

CPP-II/ENVT/A-02(C)/2026/365

28.09.2026

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

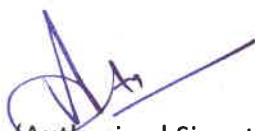
Sub: Environment Statement of 540MW Captive Thermal Power Plant, 1200MW Thermal Power Plant, 3X1500 KVA Diesel Generator Set, 7X3000 KVA Diesel Generator Set, 2,59,200 MT/Month Railway Siding (540 MW) and 6,00,000 MT/Month Railway Siding (1200 MW) for the financial year 2025-26.

Dear Sir,

With reference to the captioned subject, we, on behalf of Bharat Aluminium Company Limited, are enclosing herewith the Environment Statement of 540MW Captive Thermal Power Plant, 1200MW Thermal Power Plant, 3X1500 KVA Diesel Generator Set, 7X3000 KVA Diesel Generator Set, 2,59,200 MT/Month Railway Siding (540 MW) and 6,00,000 MT/Month Railway Siding (1200 MW) for the financial year 2025-26 in the prescribed Form - V under Rule 14 of the Environment (Protection) Rules, 1986 and the relevant provisions of the Environment (Protection) Act, 1986.

Thanking you,

Yours truly,
On behalf of Bharat Aluminium Company Limited

A handwritten signature in blue ink, appearing to be 'A. S.', is written over a circular stamp.

(Authorized Signatory)

Encl: a/a

Copy to:

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

FORM- V
(See Rule-14)

ENVIRONMENTAL STATEMENT OF FOR THE FINANCIAL YEAR 2025-26

PART – A

1. Name & address of the owner/ occupier of the industry operation or process : **Mr. Rajesh Singh**
CEO & Director (BALCO)
Bharat Aluminium Company Limited
Korba – 495684 (Chhattisgarh)
2. Industry category primary (STC Code) /Secondary (SIC Code) : Primary
3. Production Capacity : 1740 MW [540MW Captive Thermal Power Plant, 1200MW Thermal Power Plant, 3X1500 KVA Diesel Generator Set, 7X3000 KVA Diesel Generator Set, 2,59,200 MT/Month Coal Railway Siding (540 MW) and 6,00,000 MT/Month Coal Railway Siding (1200 MW)]
4. Year of establishment : 540MW Captive Thermal Power Plant – 2005
1200MW Thermal Power Plant – 2014
7X3000 KVA Diesel Generator Set – 2016
3X1500 KVA Diesel Generator Set - 2021
5. Date of last Environment Statement Submitted : 26th September 2025

PART – B

WATER AND RAW MATERIAL CONSUMPTION

i) Water Consumption in m³/day: -

Process	:	2001
Cooling	:	75324
Domestic	:	748

NAME OF PRODUCT	WATER CONSUMPTION PER UNIT OF PRODUCT OUTPUT (m ³ /MWh)	
	FY 2024-25	FY 2025-26
Power	2.35	2.39

ii) Raw Material Consumption:

Name of raw materials	Name of Product	CONSUMPTION OF RAW MATERIAL (MT/MWh)	
		FY 2024-25	FY 2025-26
Sp. Coal Consumption	Power(1740MW)	0.714	0.702
Sp. Biomass Consumption		0.0002	0.0002
Sp. HFO Consumption		0.00001	0.000004
Sp. LDO Consumption		0.00018	0.00018

PART – C

Pollution discharged to environment/unit output

Water: Zero discharge condition maintained.

Air: Monitoring results for major pollutants are attached as Annexure-I

PART- D

HAZARDOUS WASTE

As specified under Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016

A. From Process

Hazardous Waste	TOTAL QUANTITY GENERATED (TONNES)	
	FY 2024-25	FY 2025-26
Used or Spent oil (Schedule - I, Cat. No. 5.1)	37	53
Waste or residue containing oil (Schedule - I, Cat. No. 5.2)	1.5	1.6
Glasswool (Schedule - II, C-4)	19	63
Empty barrels/containers/ liners contaminated with hazardous chemicals /wastes (Schedule - I, Cat. No. - 33.1)	29	8

B. From Pollution Control Devices: Nil

PART- E

SOLID WASTE

A. From Process: Nil

B. From Pollution Control Equipment:

Waste	TOTAL QUANTITY (TONNES)	
	FY 2024-25	FY 2025-26
Ash (Fly ash + Bottom ash)	34,75,509	33,47,343

C. 1. Quantity Recycled or Re-Utilized within the unit: Nil

2. Sold: Nil

3. Disposed:

Waste	TOTAL QUANTITY (TONNES)	
	FY 2024-25	FY 2025-26
Ash (Fly ash + Bottom ash)	45,63,746	33,18,739

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.

S.No.	Waste Description including category	Composition	Quantum as per Hazardous Waste Authorization	Disposal Practice
1	Used or Spent oil (Schedule - I, Cat. No. 5.1)	As per Hazardous Waste, 2016 (Schedule V) - Polychlorinated biphenyls (PCBs)- < 0.01 ppm - Lead- 0.74 ppm	300 MT/Year	Sale to authorized recyclers

		• Arsenic- < 0.1 ppm • Cadmium+ Chromium+ Nickel- 0.98 ppm • Polyaromatic hydrocarbons (PAH)- < 0.01 ppm		
2	Waste or residue containing oil (Schedule - I, Cat. No. 5.2)	• Chloride as Cl- 0.10 % • Silica as SiO₂ - 64.59% • Alumina as Al₂O₃- 1.35% • Iron as Fe₂O₃- 8.73% • Calcium as CaO- 1.27% • Magnesium as MgO- 0.50% • Sodium as Na₂O- 0.42% • Potassium as K₂O- 0.38% • Titanium Oxide as TiO₂- <0.10% • Total Fluoride as F- <0.10 ppm • Cyanide as CN- <0.10 ppm	7 MT/Year	Captive Incineration in cast house furnaces/ Sale to authorized recyclers
3	Chemical sludge from wastewater treatment (Schedule - I, Cat. No. 35.3)		20 MT/Year	Disposal through captive SLF/ co-processing in cement plant/TSDF
4	Spent Ion exchange resin containing toxic metals (Schedule - I, Cat. No. 35.2)	• Silica as SiO₂- 0.79% • Alumina as Al₂O₃- 0.03%	60 MT in 05 Years i.e. within authorization Period	Utilization for energy recovery in boiler for steam or power generation

		• Iron as Fe_2O_3- 0.06% • Calcium as CaO- 1.35% • Magnesium as MgO- 0.24% • Sodium as Na_2O- 0.50% • Potassium as K_2O- 0.14% • Zinc as ZnO- <0.10% • Chloride as Cl- 0.05% • Total Fluoride as F- 475 ppm • Cyanide as CN- <0.10 ppm		as per SOP issued by CPCB
5	Glasswool (Schedule - II, C-4)	• Total Fluoride as F- <0.10 ppm • Cyanide as CN- <0.10 ppm • Chloride as Cl- 0.01%	150 MT/Year	Dispose of in captive SLF/ TSDF
6	Discarded asbestos (Schedule - I, Cat. No. - 15.2)	• Total Fluoride as F- 34.8 ppm • Cyanide as CN- <0.10 ppm • Chloride as Cl- 0.04%	100 MT/ Year	Sale to authorized recyclers/ disposal in captive SLF/TSDF
7	Empty barrels/containers/liners contaminated with hazardous chemicals /wastes (Schedule - I, Cat. No. - 33.1)	-	300 MT/Year	Sale to authorized recyclers
8	Oil and grease skimming (Schedule - I, Cat. No. - 35.4)	• Total Fluoride as F- <0.10 ppm • Cyanide as CN- <0.10 ppm	1 KL/Year	Dispose of in captive SLF/ Sale to authorized recyclers

		Chloride as Cl- 0.04%		
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Non-Hazardous waste

S.No	Type of Non-hazardous waste	Disposal practice
1	Ash	- High-density slurry disposal system has been adopted for the efficient and environment-friendly disposal of ash in the form of high-density slurry into ash ponds. - Fly ash collected from Electrostatic Precipitators (ESPs) is stored in silos through a dry ash extraction system. Ash generated from the system is utilized in following avenues in accordance with Fly Ash Notification dated 31.12.2021 and amended thereof: i. Filling of coal mine voids ii. Brick manufacturing iii. Cement industry iv. Construction of roads

PART- G

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

- The Power plants has been designed with the latest technology – High-Concentration Slurry Disposal (HCSD) system. The HCSD system is a much cleaner technology due to less disposal area, less water & power consumption, dense compact deposit with rapid drying, compact disposal site.
- The plant has been equipped with hybrid ESP, electrostatic precipitators (ESP's) followed by bag filters.
- The chimneys are 275m high which ensures adequate dispersion of the air pollutants.
- Effluent treatment plant with RO system for treatment and recycling of water leading to conservation/reduction of natural resources.
- Sewage Treatment plant has been installed for the treatment and recycling of domestic wastewater, ensuring compliance with environmental standards and promoting sustainable water management.
- 17% water recycling rate achieved in FY 26.
- 203 No. of Rainwater harvesting structures constructed under Mor Jal Mor Mati initiative.
- Increase in rail over road for inbound and outbound logistics for reduction of Scope 3 vehicular based emissions.

- Wheel wash system has been installed to prevent the carryover of dust, mud, and other debris from construction or operational areas onto public roads, thereby maintaining cleanliness and reducing environmental pollution.
- Dust extraction and dust suppression systems have been installed to control airborne particulate emissions, ensuring a safer working environment and compliance with environmental regulations.
- Rainwater harvesting structures are installed for the collection and storage of rainwater, which is then utilized for various non-potable purposes such as gardening, cleaning, and groundwater recharge, promoting sustainable water management.
- Noise reduction in 1200MW Cooling Tower by installation of Acoustic Noise barrier.
- Installation of Solar powered digital piezometers with online monitoring system to enhance ash dyke safety and reliability.
- Solar pump installation in ash dykes to enhance water recycling in power plants.
- Improvement in ash handling system through installation of modern non-contact gamma-based level sensors for real time monitoring of volumetric ash.
- Renewable Energy (RE) mix usage increased from 2.68% in FY25 to 6.4% in FY26.

PART- H

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

Expenditure/investment for environmental protection, for the year 2025-26 for both power plants was approx. Rs. 177 Cr. which includes Capital investment and operational expenses of air pollution control equipment, water pollution control equipment, horticulture, housekeeping, waste management, environment monitoring and other environmental expenses.

PART – I

Any other particulars for improving the quality of the environment.

- 135 MW unit 1 stator replacement, GILMS and bay control unit upgrades at the switchyard, and capacity enhancement of CPP 2 to MRSDS line from 150 MW to 500 MW.
- Improvement in water recycling rate through installation of additional ETP (RO based).
- Installation of Online noise meter at cooling tower to monitor noise level on continuous basis.
- Gap plantation is carried out every year in and around the BALCO Complex as well as in the Balco Township. During the year 2025-26, 77000 saplings were planted as part of gap plantation at various places in and around BALCO Plant premises and wadi plantation under CSR.
- BALCO Smelters are certified with the Environment Management System (ISO 14001:2015) certificate.
- BALCO Smelters are certified with the Energy Management System (ISO 50001:2018) certificate.
- BALCO Smelters are certified with the ASI performance standard v 3.1.
- Water Day, Environment Day, Ozone Day, Earth Day being celebrated to awareness stakeholders and employees of BALCO for protection of Environment.

- In line with the Ozone Depleting Substances (ODS) phase-out plan, approx. 48 % refrigerant gas was converted from R-22 to R-410 till FY 26. The replacement program will be continued in the upcoming years to achieve 100% phase-out of R-22.

FY 2025-26															
540 MW	Parameter	Norms	Unit	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
Unit 1 Stack 33	PM	50.00	(mg/Nm3)	34.9	27.8	25.6	36.9	37.5	30	27.9	35.9	41.8	36.7	32.1	USD
Unit 2 Stack 33	PM	50.00	(mg/Nm3)	33.4	29.3	38	40.5	37.1	32.1	38.7	24.1	37.1	25.8	33.8	27.1
Unit 3 Stack 33	PM	50.00	(mg/Nm3)	28.9	26.6	36.5	34.3	33.8	39.9	36.6	27.1	22.6	33.3	30.7	32
Unit 4 Stack 33	PM	50.00	(mg/Nm3)	17.7	41.8	31.1	30.5	35.7	34.6	USD	USD	USD	USD	USD	USD
1200 MW	Parameter	Norms	Unit	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
Unit 1 Stack 34	PM	50.00	(mg/Nm3)	29.7	33	35.9	37.7	USD	34.3	23.9	34.7	23.4	22.9	31.8	30.8
Unit 2 Stack 34	PM	50.00	(mg/Nm3)	21	22.2	22.4	42.7	22.8	37	30.8	33.2	34.6	22.1	24.9	29.6
Unit 3 Stack 35	PM	50.00	(mg/Nm3)	31.7	39.1	41.1	38.5	33.2	31.4	34.5	41.1	32.3	26.4	31.4	23.3
Unit 4 Stack 35	PM	50.00	(mg/Nm3)	30.6	27	25.6	39.6	24.9	32.8	30.3	28.9	31.9	36.5	38.9	36.7

*USD- Unit Under Shut Down