



ADHUNIK POWER AND NATURAL RESOURCES LIMITED

WORKS : Village – Padampur, Behind P.G.C.I.L Substation,
Adityapur Kandra Road, Saraikela – Kharswan : 832402, Jharkhand
Phone: + 91-657-6628400, Fax: + 91-657-6688440

Ref No APNRL/JSPCB/ES/2014-15/01

Date: 15th Sep 2015

The Member Secretary
Jharkhand Pollution Control Board
Jharkhand

Sub- Submission of Environmental Statement (Form V) for Unit I (1 x 270 MW) of M/s
Adhunik Power & Natural Resources Limited, Village-Padampur, Dist-Saraikela-
Kharswan, Jharkhand.

Ref: Environmental Clearance letter No J-13011/8/2009-IA.II(T), Dated 29th Aug 2009.

Dear Sir,

In line with compliance of above referred EC letter point No XXX of general condition,
Please find attached herewith Environmental statement (Form V) for the financial year
2014-15.

This is for your kind information & record please.

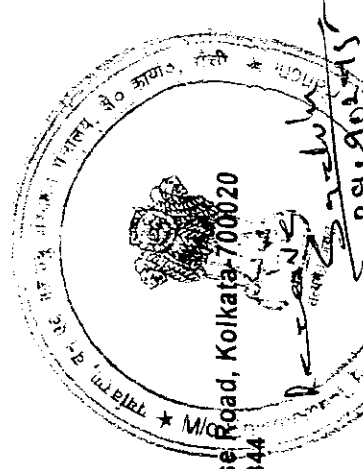
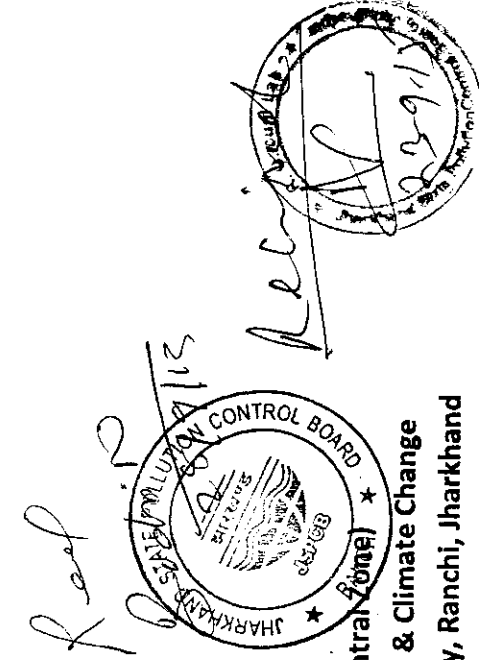
Thanking You

Your's faithfully

Kamlesh Kumar
Deputy Manager (Environment)

Encl: As mentioned above

CC: 1. The Regional Office (Eastern-Central Zone)
Ministry of Environment, Forest & Climate Change
Bunglow No A-2, Shyamali Colony, Ranchi, Jharkhand
2. The Regional Officer
Jharkhand Pollution Control Board
Jamshedpur, Jharkhand



CORPORATE OFFICE : "CRESCENT TOWER", 3rd Floor, 229 A.J.C. Bose Road, Kolkata-700020
Phone : +91-33-30915300 *Fax : +91-33-30915344

ENVIRONMENTAL STATEMENT

For

1 X 270 MW COAL BASED THERMAL POWER PLANT

(UNIT I)

FINANCIAL YEAR 2014-15



September 2015



Adhunik Power & Natural Resources Ltd
Village-Padampur, District-Saraikela-Kharsawan
Jharkhand-832105

FORM-V

From:
Adhunik Power & Natural Resources Limited
Village: Padampur
Dist: Saraikela-Kharsawan – 832 402
Jharkhand.

To,
Member Secretary
Jharkhand State Pollution Control Board,
HEC Campus, Dhurva,
Ranchi , Jharkhand.

Environmental Statement for the financial year ending on the 31st March-2015
for Unit-I (1 x 270 MW)

PART – A

- (i) **Name & Address of the owner/occupier of the** : **Sh. Nirmal Agarwal**
Industry operation or process : **BA.209,Salt Lake city**
Kolkata -64
- (ii) **Industry Category** : **Red Category**
Primary – STC Code
Secondary – STC Code
- (iii) **Production Capacity – (Units-MT)** : **Power(270 MWH)**
- (iv) **Year of Establishment** : **January-2013**
(COMMERCIAL PRODUCTION DECLARED)
- (v) **Date of Last Environmental Statement** : **24th September 2014**
Submitted

PART-B

Water and Raw Material Consumption

(i) Water Consumption KL/Day

Process : 248.83

Cooling : 8891.71

Domestic : 25.95

Name of product	Process water consumption KL/ MW	
	During the previous financial year	During the current financial year
Electricity	2013-14 0.067	2014-15 0.0450

(ii) Raw Material Consumption

Name of Raw Materials	Name of product	Consumption of raw material per MW	
		During the previous financial year	During the current financial year
Coal	Power	2013-14 0.676 MT	2014-15 0.68
LDO		0.00108 KL	0.0007

PART - C

**Pollution Discharged to environment / unit of output.
(Parameter as specified in the consent Issued)**

Pollutants	Qty. Of pollutants discharged (Mass / Day)	Concentration of Pollutants in discharges (Mass / Day)	Percentage of variation from prescribed standards with reasons
(i) Water	1) Effluent generated from Cooling tower, DM plant, IBD tank, CPI separator is being utilized in Ash Handling system. 2) Effluent generated from CBD is being reutilized in quenching & dust suppression system. 3) Effluent generated from STP is being utilized for gardening		Concentration are below the prescribed limits
(ii) Air SPM SO2 NOx	240 kg/day 775 kg/day 1200 kg/day	39 mg/Nm3 126 mg/Nm3 195 mg/Nm3	Concentration are below the prescribed limits

PART - D
HAZARDOUS WASTES
(As specified under Hazardous Wastes Management and Handling
& Transboundary Movement Rules, 2008)

Hazardous Wastes	Total Quantity (KL).	
	During the previous financial Year 2013-2014	During the current financial Year 2014-15
1 From Process	Nil	Nil
2 From Pollution Control Facilities	Nil	NIL

PART - E

Solid Wastes

	Total Quantity (MT)	
	During the previous financial Year 2013-2014	During the current financial Year 2014-15
(a) From Process Bottom Ash	72338.74422 MT	62832.8925
(b) From Pollution Control Facility Fly Ash	289354.9769 MT	251331.57
(c) (1) Quantity recycled or re-utilized within the unit (2) Sold (3) Disposed Fly Ash Bottom Ash	289354.9769 MT 72338.74422 MT	251331.57 62832.8925

PART – F

Please specify the characterization (In terms of composition and quantum) of hazardous as well as solid and indicate disposal practice adopted for both these categories of wastes

Characterization of Fly ash:

Sl No	Parameter	Result Obtained	Unit
1	Arsenic (as As)	<0.01	PPM
2	Mercury (as Hg)	<0.01	PPM
3	Chromium (as Cr)	0.0112	PPM
4	Lead (as Pb)	0.0264	PPM
5	Antimony (as Sb)	<0.01	PPM
6	Berelliyum (as Be)	<0.01	PPM
7	Cadmium (as Cd)	0.0176	PPM
8	Copper (as Cu)	0.0338	PPM
9	Nickel (as Ni)	0.0345	PPM
10	Selenium (as Se)	0.0241	PPM
11	Silver (as Ag)	<0.01	PPM
12	Tin (as Sn)	<0.01	PPM
13	Zinc (as Zn)	0.251	PPM
14	Unburnt Carbon	0.17	%

Characterization of Bottom ash:

Sl No	Parameter	Result Obtained	Unit
1	Arsenic (as As)	<0.01	PPM
2	Mercury (as Hg)	<0.01	PPM
3	Chromium (as Cr)	0.0431	PPM
4	Lead (as Pb)	0.0694	PPM
5	Antimony (as Sb)	<0.01	PPM
6	Berelliyum (as Be)	<0.01	PPM
7	Cadmium (as Cd)	0.0541	PPM
8	Copper (as Cu)	0.0643	PPM
9	Nickel (as Ni)	0.0567	PPM
10	Selenium (as Se)	0.0296	PPM
11	Silver (as Ag)	<0.01	PPM
12	Tin (as Sn)	<0.01	PPM
13	Zinc (as Zn)	0.6846	PPM
14	Unburnt Carbon	1.2	%

PART - G

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

- Fly ash bricks has been used for construction of buildings, Drains, rain water harvesting pit, Bachelor Hostel, Residential Colony for employees.
- We are using effluent water generated from Cooling tower, DM plant, IBD tank for HCDS system for bottom ash disposal instead of fresh water from River Subernrekha.
- Extensive tree plantation is under progress as a part of green belt development, which will control the impact of Air pollution and optimize the ambient temperature of surrounding areas.

PART - H

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

- For better control on fugitive emission, Water spraying is being done on unpaved internal and external roads except during rainy season.
- Extensive tree plantation and development of landscape around plant premises is under progress . Total plantation till 31st March 2014 is 35600 saplings with 86 % survival rate.
- Adoption of good house keeping practices through manual and mechanical system.
- Rain water harvesting drawing has been approved by CGWA, copy of approval letter has already been submitted to MoEF, JSPCB. As per approved drawing, 13 No rain water harvesting pit has constructed inside the plant premises.
- Black topped tar road with drain constructed inside the plant premises.
- 01 No Online Ambient air installed near DM plant for continuous analysis of PM10,PM2.5, SO2, NO,NO2 & CO.
- Online opacity meter for SPM analysis and SO2 & NOx analyzer installed at stack.
- 03 No Sewage treatment plant installed for treatment of sewage generated from Bachelor hostel, Security barrack and staff colony.
- We have adopted roof top water harvesting system at Admin building, Bachelor hostel and other buildings.
- Closed type conveying system with dust extraction and dust suppression arrangements installed for mitigate fugitive emission during conveying of raw materials.
- Implemented recommendations of CREP .
- Installed fixed type water sprinkling system at dust prone areas such as Coal handling plant, near ash pond area.
- Integral acoustic enclosures installed for DG sets for controlling noise.

It is proposed that during the next financial year (2015-16), the following measures will be undertaken for environmental improvement:

- 10000 trees will be planted during year 2015-2016

PART - I

Any other particulars for improving the quality of the environment:

1. Received certification for ISO 9001:2008, ISO 14001: 2004 & ISO 18001:2007 from Bureau Veritas.
2. Training on EMS to all employees and contract labors to create Environment awareness.
3. Green Belt development is under progress.
4. Only PUC certified vehicles are engaged.
5. Monitoring of Ambient air quality , Surface and ground water quality, stack monitoring, soil, Noise level , solid waste (Hazardous & non-hazardous) is being done through MoEF & NABL accredited laboratory.
6. Full-fledged Environmental laboratory has installed.
7. Installation of Online Effluent monitoring system is in progress.
8. Webhosting of online environment data on CPCB/SPCB website is in progress.
9. Audit by site team to improve Environmental Management system (EMS).
10. Celebration of Environmental promotional activities (Environment day, Earth Day, Water day, Ozone day)

Date: 01/09/2015

Signature :
Name : Kamlesh Kumar



Designation : Deputy Manager(Environment)

Address : Adhunik Power & Natural Resources
Limited, Village : Padampur
Dist: Saraikela-Kharsawan –
832 105. Jharkhand