm ³	No deviation

		DG Stack	#2 Emissions & Pollut	tion Load (2021–22)
Sr. No.	Stac k Atta ched to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	DG	Particulate Matter	38	75 mg/Nm ³	No deviation
1	No.#	Carbon monoxide	44	150 mg/Nm ³	No deviation
II	11	Oxide of Nitrogen	224	710 mg/Nm ³	No deviation

c. Ambient Air Quality Monitoring (2021-22)

Sr. No.	Parameters	Average of all Ambient Air Quality Results for Financial Year	Maximum Permissible Limit (Annual avg.)	Variance (exceeding allowed Quantity)
1	PM-10	52.0	60 μg/Nm ³	No deviation
2	PM-2.5	27.3	40 μg/Nm ³	No deviation
3	SO_2	17.6	50 μg/Nm ³	No deviation
4	NOx	17.6	40 μg/Nm ³	No deviation

d. Ambient Noise Level (2021-22)

Sr. No.	Noise Level Monitoring	Average of all Ambient Air Noise Results for Financial Year		Variance (exceeding allowed
		·		Quantity)
1	Noise Level-Day	58.79	75 dB(A)	No deviation



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Noise Level- Night	53.79	70 dB(A)	No deviation
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PART-D

As specified under Hazardous Waste (Management & Handling & Trans-boundary movement rules) Amendment Rules 2008, Amended 2017

Sr. No.		Total Quantity (Liters)		
	Hazardous Wastes	During the current financial year (2020–21)	During the current financial year (2021–22)	
1.	Used Oil	5212	4681	
2.	Waste Oil	-	-	

PART - E SOLID WASTES

Sr. No.	Details	2020-21	2021–22
1.	Bottom Ash	231306.612 MT	221396.44 MT
2.	Fly Ash	925226.448 MT	885585.77 MT

PART-F

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

A. Non Hazardous Solid Waste

Solid Waste generation

Total FLY Ash Generated :

Cumulative Fly ash utilization (FY)

Practice Adopt

: Fly ash

1106982.2 MT

829710.93 MT

6297 10.93 WII

: Supplied to cement industries, Road

projects, land development and

brick manufacturing units for

utilization.

Hazardous Liquid Waste:

Waste Generation : Used Oil
Total Used Oil Generation : 4.681KL
Cumulative Used Oil Disposal (FY) : 4.681KL

Practice Adopted : Reprocessed thorough authorized

recycler.





PART - G

Impact of pollution control measures on conservation of natural resources and consequently on the cost of production.

- 1. The treated water from the CMB and cooling tower blow down are used in ash slurry preparation.
- 2. The treated water from sewage treatment plant is used for gardening & ash slurry purpose.
- 3. Specific water consumption has been maintained around $2.30~\mathrm{M}^3/\mathrm{MWHr}$ against stipulated limit of $3.5\mathrm{M}^3/\mathrm{MWHr}$.

PART - H

Additional measures/investment proposal for environmental protection including statement of pollution.

- 1. Online Environment data from CEMS, AAQMS and EQMS are being uploaded to the CPCB/CECB server.
- 2. Installation of PTZ camera as per CTO condition and data being uploaded at CPCB portal.
- 3. Greenbelt development carried out in plant premises by planting more than 5000 saplings.

4. Remedial measure taken for ash utilization

- MoU signed between LAPL and SECL for the supply of 5.81 lakh Cu.M fly ash to mine void of Manikpur OCM. Feasibility study report for transportation of ash to Manikpur OCM submitted to SECL. Ash transportation is expected to be started from November 2022.
- Made MOU/agreement with cement industries in CG with sharing cost of transportation of dry ash.
- Made MOU/Agreement with nearby fly ash brick manufacturing industries for free of cost supply of dry ash to nearby fly ash brick manufacturing units.
- Approached road project contractors to use fly ash for road project from our plants, as per norms of NHAI/PWD to use fly ash from nearby plants. NHAI allotted 5.55 lakh Cu.M of ash for supply in ongoing Korba Champa NHAI road project.
- Exploring nearby villages having low lying areas for land development and required leveling by ash filling.

<u>PART - I</u> Any other particulars for improving the quality of the environment

 Installation of PTZ camera at outlet of plant premises for monitoring of Zero liquid discharge.

KORBA WAY

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Environment awareness programs are conducted for all LAPL, Contractors employees and their families, nearby local community through different promotional activities, painting, drawing, and poster quiz competition etc. on the occasion of World Environment Day.

Knowledge sharing on Environmental issues /legal updates is also conducted inside the

plant for regular and contractor employees at regular time to time.

• Plantation carried out during Plantation "Mahabhiyaan" & World Environment Day/Week 2021 for 5000 saplings.

: Mr. Yenugula Dharaninder Name

Designation : Executive Director

Date : 22.09.2022

Address : Lanco Amarkantak Power Limited