

BALCO/ENVT/A-01(A)/19/17

25th September 2019

To,
The Member Secretary,
Head Office, Chhattisgarh Environment Conservation Board,
Paryavas Bhawan, North Block.Sector-19,
Atal Nagar Raipur - 492001.

Sub: Environment Statement of Kawardha Mines for the financial year 2018-19

Respected Sir,

With reference to the captioned subject we are enclosing herewith the Environment Statement of Bodai Daldali Bauxite Mines - Kawardha for the financial year 2018-19 in the prescribed Form - V under Section 6 and 25 of the Environment (Protection) Act - 1986.

Thanking you

Yours truly


Rajesh Mishra
Head - Bauxite Mines

Encls: a/a

Copy to: Regional Officer, CECB, Bhilai - Durg



FORM – V

See Rule 14

Environmental statement for the financial year ending 31st March 2019

PART – A

- i) Name and address of the mine: **Kesmarda, Rabda,
Semsata, Mundadadar
Bodai – Daldali Bauxite Ore
Mines
Bharat Aluminium Co. Ltd.
KORBA (CG)**
- ii) Industry category Primary (SIC Code) or Secondary (SIC Code) **Primary**
- iii) Production capacity units: **12.5 Lac T/Year (Bauxite)**
- iv) Year of establishment: **2010**
- v) Date of the last Environmental statement submitted: **28th September 2018**

PART – B

WATER AND RAW MATERIAL CONSUMPTION

i) Water consumption in Kiloliters per day (KLD)

Spraying: 16 KLD
Domestic: 9.20 KLD

Name of product	Process water consumption per product output	
	During the financial year 2017-18	During the financial year 2018-19
Bauxite	NA	NA

(ii) Raw Material Consumption:

Name of Raw Material	Consumption of Raw Materials per unit of product	
	During the financial year 2017-18	During the financial year 2018-19
i. Power gel	0.00040 Kg/MT	Nil
ii. Cordtex fuse	0.5186 Mtr/MT	Nil
iii. Ammonium nitrate	0.2909 Kg/MT	0.349 Kg/MT

- Industry may use codes if disclosing details of Raw Materials would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART – C

POLLUTANT DISCHARGED TO ENVIRONMENT / UNIT OF OUTPUT (Parameters as specified in the consent issued)

Pollutants (Including Mine & Colony discharge of water	Quantity of pollutants Discharged	Concentrations of pollutants in Discharge	% of variation from prescribed standards with reasons
Air		Annexure - A	Within norms
Water (Surface)		Annexure – B	Within norms
Water (Ground)		Annexure – B	Within norms
Noise		Annexure – A	Within norms

PART – D

(Hazardous Waste)

As specified under Hazardous Waste Management Handling rule

Hazardous Waste	Total quantity (Kg)	
	During the current financial year 2017-18	During the current financial year 2018-19
a) From process b) From pollution Control facility	0.024 MT Used Oil Nil	0.031 MT Used Oil Nil

PART – E

SOLID WASTES

Removal of Overburden	Total quantity	
	During the financial year 2017-18	During the financial year 2018-19
i) Total O.B.	2048900	1361438
ii) Total O.B. for back filling	2048900	1361438
iii) Total O.B. disposed	Nil	Nil

PART – F

PLEASE SPECIFY THE CHARACTERISATION (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICES ADOPTED FOR BOTH THESE CATEGORIES OF WASTES.

The mining activity carried out at Bodai - Daldali mines is to excavate bauxite ore from the reserves present there-under. The ore consists of mineral which has a composition of bauxite and remaining of solid waste which is also known as overburden. The overburden is generally comprised of morrum (55%), soil (30%) and followed by laterite (15%). The top soil generated during mining is stored at earmarked location and used later on during reclamation.

Overburden thus obtained during the mining activity is disposed by using it for carrying out the reclamation of mined out areas. Reclamation of mined out areas is carried out in a systematic manner by back filling them with overburden and waste after sorting of bauxite from ROM obtained during course of mining. After backfilling, area is leveled to the original level as far as possible, compacted and covered with top soil stored in the earlier cycle of mining for afforestation.

PART – G

IMPACT OF THE POLLUTION ABATEMENT MEASURE TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION

We are carrying out monitoring of the environmental parameters and complying with all the norms, guidelines and regulations as stipulated by statutory bodies. There is a full fledged Health, Safety & Environment Department and Laboratory Department that work in co-ordination for conducting environmental monitoring and pollution control operations. There is indeed a positive impact on the environment due to pollution abatement measures taken on conservation of natural resources. The pollution, if any, is dealt with at source, thereby reducing the pollutants entering into the environment.

Impacts of pollution abatement measures such as construction of stop dams/ check dams in the course of natural streams have drastically reduced the silt content in surface water by arresting at upstream locations. This has also helped in recharging the groundwater table of the adjoining areas.

Reclamation of the mined out areas has solved the nuisance of overburden being generated during the mining activity. Afforestation of these reclaimed areas has in turn given an aesthetic look to the mine leases.

Blasting operations are carried out in the period between 1.00 PM to 2.00 PM in a controlled manner due to which the danger of fly rocks is negated. The dust levels are also drastically reduced with this technique. Wet drilling is already in practice and hence the fugitive emission levels are also within norms and control.

PART – H

ADDITIONAL MEASURES / INVESTMENT PROPOSALS FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION, PREVENTION OF POLLUTION.

In order to abate the negative impacts generated due to mining activity and also for the conservation of natural resources, the environmental management initiatives are taken up which are summarized as below;

- Wet drilling is practiced for minimization of dust generation.
- Maintenance of pucca roads and water sprinkling on haul roads.

- Mined out areas reclaimed by backfilling of overburden and covered by top soil on top. Afforestation is carried out on top of reclaimed areas.
- Waste dump handling and stabilization are carried out efficiently keeping environment protection and bio-diversity improvement in mind.

PART – I

ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT

- In year 2018-19, we have planted 5000 saplings in the mined out area & as green belt between the mining area.
- .
- Blasting operation is restricted only between 1 to 2 PM during the daytime. Controlled blasting reduces the noise generation as well as ground vibration to as low as possible.
- ₹ 1.6 crore invested for reclamation OB handling green belt development and other environment related expenses.