

Ref: LAPL/PWR/HSE/PUB/L3/IOC/CECB/1461/2014.09.20

Date: 20.09.2014

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

**Sub:** - Environment Statement for 2x300 MW, Village Pathadi, Korba Coal Based Thermal Power Plant for the FY 2013-14

Dear Sir,

Environment Statement for 2x300 MW Coal Based Thermal Power Plant for the FY 2013-4 under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 is attached in the prescribed format Form-V.

This is for your kind information please.

Thanking you,  
For Lanco Amarkantak Power Limited

  
Alok Mukherjee  
Executive Director



CC: The Member Secretary, Chhattisgarh Environment Conservation Board, Raipur  
CC: The Member Secretary, Central Pollution Control Board, New Delhi  
CC: The Additional Director, MoEF, Regional office, Bhopal

**Lanco Amarkantak Power Limited**  
(Formerly Lanco Power Limited)

**Corporate Office:** Lanco House, Plot # 397, Udyog Vihar, Phase-3, Gurgaon-122 016, New Delhi Region, India.

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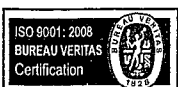
**Registered Office:** Lanco House, Plot No. 4, Software Units Layout, HITEC City, Madhapur, Hyderabad-500 081, A.P., India.

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**Project Office:** Village Pathadi, P.O. - Tilkeja, District - Korba, Chhattisgarh - 495 674

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# **ENVIRONMENTAL STATEMENT**

**OF**

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

**FINANCIAL YEAR ENDING THE 31<sup>ST</sup> MARCH, 2014**

**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<sup>st</sup> March 2014

### PART- A

- |     |  |   |  |
|-----|--|---|--|
| I   | Name and address of the Occupier/Factory Manager   | : | Mr. Alok Mukherjee<br>Executive Director<br>Lanco Amarkantak Power Ltd<br>Patadi, Korba C.G. |
| ii  | Industry Category                                  |   |  |
|     | Primary - (STC Code)                               | : |  |
|     | Secondary - (SIC Code)                             | : |  |
| iii | Production Capacity (Power)                        | : | 2 X 300 MW (600 MW)  |
| iv  | Year of Establishment                              | : | 2009 (UNIT- I) & 2010 (UNIT- II)   |
| v   | Date of the last Environmental Statement submitted | : | 28 <sup>th</sup> September 2013  |

**PART - B**

**I. WATER AND RAW MATERIAL CONSUMPTION**

**a. Water Consumption for the period (Apr'13 - March'14)**

- |                          |                             |
|--------------------------|-----------------------------|
| 1. Process               | : NIL                       |
| 2. Cooling & Boiler Feed | : 19265 m <sup>3</sup> /day |
| 3. Domestic              | : 476 m <sup>3</sup> /day   |

Name of Product	Process Water Consumption per Unit of Product Output	
	During the previous year (2012-13)	During the current year (2013-14)
Power Generation	3.42 KL/MW	2.78 KL/MW

**b. Raw Material Consumption**

Name of Product	Name of Raw Materials	Unit	Consumption of Raw Material Per Unit of Output	
			During the previous Financial Year (2012-13)	During the current financial year (2013-14)
POWER	Fuel Oil	KL	2268.898	648.36
	Coal	MT	2387650.61	1591621

## **PART – C**

### **POLLUTION DISCHARGED TO ENVIRONMENT /UNIT OF OUTPUT**

#### **a. Water**

Effluent quantity : 2300 KL/day  
Domestic effluent quantity : 260 KL/day

#### **Average of Treated Effluent Monitoring Data for financial year**

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	53.68	250 mg/L	No deviation
3	TSS	45.86	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**

Sr. No.	Parameters	Average of all Waste water Monitoring Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
1	BOD	18.44	30 mg/L	No deviation
2	COD	53.92	250 mg/L	No deviation
3	TSS	52.68	100 mg/L	No deviation
4	Oil & Grease	<1.0	10 mg/L	No deviation

- Treated sewage effluent 100% utilized in horticulture & plantation.

**b. Air**

<b>Stack Emissions &amp; Pollution Load ( 2013-14)</b>					
Sr. No.	Stack Attached to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
1	Boiler Unit # I	SPM	44.63 mg/Nm <sup>3</sup>	50 mg/Nm <sup>3</sup>	No deviation
		SO <sub>2</sub>	337.09 mg/Nm <sup>3</sup>	-	No deviation
		NOx	165.26 mg/Nm <sup>3</sup>	-	No deviation

<b>Stack Emissions &amp; Pollution Load ( 2013-14)</b>					
Sr. No.	Stack Attached to	Pollutant	Average of all Waste water Monitoring Results for Financial Year	Actual Quantity of Pollutants (Kg/Day)	Variance (exceeding allowed Quantity)
1	Boiler Unit # II	SPM	Shut down	50 mg/Nm <sup>3</sup>	No deviation
		SO <sub>2</sub>	Shut down	-	No deviation
		NOx	Shut down	-	No deviation

<b>DG Stack Emissions &amp; Pollution Load ( 2013-14)</b>					
Sr. No.	Stack Attached to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
1	DG No.# I	Particulate Matter	36	-	No deviation
		Carbon monoxide	48	-	No deviation
		Oxide of Nitrogen	221	-	No deviation

<b>DG Stack Emissions &amp; Pollution Load ( 2013-14)</b>					
Sr. No.	Stack Attached to	Pollutant	Average of all Stack Monitoring Results for Financial Year	Maximum Permissible Limits	Variance (exceeding allowed Quantity)
1	DG No.# II	Particulate Matter	34	-	No deviation
		Carbon monoxide	52	-	No deviation
		Oxide of Nitrogen	235	-	No deviation

### c. Ambient Air Quality Monitoring

Sr. No.	<u>Parameters</u>	Average of all Ambient Air Quality Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
1	PM-10	44.62	100 µg/Nm <sup>3</sup>	No deviation
2	PM-2.5	20.81	60 µg/Nm <sup>3</sup>	No deviation
3	SO <sub>2</sub>	11.90	80 µg/Nm <sup>3</sup>	No deviation
4	NO <sub>x</sub>	20.46	80 µg/Nm <sup>3</sup>	No deviation

### c. Ambient Noise Level

Sr. No.	Noise Level Monitoring	Average of all Ambient Air Noise Results for Financial Year	Maximum Permissible Limit	Variance (exceeding allowed Quantity)
1	Noise Level-Day	53.7	75 dB(A)	No deviation
2	Noise Level-Night	56	70 dB(A)	No deviation

**PART-D**

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

Sr N o.	Hazardous Wastes	Total Quantity (Kg)	
		During the previous financial year (2012-13)	During the current financial year (2013-14)
1.	Used Oil	12000	15958
2.	Waste Oil	800	NIL

**PART - E**

**SOLID WASTES**

Sr. No.	Details	2012-13	2013-14
1.	Bottom Ash	232856 MT	151660 MT
2.	Fly Ash	833595 MT	526619 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.**

Non Hazardous Solid Waste  
Solid Waste generation : Ash (Fly ash & Bottom ash)  
Total FLY Ash Generated : 526619  
Cumulative Fly ash utilization : 374006



**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 is used in ash disposal.
2. The treated water from sewage treatment plant is used for gardening & ash slurry purpose.
3. Fly ash utilization increased up to 71% during this financial year

**PART - H**


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

1. Greenbelt development in 210 Acres during this financial year

**PART - I**

**Any other particulars for improving the quality of the environment**

1. Green Belt Development around the plant and surrounding areas
2. Real time online data transmission of stack and ambient air parameters to CPCB & CECB.

Signature: 

Name: Mr. Alok Mukherjee

Designation: Executive Director

Address: Lanco Amarkantak Power Limited

