

Ref: LAPL/PWR/HSE/PUB/L3/IOC/CECB/ 1327

13.09.2021

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

Sub: - Environment Statement for 2x300 MW coal based thermal power plant for the FY 2020-21.

Dear Sir,

Please find enclosed herewith Environment Statement for 2x300 MW coal based power plant for the FY 2020-21 in the prescribed format Form-V.

This is for your information please.

Thanking you,

Your Sincerely,

For LancoAmarkantak Power Limited

**Authorized Signatory** 

2-26.K



Enci: - 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, PariyavaranBhawan, Jorbagh Road Aligani, New Delhi

#### LANCO AMARKANTAK POWER LIMITED

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

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

www.lancogroup.com Corporate Identity NumberCIN- U40109TG2001PLC036265

# ENVIRONMENTAL STATEMENT

### **OF**

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

FINANCIAL YEAR ENDING THE 31ST MARCH, 2021

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 31\* March 2021

### PART- A

Name and address of the occupier : Mr. Kothapalli Venkata Sudhirbabu i

DirectorLancoAmarkantak Power LtdPatadi,

Korba C.G.

ii **Industry Category** 

Primary - (STC Code)

: Red

Secondary - (SIC Code)

iii Production Capacity (Power)

: 2 X 300 MW (600 MW)

iv Year of Establishment

 $\mathbf{v}$ 

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

Date of the last Environmental

Statement submitted

: September 2020



### PART - B

### WATER AND RAW MATERIAL CONSUMPTION

### a. Water Consumption for the period (Apr'20 - March'21)

1. Process

: NIL m³/day

2. Cooling & Boiler Feed

: 26930.35 m<sup>3</sup>/day

3. Domestic

: 187m<sup>3</sup>/day

Name of D. 1.	Process Water Consumption per Unit of Product Output		
Name of Product	During the previous year (2019-20)	During the current year (2020-21)	
Power Generation	2.34M³/MWhr	2.176 M <sup>3</sup> /MWhr	

### b. Raw Material Consumption

Name of Product	Name of Raw	Unit	Consumption of Raw M	laterial Per Unit of Output
	Materials	Onit	During the previous Financial Year (2019-20)	During the current financial year (2020-21)
POWER	Fuel Oil	KL	521.21	395.31
	Coal	MT	2418174	2999344

### PART - C

### POLLUTION DISCHARGED TO ENVIRONMENT /UNIT OF OUTPUT

a. Water

Effluent quantity

: 2916.34 KL/day

Domestic effluent quantity

: 99.8 KL/day

### Average of Treated Effluent Monitoring Data for financial year 2020-21

Sr. No.	Parameters	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
1	BOD	14.55	30 mg/L	No deviation
2	COD	42.33	250 mg/L	No deviation
3	TSS	41.54	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 2020-21

Sr. No.	Parameters	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
1	BOD	13.58	30 mg/L	No deviation
2	COD	43.57	250 mg/L	No deviation
3	TSS	37.79	100 mg/L	No deviation
4	Oil & Grease	<1.0	10 mg/L	No deviation

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

### b. Air

		Stack	<b>Emissions &amp; Pollution</b>	Load ( 2020-21)	
Sr. No.	Stack Attache d to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	Boiler	SPM mg/Nm³	44.13	50 mg/Nm <sup>3</sup>	No deviation
1	Unit #	SO <sub>2</sub> mg/Nm <sup>3</sup>	784.35	600 mg/Nm <sup>3</sup>	184.35 mg/Nm3
	1	NOx mg/Nm³	275.02	450mg/Nm³	No deviation

		Stack	<b>Emissions &amp; Pollution</b>	Load ( 2020-21)	
Sr. No.	Stack Attache d to	Pollutant	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	Da:1au	SPM mg/Nm³	44.96	50 mg/Nm³	No deviation
1	Boiler Unit #	SO <sub>2</sub> mg/Nm <sup>3</sup>	792.33	600 mg/Nm <sup>3</sup>	192.33 mg/Nm3
	11	NOx mg/Nm³	277.68	450mg/Nm³	No deviation





		DG Stack	#1 Emissions & Polluti	on Load ( 2020-21)	
Sr. No.	Stack Attach ed to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	DG	Particulate Matter	38	75 mg/Nm³	No deviation
1	No.#	Carbon monoxide	43	150 mg/Nm <sup>3</sup>	No deviation
	1	Oxide of Nitrogen	242	710 mg/Nm <sup>3</sup>	No deviation

	.,	DG Stack	#2 Emissions & Pollu	tion Load ( 2020-21	.)
Sr. No.	Stack Attac hed to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
	DG	Particulate Matter	35	75 mg/Nm <sup>3</sup>	No deviation
1	No.#	Carbon monoxide	45	150 mg/Nm <sup>3</sup>	No deviation
	11	Oxide of Nitrogen	238	710 mg/Nm <sup>3</sup>	No deviation

### c. Ambient Air Quality Monitoring

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	51.1	60 μg/Nm <sup>3</sup>	No deviation
2	PM-2.5	25.6	40 μg/Nm <sup>3</sup>	No deviation
3	SO <sub>2</sub>	16.3	50 μg/Nm <sup>3</sup>	No deviation
4	NOx	17.7	40 μg/Nm³	No deviation

### d. Ambient Noise Level

Sr. No.	Noise Level Monitoring	Average of all Ambient Air Noise Results for Financial Year		Variance (exceeding allowed Quantity)
1	Noise Level-Day	55.79	75 dB(A)	No deviation
2	Noise Level- Night	51.79	70 dB(A)	No deviation





#### **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 previous financial year ( 2019–20)	During the current financial year ( 2020-21)	
1.	Used Oil	4626	5212	
2.	Waste Oil	-	-	

### PART - E **SOLID WASTES**

Sr. No.	Details	2019-20	2020-21
1.	Bottom Ash	192157.65 MT	231306.612 MT
2.	Fly Ash	768630.60 MT	925226.448 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

: 1156533.06 MT

: 515880 MT

Supplied to cement industry and brick manufacturing units for

utilization.

Hazardous Liquid Waste:

Waste Generation

Total Used Oil Generation

Cumulative Used Oil Disposal (FY)

Practice Adopted

Used Oil

5.212 KL

5.212 KL

Reprocessed thorough authorized

recycler.





### 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  $2.176 \,\mathrm{M}^3/\mathrm{MWHr}$  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. Greenbelt development carried out in plant premises by planting more than 5000 saplings.
- 3. Remedial measure taken for ash utilization
  - Request for open cast mines void allocation is pending to SECL authorities for ash filling. Already MS, CECB, Raipur ordered to ash dispose in manikpur OCM.
  - Made MOU/agreement with cement industries in CG with sharing cost of transportation of dry ash.
  - Made MOU/Agreement with brick industries for free supply of dry ash.
  - Approached road project contractors to use fly ash for road project from our plants, as per norms NHAI/PWD to use fly ash from nearby plants
  - Exploring nearby villages having low lying areas and required leveling by ash filling.
    PART I

### 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.
- 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.

y. De - lu.

Name : Mr. Yenugula Dharaninder

Designation : Executive Director

Date : 13.09.2021

Address : Lanco Amarkantak Power Limited

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