

CPP-1200MW/ENVT/A-05/2018/318  
28 September 2018

The Member Secretary,  
Head Office, Chhattisgarh Environment Conservation Board,  
Paryavas Bhawan, North Block, Sector-19,  
Naya - RAIPUR (C.G.)

Dear Sir,

**Sub:** Environment Statement of 1200 MW (4X300 MW) for the financial year  
2017-18

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With reference to the captioned subject we are enclosing herewith the Environment Statement of 1200 MW (4X300 MW) for the financial year 2017-18 in the prescribed Form - V under Section 6 and 25 of the Environment (Protection) Act -1986.

Thanking you,

Yours truly,



Ashutosh Dwivedi  
Head - 1200 MW Power Plant



Encl: a/a

**Copy to:**

1. Regional Officer, CECB, Korba.

**FORM- V**  
**(See Rule-14)**

**ENVIRONMENTAL STATEMENT OF FOR THE FINANCIAL YEAR 2017-18**

**PART – A**

1. Name & address of the owner/ occupier of the industry operation or process. : **Vikas Sharma**  
CEO & Director, BALCO  
**1200 MW Power Plant,**  
**Bharat Aluminium Company**  
**Limited**  
Korba – 495684  
(Chhattisgarh)
  
2. Industry category primary/  
Secondary (STD Code) : Primary
  
3. Production Capacity. : 1200 MW (4 x 300) Power
  
4. Year of establishment : 2014
  
5. Date of last Environment Statement  
Submitted : 27<sup>th</sup> September 2017



**PART – B**

**WATER AND RAW MATERIAL CONSUMPTION**

**i) Water Consumption in m<sup>3</sup>/day: -**

Process	:	2412
Cooling	:	43838
Domestic (Plant)	:	591

Power generation: 6785 MU

Name of product	WATER CONSUMPTION PER UNIT OF PRODUCT OUTPUT	
	During the financial year 2016-17	During the financial year 2017-18
Power	2.44	2.53

\*Includes water consumed in project activity.

**ii) Raw Material Consumption:**

Name of raw Materials	Name of Product	CONSUMPTION OF RAW MATERIAL	
		During the financial year 2016-17	During the financial year 2017-18
Coal	Power	4758149 MT	4711683 MT
HFO		1478 KL	1084KL
LDO		1684 KL	2343 KL
Burning Oil		1437 KL	--

PART - C			
PARAMETER AS PER IS - 2490			
Pollutant	Norms (mg/lit)	Concentration of pollutant in discharge (mg/lit)	Qty of pollutants discharged (kg/day)
WATER		Zero discharge	NIL
AIR			
POLLUTANTS		Qty of pollutants Generated (kg/day)	
a. SPM		173.22	

**PART- D**

**HAZARDOUS WASTE**

*(As specified under Hazardous Waste (Management, Handling, and Storage) Rules 1989.*

Hazardous Waste	TOTAL QUANTITY (TONNES)	
	During the financial year 2016-17	During the financial year 2017-18
Used Oil/Spent Oil	13.84*	8.57
Wastes containing oil	Nil	0.825
Spent lead acid battery	Nil	Nil
Glasswool & Cerawool (C-4)	-	7
Empty barrels/Containers/Liners contaminated with Haz. Che./Waste-(33.1)	-	43 Nos.

**PART- E**

**SOLID WASTE**

Sl. No.	Waste	TOTAL QUANTITY (TONNES)	
		During the financial year 2016-17	During the financial year 2017-18
1.	Fly ash	1594495	1566796
2.	Bottom Ash	398624	391699

**PART- F**

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

**DISPOSAL PRACTICES ADOPTED**

- High-density slurry disposal system has been adopted.
- Fly ash from the ESP's is collected in silos by dry ash extraction system from where they are filled in fly ash capsules pneumatically and then transported to cement plants and brick manufacturing plants.
- Waste oil / Used oil is stored in barrels on cemented floors under covered sheds and sold to parties having MoEF authorization for handling / transportation of Hazardous Waste.
- Used Lead-Acid battery is stored on Concrete floors under covered sheds and will be sold in as it is condition (no processing) to registered recyclers having MoEF authorization for handling / transportation of Hazardous Waste.

## PART- G

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

The 1200 MW power plant has been designed with the latest technology – high-Concentration Slurry Disposal (HCSD) system. The HCSD system is a much cleaner technology due to the following reasons- less disposal area, less water & power consumption, dense compact deposit with rapid drying, compact disposal site.

The plant has been equipped with high efficiency electrostatic precipitators (ESPs) and the 275 m high chimney also ensures adequate dispersion of the air pollutants.

Further, we have made the following expenditure in order to control pollution:

<b>Expenditure incurred for various Environmental measures 2017-18</b>			
<b>Sl.No.</b>	<b>Project Description</b>	<b>2016-17</b>	<b>2017-18</b>
1	Housekeeping	1.19	0.51
2	Ash handling	9.32	10.2
3	Plantation	0.10	0.08
4	ESP maintenance	-	0.49
	<b>Total</b>	<b>10.61</b>	<b>11.30</b>

## PART- H

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

Hybrid bagfilters are installed in all ESPs of power plant to keep emission level below 50 mg/Nm<sup>3</sup>.

**PART - I**

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

Tree plantation is carried out every year in and around the Aluminium and Power Complex as well as in the Balco Township. During 2017-18, we have carried out plantation of 5000 saplings in and around the BALCO also we have contributed ₹2 crore in the Hariyar Chhattisgarh Kosh for development of green belt under Hariyar Chattisgarh plantation Korba.

