

Ref: LAPL/PWR/HSE/PUB/L3/IOC/CECB/1878

Date -28.09.2023

To

Regional Officer, Chhattisgarh Environment Conservation Board, Korba, Chhattisgarh

**Sub:** - Environment Statement for Lanco Amarkantak Power Ltd. At Village- Pathadi, Dist. Korba, Chhattisgarh 2x300 MW coal based thermal power plant for the FY 2022-23.

Dear Sir,

Please find enclosed herewith Environment Statement for 2x300 MW coal based power plant for the FY 2022-23 in the prescribed format Form-V.

This is for your information please.

Thanking you,

Yours Sincerely,

For Lanco Amarkantak Power Limited

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Digitally signed by Yenugula Dharaninder Date: 2023.09.29

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**Authorized Signatory** 

Lanco Amarkantak Power Ltd. At Village- Pathadi, Dist. Korba, Chhattisgarh **Encl: - Form- V** 

CC 1. The Member Secretary, CECB, Raipur

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

#### LANCO AMARKANTAK POWER LIMITED

Corporate office: Lanco House Plot # 334, 4<sup>th</sup> Floor, Udyogvihar Phase – IV, Gurugram 122015, Haryana, India T+91-124-692 6200

Registered office: LancoHouse , 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@lancogroup.com

Project office: Village – Pathadi, P.O.-Tilkeja, Dist-Korba , Chhattisgarh-495 674 T+91-7759-279 938 F+91-7759-279 970

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# ENVIRONMENTAL STATEMENT

OF

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

FINANCIAL YEAR ENDING THE 31ST MARCH, 2023

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 2023

#### PART- A

Name and address of the occupier i.  $: Mr.\ Kothapalli Venkata Sudhir babu$ 

Director Lanco Amarkantak Power Ltd

Patadi, Korba C.G.

ii. Industry Category

: Red

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

Production Capacity (Power) iii. :2 X 300 MW (600 MW)

iv. Year of Establishment :2009 (UNIT-I) & 2010 (UNIT-II)

Date of the last Environmental v.

Statement submitted : 22th September 2022





#### PART - B

### WATER AND RAW MATERIAL CONSUMPTION

### a. Water Consumption for the period (Apr'22 - March'23)

1. Process

: NIL m³/day

2. Cooling & Boiler Feed

: 11823.12 m<sup>3</sup>/day

3. Domestic

: 179.78 m3/day

	Process Water Consumption per Unit of Product Output		
Name of Product	During the Last year (2021-22)	During the current year (2022-23)	
Power Generation	2.30 M <sup>3</sup> /MWhr	2.47 M³/MWhr	

#### b. Raw Material Consumption

Name of Produ ct	Name of Raw	Unit	Consumption of Raw Material Per Unit of Outp				
	Materials		During the Last financial year (2021-22)	During the current financial year (2022-23)			
POWER	Fuel Oil	KL	557.81	414.42			
	Coal	MT	2764320	2444904			

#### PART - C

### POLLUTION DISCHARGED TO ENVIRONMENT /UNIT OF O

a. Water

Effluent quantity

: 2146.77 KL/day

Domestic effluent quantity : 99.14 KL/day

#### Average of Treated Effluent Monitoring Data for financial year 2022-23

	Sr.No.	Parameters	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
	1	BOD	17.92	30 mg/L	No deviation
	. 2	COD	54:88	250 mg/L	No deviation
•	3	TSS	31.38	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 2022-23

Sr.No.	Parameters	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
1	BOD	18.63	30 mg/L	No deviation
2	COD	54.13	250 mg/L	No deviation
3	TSS	35.04	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 E	missions & Pollution L	Load (2022-23)	
Sr.No	Stack Attache d to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
		SPM mg/Nm³	43.01	50 mg/Nm <sup>3</sup>	No deviation
1	Boiler Unit # I	SO <sub>2</sub> mg/Nm³	803.88	600 mg/Nm <sup>3</sup>	203.88 mg/Nm3
		NOx mg/Nm³	279.40	450mg/Nm <sup>3</sup>	No deviation

W. W.					
		Stack E	missions &Pollution I	Load (2022-23)	
Sr.No.	Stack Attac hed to	Pollutant	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	Boiler	SPM mg/Nm³	41.87	50 mg/Nm <sup>3</sup>	No deviation
1	Unit #	$SO_2$ mg/Nm <sup>3</sup>	808.46	600 mg/Nm <sup>3</sup>	208.46 mg/Nm3
	11	NOx mg/Nın³	273.25	450mg/Nm³	No deviation





		DG Stack	#1 Emissions & Pollution	1 Load ( 2022-23)	
Sr.No	Stack Attach ed to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
		Particulate Matter	37.50	75 mg/Nm <sup>3</sup>	No deviation
1	DG No.# I	Carbon monoxide	36.50	150 mg/Nm <sup>3</sup>	No deviation
		Oxide of Nitrogen	218	710 mg/Nm <sup>3</sup>	No deviation

	DG Stack #2 Emissions & Pollution Load (2022-23)						
Sr.No	Stack Attach ed to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)		
		Particulate Matter	37	75 mg/Nm <sup>3</sup>	No deviation		
1	DG No.# II	Carbon monoxide	41	150 mg/Nm <sup>3</sup>	No deviation		
		Oxide of Nitrogen	221	710 mg/Nm <sup>3</sup>	No deviation		

## c. Ambient Air Quality Monitoring (2022-23)

Sr.No.	Parameters	Name of Location	Average of all Ambient Air Quality Results for Financial Year	Maximum Permissible Limit (Annual avg.)	Variance (exceeding allowed Quantity)
		Ash Pond	54.70		
		Switch Yard	56.12		
1000		DM Plant	54.25		
		Admin. Bldg.	56.12	60 μg/Nm3	No deviation
1	PM-10	Pathadi	52.89	Aller Carlo	140 deviadon
		Saragbundia	53.98		
		Sandel	52.38	4	61 - 32
		Khoddel	53.10		
	14	Ash Pond	28.76		112 1 1
		Switch Yard	29.58	40 μg/Nm3	13
= r		DM Plant	28.25		
		Admin. Bldg.	29.58		No deviation
2	PM-2.5	Pathadi	26.71		No deviation
		Saragbundia	27	in the same of the	
		Sandel	27~	,	
	Khoddel	27.00			
· 727 -		Ash Pond	18.90		
1 00 00		Switch Yard	18.45		
	SO <sub>2</sub> D	DM Plant	17.12	50 μg/Nm3 No	No deviation
3		Admin. Bldg.	18.45		
		Pathadi	18.24		
		Saragbundia	19		ONA

		Sandel	17.05			60 - C. R. J. S.J.
		Khoddel	19.96			
		Ash Pond	22.19	·		
		Switch Yard	21.68			
		DM Plant	20.42	, e		
4	NOx	Admin. Bldg.	21.68		40 μg/Nm3	
	TVCX	Pathadi	21.55		1.6/ =	No deviation
		Saragbundia	22			
	V	Sandel	20.33			
		Khodael	21.23			

#### d. Ambient Noise Level (2022-23)

Sr.No.	Name of Location	Average of all Ambient Financial Year	Variance (exceeding	
		Maximum Permissible Lim	it	allowed
		Noise Level-Day 75 dB(A)	Noise Level-Night 70 dB(A)	Quantity)
1	Colony	48.50	45.22	,
2	Gate No. 1	51.82	48.24	
3	Gate No. 2	51.68	49.05	
4	Admin. Building	49.44	47.84	
5	LTTL Admin. Building	61.65	53:57	
6	Switch yard	60.39	56.72	No deviation
7	C.H.P.	61.15	59.77	110 deviation
8	Ash Dyke	55.16	53.16	
9	DM Plant	62.33	60.07	
10	Chlorination	62.89	59.92	
11	Store Building	67.32	62.39	•"
12	Service Building	64.57	62.01	

#### PART-D

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

Sr. No.		Total Quantity (Litters)		
	Hazardous Wastes	During the current financial year (2021–22)	During the current financial year ( 2022–23)	
1.	Used Oil	4681	8146	
2.	Waste Oil	€		





#### PART - E SOLID WASTES

Sr.	Details	2021–22	2022-23
No.	Bottom Ash	221396.44 MT	2,07,289.23 MT
1.	Fly Ash	885585.77 MT	8,29,156.91 MT
2.			3 3 3 3

#### PART-F

<u>Please specify the characterization (in terms of composition and quantum) of hazardous as</u> 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

: 10, 36,446.14 MT

: 14, 62,739.01 MT

: Supplied to cement industries, Road Projects, for Land Development and to Fly

Ash Brick Plants.

Hazardous Liquid Waste:

Waste Generation

Total Used Oil Generation : Cumulative Used Oil Disposal (FY) :

Practice Adopted

**Used** Oil

8.146 KL

8.146 KL

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 & Road sprinkling.
- 3. Specific water consumption has been maintained around 2.47  $\rm M^3/MWHr$  against stipulated limit of 3.5  $\rm M^3/MWHr$ .

#### 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 4 NO's of Rain water harvesting structures as per CTO condition and report submit to State pollution control board.
- 3. Greenbelt development carried out in plant premises by planting more than 5000 saplings in monsoon 2022-23.

#### 4. Remedial measure taken for ash utilization

- Supplying Dry Fly Ash to 3 Cement Companies in Chhattisgarh on sharing basis of transportation cost.
- Started supplying Fly Ash to Manikpur OCM for mine backfilling from June 2023. Ash
  qty. of 5.81 Lakhs Cu.M allotted by SECL to LAPL for mine backfilling work in
  Manikpur OCM.
- Supplying fly ash to nearby Brick Manufacturing Units on free of cost to their door step.
- Approached road project agencies (NHAI, State PWD) to use fly ash from our Ash Dyke for their road project work.
- 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 4 NO's of Rain water harvesting structures as per CTO condition and report submit to State pollution control board.
- Environment awareness programs are conducted for all LAPL, Contractors employees and their families, nearby local community through different promotional activities, cotton bag distribution, Ground and Drinking Water analysis, Cleanness drive, 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 2022-23 for 5000 saplings.

Name : Mr. Yenugula Dharaninder

Designation : Executive Director

Date : 28.09.2023

Address : Lanco Amarkantak Power Limited

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