

Ref: LANPL/Env St 12-13/ 2173

Dated: 10.09.2013

To,

The Member Secretary,
Uttar Pradesh Pollution Control Board,
PICUP Bhawan, Vibhuti Khand
Gomtinagar
LUCKNOW(UP)

Subject: Environmental Statement FY 2012-13

Ref: (I) Letter No F21564/C-9/Air Pollution/32/13 dated 4.04.2013 for CTO (Air) (II) Letter No F21565/C-9/Sah Jal/60/13 dated 4.04.2013 for CTO (Water).

Dear Sir,

Please find enclosed herewith Environmental Statement for the Financial Year 2012 – 13 for Lanco Anpara Power Ltd, Vill. Anpara ,Distt. Sonebhadra (U.P.) under the Rule 14 of Environment Protection Rules, 1986.

Hope you will find the attached Environment Statement and all supporting documents satisfactory to your requirements.

Yours Sincerely,

(A.K.Srivastava)

Sr. Vice President

12 .11 .09 17 3

Encl: As above

CC: Regional Officer, UP Pollution Control Board, Robertsganj, Sonebhadra (UP.)

ENVIRONMENTAL STATEMENT

FOR THE FINANCIAL YEAR

2012 - 2013

-Submitted By-

M/s LANCO ANPARA POWER LIMITED
ANPARA
Distt.- SONEBHADRA (U.P.)-231225

ENVIRONMENTAL STATEMENT FORM-V

(See Rule 14)

Environmental Statement for the Financial Year ending the 31st March 2013

PART- A

i Name and address of the occupier

: Raj Kumar Roy

Lanco Anpara Power Ltd.

Anpara, Sonbhadra (U.P.) - 231225

Industry Category ii

٧

Primary - (STC Code)

: Red Category

Secondary – (SIC Code)

iii Production Capacity (Power) iv

: 2X600 MW Electricity

Year of Establishment

: Commercial Operation of Unit#1 in Dec 2011 and

Unit #2 in Jan 2012

Date of the last Environmental

Statement submitted

: 14.09.2012

WATER AND RAW MATERIAL CONSUMPTION

a. Water Consumption for the period (Apr'12 - March'13)

1. Process

: 10181751 M³

2. Cooling & Boiler Feed

: 10463640 M³

3. Domestic

: 20321 M³

Name of Product	Process Water Consumption per Unit of Product Output		
	During the previous Financial Year (2011-12)	During the current Financial Year (2012-13)	
Electricity Generated (FY 2012-13) 3979.17 MU	6.24 Lit/KWH	5.19 lit/KWH	

b. Raw Material Consumption

Name of Product	Name of Raw	Un it	Consumption of Raw Mater	ial Per Unit of Output
Electricity Generated (FY	Materials		During the previous Financial Year (2011-12)	During the current financial year (2012-13)
2012-13) 3979.17 MU	Fuel Oil	KL	3.85 ml/ KWH	1.79 ml/ KWH
	Coal	MT	0.69 kg/ KWH	0.67 kg/ KWH

POLLUTION DISCHARGED TO ENVIRONMENT /UNIT OF OUTPUT

a. Water

Effluent quantity

:

1697 KL/day

Domestic effluent quantity

240

KL/day

System has been designed and the same is ensured for zero discharge and utilization in different areas including spraying & plantation.

Quality of Treated Effluent from Effluent Treatment Plant(ETP).

Parameters	Permissible Limits	Average Results
pH	6.5-8.5	8.2
BOD ₃ at 27°C	30 mg/l	22.8
COD	250 mg/l	74.0
TSS	100 mg/l	83.7
Oil & Grease	10 mg/l	0.5

II. Quality of Treated Sewage from Sewage Treatment Plant(STP).

Parameters	Permissible Limits	Average Results	
рН	6.5-8.5	7.6	
BOD₃ at 27°C	30 mg/l	18.8	
COD	250 mg/l	64.7	
TSS	100 mg/l	77.2	
Oil & Grease	10 mg/l	0.3	

III. Quality of Ash Pond Effluent.

Parameters	Permissible Limits	Average Results
рН	6.5-8.5	8.5
BOD ₃ at 27 ⁰ C	30 mg/l	5.7
COD	250 mg/l	15.6
TSS	100 mg/l	76.3
Oil & Grease	10 mg/l	0.4

b. Stack Emission Monitoring.

Stack Emissions & Pollution Load (Apr'12- Mar' 13)						
Sr. No.	Stack Attached to	Pollutant	Concentration of pollutants discharge (Mass/volume)	Percentage of Variation from prescribed standards with reasons.		
1		SPM	44.20 mg/NM ³	No Deviation		
2	Unit # I	SO ₂	753.67 mg/NM ³	-NA-		
3		NOx	290.83 mg/NM ³	-NA-		
1		SPM	42.80 mg/NM ³	No Deviation		
2	Unit # II	SO ₂	736.80 mg/NM ³	-NA-		
3		NOx	234.60 mg/NM ³	-NA-		

C. Ambient Air Quality Monitoring

PM10(ug/m3) Values					
Name of AAQ Station	Minimum	Maximum	Average	*Maximum Permissible Limit(ug/m3)	
AAQ-1, Audi Mod	51.0	90.0	87.4	100.0	
AAQ-2, Track Hopper	82.0	98.0	98.0	100.0	
AAQ-3, Near Boiler	80.0	93.0	88.7	100.0	
AAQ-4, Lanco Colony	49.0	91.0	65.8	100.0	
AAQ-5, Dibulganj	61.0	82.0	72.9	100.0	
AAQ-6, Kakri	54.0	86.0	73.1	100.0	

PM2.5(ug/m3)					
Name of AAQ Station	Minimum	Maximum	Average	*Maximum Permissible Limit(ug/m3)	
AAQ-1, Audi Mod	18.00	45.00	42.14	60	
AAQ-2, Track Hopper	38.00	54.00	53.78	60	
AAQ-3, Near Boiler	30.00	46.00	40.83	60	
AAQ-4, Lanco Colony	16.00	45.00	24.00	60	
AAQ-5, Dibulganj	18.00	35.00	27.36	60	
AAQ-6 , Kakri	17.00	39.00	30.36	60	

SOx (ug/m3)					
Name of AAQ Station	Minimum	Maximum	Average	*Maximum Permissible Limit(ug/m3)	
AAQ-1, Audi Mod	10.00	15.00	13.25	80	
AAQ-2, Track Hopper	11.00	16.00	13.96	80	
AAQ-3, Near Boiler	12.00	17.00	14.33	80	
AAQ-4 ,Lanco Colony	9.00	17.00	13.27	80	
AAQ-5, Dibulganj	9.00	16.00	13.27	80	
AAQ-6, Kakri	11.00	17.00	14.36	80	

NOx(ug/m3)					
Name of AAQ Station	Minimum	Maximum	Average	*Maximum Permissible Limit(ug/m3)	
AAQ-1, Audi Mod	11.00	22.00	15.00	80	
AAQ-2, Track Hopper	11.00	20.00	15.50	80	
AAQ-3, Near Boiler	11.00	20.00	15.08		
AAQ-4, Lanco Colony	12.00	18.00	14.73	80	
AAQ-5, Dibulganj	11.00	18.00		80	
AAQ-6, Kakri	12.00	22.00	13.64 15.55	80 80	

CO(mg/m3)						
	Minimum	Maximum	Average	*Maximum Permissible Limit(mg/m3)		
AAQ-1, Audi Mod	0.52	0.88	0.71	1		
AAQ-2, Track Hopper	0.47	1.75	1.37	1		
AAQ-3, Near Boiler	1.05	1.72	1.41	4		
AAQ-4, Lanco Colony	0.46	1.60	0.66	4		
AAQ-5 , Dibulganj	0.52	1.62	0.75	4		
AAQ-6 , Kakri Maximum Permissible limit as per N	0.42	1.22	0.75	4		

e limit as per NAAQ Standards 2009.

HAZARDOUS WASTES

(As specified under Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008.)

The LANPL has taken Hazardous Waste Authorization vide letter no F10917/C-9/Haz/65/2012 dated 28.09.2012 from UPPCB for Storage and disposal of Hazardous waste.

otal Quantity	y of Generated Hazardous Wastes Du	uring the Financial Year 2012-201:
S.No.	Particulars	Quantity
1.	Used/Spent Oil	18.06 M3

Hazardous Waste Disposal: Waste oil is being collected in hazardous waste storage area and disposed through registered recyclers.

PART - E

SOLID WASTES

Fly Ash (in MT)		Bottom Ash (in MT)	
FY 11-12	FY 12-13	FY 11-12	FY 12-13
226218	779067	56554	194766

PART - F

Please spacify the characterisation (in terms of composition and quantum) of Hazardous as well as solid waste and indicate disposal practice adopted for both these categories.

Ash Disposal: System has been designed and planned to utilize fly ash as per Fly Ash Utilization Notification in different areas including cement admixtures and manufacturers, ash bricks & block manufacturers and other suitable users.

Hazardous Waste Disposal: Waste oil is being collected in hazardous waste storage area and disposed through registered recyclers.

Impact of the Pollution abatement measures taken on conservation of natural resources and the cost of production.

Air pollution and water pollution control devices and plant has been installed to reduce air and water pollution as per Environment Management Plan after scientific study. Other monitoring equipments, control devices and measures enumerated below are taken for environmental protection.

S.No. Particulars		
1.	Air Pollution Control	
1.	Electrostatic Precipitators	
2.	Bi-Flue Stack	
11.	Water Pollution Control	
1.	Sewage Treatment Plant	
2.	Effluent Treatment Plant	
3.	Storm Water Drains	
4.	Drains along the roads	
5.	Water drain culverts	
III.	Environment Monitoring & Management	
1.	Continuous Ambient Air Quality Monitoring Station	
2. Micro – meteorological station (Auto)		
3.	SO _x ,NO _x and Opacity online Analyzers	
IV.	Environment Laboratory with following equipments	
1.	High Volume Samplers	
2.	Fine Particulate Samplers	
3.	BOD Incubator	
4.	COD Digester	
5.	COD Analyser	
5.	pH Analyser	
7.	Digital Balance	
3.	Rain Gauge	
/ .	Other supportive facilities	
L	Fire Fighting Equipments(Portable)	
2.	Fire Fighting Equipments(Fixed)	
l	Fire Fighting Equipments(Mobile)	
	Ambulance and First Aid Station	
	Ash Disposal System	
	Ash Water Recovery System	
	Environment Related Studies & Trainings	
	Green Belt, Area leveling and development	

PART - H

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution.

- (1) Additional green area development within plant premises and ornamental plantation along the roads.
- (2) Various Environmental trainings to create awareness among employees and workmen.
- (3) Development of Standard Operating Procedures to guide employees for waste minimization and management.
- (4) E-waste management initiative.
- (5) Corporate Social Responsibility initiative including plant saplings donation to villagers at different occasions and health care programme.
- (6) Implementation of Integrated Management System (IMS) for Quality, Environment and Safety management system.

PART-I

Any other particulars in respect of environmental protection and abatement of pollution

- (1) Regular monitoring of stack emission.
- (2) Regular monitoring Ground Water and drinking water parameters.
- (3) Regular monitoring Ambient Noise level.
- (4) Installation of On-line Ambient Air Quality Monitoring Station.
- (5) Plantation efforts are being carried-on to the maximum possible extends in and around LANPL premises. In this direction, we are making efforts to achieve the target of 33%, which shows our sincerity in making efforts for continual improvement in quality of environment. In Financial Year 2012-13 around 4000 plants has been planted in LANPL premises.
- (6) Hazardous Waste Management as per rules.
- (7) Dust Extraction and Dust Suppression system in dust prone areas.
- (8) Regular sprinkling and road wetting to minimize dust concentration in Ambient Air inside the plant premises.
- (9) Celebration of World Environment Day on large scale for environmental awareness among employees and contract workman within plant premises.

Name

: Debabrata Kundu

Designation : Sr. Vice President (O&M)

Address

: Lanco Anpara Power Limited