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


Sir,

This has reference to Rule 14 of Environment Protection Act 1986. We are submitting herewith Environment Statement in prescribed Form V for Pakhar Bauxite Mines (Area-115.13 ha) of M/s Hindalco Industries Limited, Lohardaga for the financial year 2021-22.

Kindly acknowledge receipt for the same.

Thanking you,

Yours truly,
For M/s Hindalco Industries Limited

Basudev Gangopadhyay
AVP (Planning, Environment & Compliance)

Encl: Form-V with Annexure

CC:-
1. The Regional Officer, Jharkhand State Pollution Board, Dhubwa, Ranchi.
2. The Scientist (E) / Additional Director, MoEF&CC, Regional Office, Ranchi.
(FORM-V)
(See Rule-14)
Environment Statement for the financial year ending the 31st March 2022

PART-A

(i) Name & address of the owners/occupier of the industry/operation/ process

Pakhar Bauxite Mines (115.13 ha)
Hindalco Industries Limited
Lohardaga -835302, Jharkhand

(ii) Industry Category: Primary (STC code), Secondary (SIC code)

- 

(iii) Production Capacity :

3.00 LTPA (Bauxite)

(iv) Year of establishment

2004

(v) Date of last environmental statement submitted

29-09-2021

PART-B

Water & Raw material Consumption

Water Consumption (m3/day): 36 m3/day (Water sprinkling on haul road for dust suppression, plantation and drinking water)
Process: As the operation is mining of Bauxite by open cast method with shallow depth, therefore water is not required for processing.

<table>
<thead>
<tr>
<th>Name of products</th>
<th>Process water consumption per unit of product output During the previous financial year (2020-21)</th>
<th>During the current financial year (2021-22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauxite</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Bauxite is a natural product. As such no water is required for processing.

(1) Raw material Consumption

<table>
<thead>
<tr>
<th>Name of raw materials</th>
<th>Name of products</th>
<th>Consumption of raw material per unit of output During the previous financial year (2020-21)</th>
<th>During the current financial year (2021-22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Applicable</td>
<td>Bauxite</td>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>(1) Pollutants</th>
<th>Quality of pollutants discharged (mass/day)</th>
<th>Concentrations of pollutants discharges (mass/volume)</th>
<th>Percentage of variation from prescribed standards with reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Water</td>
<td>No waste water discharge. Negligible amount of domestic waste water generated is being disposed off through septic tank.</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>(b) Air</td>
<td>Ambient air quality monitoring report is being submitted at your good office at the time of EC compliance report.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Remarks: The limits are well below than the prescribed limit.

PART-D

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

<table>
<thead>
<tr>
<th>Hazardous wastes</th>
<th>Total Quantity (Lts)</th>
<th>During the previous financial year (2020-21)</th>
<th>During the current financial year (2021-22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>From process</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Used/Spent oil)</td>
<td>514 ltr</td>
<td></td>
<td>5094 ltr</td>
</tr>
<tr>
<td>(b) From pollution control facilities</td>
<td>Nil</td>
<td></td>
<td>Nil</td>
</tr>
</tbody>
</table>

Combined figure for Pakhar group of Mines.
### PART-E

**Solid Wastes**

<table>
<thead>
<tr>
<th>Solid wastes</th>
<th>Total Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the previous financial year (2020-21)</td>
<td>During the current financial year (2021-22)</td>
</tr>
<tr>
<td>(a) From process</td>
<td></td>
</tr>
<tr>
<td>357483.2 Cu.M</td>
<td>536951.4 Cu.M</td>
</tr>
<tr>
<td>(b) Form pollution Control facility</td>
<td></td>
</tr>
<tr>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>(c)(1) Quantity recycled or re-utilized within the unit.</td>
<td></td>
</tr>
<tr>
<td>Total over burden (OB) is being used in subsequent back filling.</td>
<td>Total over burden (OB) is being used in subsequent back filling.</td>
</tr>
<tr>
<td>(2) Sold</td>
<td></td>
</tr>
<tr>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>(3) Disposed</td>
<td></td>
</tr>
<tr>
<td>Nil</td>
<td>Nil</td>
</tr>
</tbody>
</table>

### 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

  1) Used/Spent Oil – 5094 ltr, Mines having proper storage & handling facility for used/spent oil. Used/spent oil generated from mining machineries is being stored at earmarked place in closed barrels provided with proper roofing and impervious flooring.

  2) Solid Waste – 536951.4 Cu.M (Over burden i.e. soil, morrm and laterite, utilized for reclamation)

### PART-G

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

Massive plantation programme has been carried out on reclaimed area in Pakhar Plateau. Around 90% are having green canopy and medical value. Objective is to develop local economy, generate livelihood of local people. Product of specimen will have medicine value.
Conventional method of rock fragmentation by drilling & blasting has been improvised by controlled blasting technique using NONEL. This has substantially reduced ground vibration noise, dust and fly rock.

PART-H
Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.

Plantation programme/biodiversity growth activity to continue in years to come.

PART-I
Any other particulars for improving the quality of the environment.

Hindalco, Mines Division is an ISO 14001:2004, ISO 9001:2008, OHSAS 9001:2007 & SA 8000:2008 certified company and under QEHS management system, every care is being taken to conserve and improve the natural environment in all its mines. QEHS (Quality Environment, Occupational Health & Safety) Management system implemented at all Mines of Hindalco and operational control procedures to prevent and control pollution are in practice.

Environmental training programme are conducted departmentally to generate awareness among masses to save environment.