



Ref: HIL/LHD/ENV/JSPCB/ 917

Date: 26.09.2024

To,
The Member Secretary,
Jharkhand State Pollution Control Board,
TA building, Ground floor,
HEC Complex, PO Dhurwa,
Ranchi-834003

Sub: Environment Statement for Serangdag Bauxite Mine (Area- 77.89 ha) of M/s Hindalco Industries Limited, located in Gumla, Jharkhand, for the year 2023-24.

Dear Sir,

This has reference to Rule 14 of Environment Protection Act 1986. We are submitting herewith Environment Statement in prescribed Form V for Serangdag Bauxite Mine (Area- 77.89 ha) of M/s Hindalco Industries Limited, Gumla for the financial year 2023-24.

Kindly acknowledge receipt for the same.

Thanking you,

Yours truly,
For **M/s Hindalco Industries Limited**

A handwritten signature in blue ink, appearing to read 'Basudev', with a horizontal line underneath.

Basudev Gangopadhyay
AVP (Planning, Environment & Compliance)

Encl: As Above

CC:-

1. The Regional Officer, Jharkhand State Pollution Board, Dhurwa, Ranchi.
2. The Deputy Director General of Forests (C), MoEF&CC, Integrated Regional Office, Ranchi.

FORM-V
(See Rule-14)
Environment Statement for the financial year ending the 31st March 2024

PART-A

| | | |
|-------|--|---|
| (i) | Name & address of the owners/occupier of the industry/operation/ process | Serangdag Bauxite Mine (77.89 ha) M/s Hindalco Industries Limited District Gumla, Jharkhand |
| (ii) | Industry Category: Primary (STC code), Secondary (SIC code) | - |
| (iii) | Production Capacity: | 1.00 LTPA (Bauxite) |
| (iv) | Year of establishment | 2008 |
| (v) | Date of last environmental statement submitted | 23-09-2023 |

PART-B

Water & Raw material Consumption

(i) Water Consumption (m³/day):

| | |
|--|------|
| Process | Nil |
| Industrial (Sprinkling for Dust Suppression, etc.) | 3.58 |
| Domestic (Drinking & Other) | 1.94 |

Process: As the operation is mining of bauxite by the opencast method with shallow depth, therefore, water is not required in this mining process.

| Name of Products | Process water consumption per unit of product output | |
|------------------|--|---|
| | During the previous financial year (2022-23) | During the current financial year (2023-24) |
| Bauxite | Nil | Nil |

Bauxite is a natural product. As such, no water is required in the mining process.

(ii) Raw Material Consumption

| Name of raw materials | Name of products | Consumption of raw material per unit of output | |
|-----------------------|------------------|--|---|
| | | During the previous financial year (2022-23) | During the current financial year (2023-24) |
| Not Applicable | Bauxite | Nil | Nil |

Bauxite is a natural product, and it is produced by heavy-duty mining machinery. As such, no raw material is required in this mining process.

PART-C

Pollutants discharge to environment/unit of output. (Parameters as specified in the consent issued)

| Pollutants | Quality of pollutants discharged (mass/day) | Concentrations of pollutants discharges (mass/volume) | Percentage of variation from prescribed standards with reasons |
|------------|--|---|--|
| (a) Water | <p>No wastewater is generated from our mining operation.</p> <p>However, only a negligible amount of effluent is generated from the workshop, and an Oil & grease trap system is already installed for the treatment of this effluent. The treated water is in a closed circuit and is reused for washing vehicles in the workshop. The quality of this treated water is being monitored regularly and the reports of the same are timely submitted to your good office.</p> <p>A negligible amount of domestic wastewater is also generated, which is collected in a septic tank and then followed by a soak pit.</p> | | Not applicable |
| (b) Air | Air monitoring is being carried out regularly, and reports of the same are timely submitted to your good office. | | Not applicable |

Remarks: The Monitoring results are well within prescribed limit.

PART-D

Hazardous Waste

(As specified under Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016)

| Hazardous wastes | Total Quantity (Litres) | |
|--|--|---|
| | During the previous financial year (2022-23) | During the current financial year (2023-24) |
| (a) From process: Operation of Machines (Used/Spent Oil) * | 520 ltr | 405 ltr |
| (b) From pollution control facilities | Not applicable | Not applicable |

Remarks: - Combined figure of Shrengdag (155.81 ha), Serangdag (77.89 ha), and Jalim-Sanai Bauxite Mines, i.e., the Shrengdag Group of Mines

PART-E

Solid Wastes

| Solid wastes | Total Quantity (m ³) | |
|---|---|---|
| | During the previous financial year (2022-23) | During the current financial year (2023-24) |
| (a) From process: Overburden (OB) | 99,426.62 m ³ | 193,292.92 m ³ |
| (b) Form pollution Control facility | Nil | Nil |
| (c) (1) Quantity recycled or re-utilized within the unit. (2) Sold (3) Disposed | Overburden is being used for concurrent backfilling Nil Nil | Overburden is being used for concurrent backfilling Nil Nil |

PART-F

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

➤ **Hazardous Waste:**

Total of 405 litre of used/spent oil (Category 5.1) has been generated from the Shrengdag Group of Mines & stored in closed barrels at an earmarked place with proper roofing and impervious flooring, and it is disposed of through JSPCB-authorized recyclers only.

➤ **Solid waste:** Total 193,292.92 m³ Overburden (OB) has been generated and utilized for Concurrent backfilling.

PART-G

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

- A massive plantation program has been carried out on the reclaimed area of the mine. In this plantation program, we plant local species, including fruit-bearing plants and those with medicinal value, with the objective of developing the local economy and generating livelihood opportunities for the local community.
- Water Sprinkling is being carried out by mobile water tanker

PART-H

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

The plantation program and biodiversity growth activities will continue in the years to come.

PART-I

Any other particulars for improving the quality of the environment.

The Serangdag Bauxite Mine (77.89 Ha) comes under Hindalco Mines Division, Lohardaga, which is an ISO 14001:2015, ISO 9001:2008, OHSAS 18001:2007, and SA 8000:2008 certified company. Operating under a QEHS (Quality, Environment, Occupational Health & Safety) management system, all necessary measures are taken to conserve and improve the natural environment at all sites. The QEHS management system is implemented at all Hindalco Mines and Sidings, with operational control procedures in place to prevent and control pollution.

Environmental awareness and training programs are conducted to educate people on the importance of protecting the environment.