

Ref: LAPL/PWR/HSE/PUB/L3/IOC/CECB/1699/2015.09.19

19.09.2015

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

Sub: - Environment Statement for 2x300 MW Coal based thermal power plant for the
FY 2014-15

Dear Sir,

Please find enclosed herewith Environment Statement for 2x300 MW coal based power plant for the FY 2012-13 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 in the prescribed format Form-V.

This is for your 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.

T: +91 40 4009 0400 F: +91 40 2311 6127 E: info@lancogroup.com

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ENVIRONMENTAL STATEMENT

OF

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

FINANCIAL YEAR ENDING THE 31ST MARCH, 2015

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

ENVIRONMENTAL STATEMENT

FORM-V
(See Rule 14)

Environmental Statement for the Financial Year ending the 31st March 2015

PART- A

- I Name and address of the occupier : Mr. Alok Mukherjee
Executive Director
Lanco Amarkantak Power Ltd
Pathadi, 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 : September 2014

PART - B

WATER AND RAW MATERIAL CONSUMPTION

a. Water Consumption for the period (Apr'14 – March'15)

- | | |
|--------------------------|--------------------------------|
| 1. Process | : NIL m ³ |
| 2. Cooling & Boiler Feed | : 16964.15 m ³ /day |
| 3. Domestic | : 376.38 m ³ /day |

Name of Product	Process Water Consumption per Unit of Product Output	
	During the previous year (2013-14)	During the current year (2014-15)
Power Generation	3.2 m ³ /MW	2.8 m ³ /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 (2013-14)	During the current financial year (2014-15)
POWER	Fuel Oil	KL	648.36	596.39
	Coal	MT	1591621	1589666

PART - C

POLLUTION DISCHARGED TO ENVIRONMENT /UNIT OF OUTPUT

a. Water

Effluent quantity : 2100 KL/day
Domestic effluent quantity : 185 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	18.84	30 mg/L	No deviation
2	COD	61.76	250 mg/L	No deviation
3	TSS	52.94	100 mg/L	No deviation
4	Oil & Grease	<1.0	10 mg/L	No deviation

- Treated effluent is being utilized 100% in ash slurry preparation & sprinkling at coal handling plant for fugitive emission control. Plant is operating at Zero Liquid 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	17.59	30 mg/L	No deviation
2	COD	50.33	250 mg/L	No deviation
3	TSS	45.0	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

Stack Emissions & Pollution Load (2014-15)					
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	46.3 mg/Nm ³	50 mg/Nm ³	No deviation
		SO ₂	222.6 mg/Nm ³	-	No deviation
		NOx	125.8 mg/Nm ³	-	No deviation

Stack Emissions & Pollution Load (2014-15)					
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 ³	--
		SO ₂	Shut down	-	--
		NOx	Shut down	-	--

DG Stack Emissions & Pollution Load (2014-15)					
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		-	--
		Carbon monoxide		-	--
		Oxide of Nitrogen		-	--

DG Stack Emissions & Pollution Load (2014-15)					
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		-	--
		Carbon monoxide		-	--
		Oxide of Nitrogen		-	--

c. Ambient Air Quality Monitoring

Sr No.	<u>Parameters</u>	Average of all Ambient Air Quality Results for Financial Year, $\mu\text{g}/\text{Nm}^3$	Maximum Permissible Limit, $\mu\text{g}/\text{Nm}^3$ (annual average)	Variance (exceeding allowed Quantity)
1	PM-10	32.63	60	No deviation
2	PM-2.5	20.80	40	No deviation
3	SO ₂	15.11	50	No deviation
4	NO _x	18.92	40	No deviation

D. Ambient Noise Level

Sr.No.	Noise Level Monitoring	Average of all Ambient Air Noise Results for Financial Year, dB(A)	Maximum Permissible Limit, dB(A)	Variance (exceeding allowed Quantity)
1	Noise Level-Day	59.6	75	No deviation
2	Noise Level-Night	57.7	70	No deviation

PART-D

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

Sr No.	Hazardous Wastes	Total Quantity (Kg)	
		During the previous financial year (2013-14)	During the current financial year (2014-15)
1.	Used Oil	15958	11232
2.	Waste Oil	-	-

PART - E

SOLID WASTES

Sr. No.	Details	2013-14	2014-15
1.	Bottom Ash	151660	140941
2.	Fly Ash	526619	528653

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 : 669594 MT
Cumulative Fly ash utilization : 476195 MT

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 system.
2. The treated water from sewage treatment plant is used for gardening and Horticulture
3. Fly ash utilization increased up to 90.08% during this financial year.
4. Specific water consumption has been brought down to 2.8 m³/ MW as comparison to that of 3.2 m³/MW during 2013-14.

PART - H

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

1. Greenbelt in 210 Acres developed
2. The CEMS and on-line effluent analyzer data uploaded to CPCB server.

PART - I

Any other particulars for improving the quality of the environment

1. Environment awareness programme during world environment week carried out in and around the plant including at colony for family members too.



Name: Mr. Alok Mukherjee
Designation: Executive Director
Address: Lanco Amarkantak Power Limited