



Hindalco/Env/2026-27/12

May 26th 2026

To,

The In-charge, Regional Office (Eastern-Central Zone),

Ministry of Environment, Forest and Climate Change,
Integrated Regional Office, 2nd Floor, Headquarter-Jharkhand State Housing Board,
Harmu Chowk, Ranchi, Jharkhand-834002

Sub.: Submission of environment clearance compliance report for the period from October'25 to March'26

Ref.: MoEF&CC environment clearance letter No. J-11011/131/2005-IA.II (I) dated 20.09.05

Dear Sir,

This is with reference to the aforesaid subject regarding environment clearance granted by your esteemed office vide letter No. J-11011/131/2005-IA. II (I) dated 20.09.2005.

In this regard, hereby we are pleased to submit Six Monthly Environment Clearance Compliance Report for the period from October'25 to March'26 for our Hindalco Industries Limited, Muri Works.

Soft copy of Environment Clearance compliance report is being also submitted through e-mail to ro.ranchi-mef@gov.in; dirnmnh@gmail.com; mscb.cpcb@nic.in; zokolkatta.cpcb@nic.in; ranchijspcb@gmail.com & roranchi47@gmail.com

Thanking You,

Your's Faithfully

For & On Behalf of

Hindalco Industries Limited - Muri Works



(Sandeep Patil)

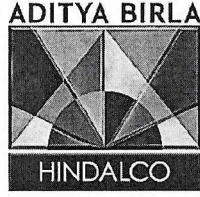
Unit Head, Muri Works

Encl.: EC compliance report

Copy to:

- 1. The Director**, Ministry of Environment, Forest and Climate Change, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi-110003
- 2. The Member Secretary**, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032
- 3. The In-charge**, Central Pollution Control Board, (Eastern Zonal Office), Southern Conclave, Block 502, 5th and 6th Floors, 1582 Rajdanga Main Road, Kolkata-700107
- 4. The Member Secretary**, Jharkhand Pollution Control Board, T.A. Bhawan, HEC Complex, Dhurwa, Ranchi
- 5. The Regional Officer**, Jharkhand State Pollution Control Board, Industrial Area, Tupudana, Ranchi-834003

Hindalco Industries Limited



Hindalco Industries Limited
(Muri Works)

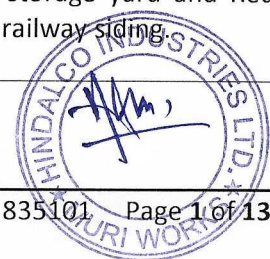
Environment Clearance Compliance Report Period:
October'2025 to March'2026



Hindalco Industries Limited (Unit – Muri Works)
P.O.: Chotamuri, Distt. Ranchi – 835101, Jharkhand – India

A. SPECIFIC CONDITIONS

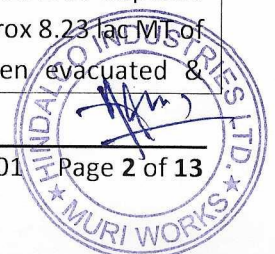
Sr. No	Condition	Compliance Status
(i)	<p>The gaseous emissions from various units shall conform to the standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry, its size and location. At no time the emission level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency. Ambient Air Quality data should be regularly monitored and records maintained and report submitted to the Ministry /CPCB/Jharkhand State Pollution Control board once in six months.</p>	<p>Pollution control Equipments had been installed to conform the prescribed emission standard. Online Continuous Emission Monitoring System (OCEMS) had been installed and attached with Refinery & Power Plant Boiler stacks to online continuous emission monitoring and uninterruptedly report being transferred to the CPCB & JSPCB through dedicated lease line server.</p> <p>Ambient air quality regularly monitored and report submitted to the MOEF&CC, CPCB & JSPCB and its Regional Offices with six monthly EC compliance report. Ref. Annexure-1.</p>
(ii)	<p>There shall be no discharge of process effluent. As reflected in the EIA/EMP report, the process waste water generation shall increase from 528m³/d to 5092m³/d. About 802m³/d of waste water will be recycled. Remaining 4290m³/d will be recycled back to the process after treatment in the ETP. In addition, efforts shall be made to re-use wastewater from the existing plant. The domestic wastewater shall be treated in STP to meet prescribed standards. The company shall undertake water conservation measures by recycling of power plant blow downs and domestic effluent in the refinery process. The storm water management shall be by use of water for sprinkling, recycling to process, ash moistening and plant keep up.</p>	<p>There is no process effluent discharged and after treatment in ETP it is being recycled and reused in the process. The domestic waste water generated from residential colony is after treatment in STP being used for the plantation purpose as well as necessary initiatives have been taken towards water conservation.</p> <p>Wastewater generation and input to ETP average/day H2 FY26 (October 25 to March 26) 4157 m³/day and 100% of ETP treated water reused in process and there is no discharge.</p> <p>Domestic wastewater 140 m³/day treated in STP and 100% utilised for gardening and dust suppression in road.</p> <p>The quality of effluent and domestic wastewater is being maintained as per the prescribed standards and online effluent quality monitoring system installed in ETP & STP and real time data is being transferred to the JSPCB & CPCB server.</p> <p>Storm water is managed by storm water drainage system.</p>
(iii)	<p>In plant control measures for checking fugitive emission from spillage/raw materials handling shall be provided. Water sprinklers shall be provided to control the fugitive emissions from the active red mud</p>	<p>In plant for checking fugitive emissions, dust suppression systems are installed in Bauxite handling area, Coal storage yard and Red Mud loading area in railway siding.</p>



EC Compliance Status Report

Ref. No. J-11011/131/2005-IA.II (I) dated 20.09.05

	disposal areas and ash coverage in inactive areas.	<p>To control the fugitive emission following systems are already in place:</p> <ul style="list-style-type: none"> ▪ Dust extraction system has been commissioned in Bauxite and coal crusher. ▪ Dust suppression system with water sprinklers along the road and periphery of RMP. ▪ Dedicated water tankers in RMP area and road to suppress dust. ▪ Water Cannon & sprayer tanker deployed. ▪ Additional Green belt developed activity is going on in RMP abandoned area.
(iv)	The particulate emissions from the Calciner shall be controlled by installation of electrostatic precipitator. The particulate emissions shall not exceed 50 mg/Nm ³ . The company shall install bag filters to control the emissions from the alumina kiln. All the boiler stacks shall be provided with stack height as per the CPCB guidelines. The boiler and Calciner stacks shall be equipped with continuous monitoring device to check SPM emission levels.	<p>Pollution control equipment (ESP) had been installed and attached with Calciner stack to control the emission as per the prescribed standard 50 mg/Nm³. The height of the boiler stack provided as per the CPCB guidelines.</p> <p>The Boiler & Calciner stacks equipped with the continuous monitoring devices to check the PM (Calciner stack), PM (in CGPP stack) and real time data being transferred to the CPCB & JSPCB server.</p>
(v)	The company shall adopt dry disposal system for red mud disposal and shall provide Geo membrane lining in red mud storage area. The ground water quality shall be monitored at various depths around the red mud ponds and action plan in this regard shall be submitted to the Ministry. The company shall rehabilitate the abandoned red mud pond areas with development of green cover.	<p>Dry mud disposal system had been adopted by the unit for Red Mud by Pressure Filter Technology with 73-75% solid. In the RMP area, a well-designed system is installed to take care of any Leachate, seepage and runoff water.</p> <p>Pre & Post Monsoon Hydrological study is being done. In the year 2026 pre & post monsoon hydrological study was conducted by ISM, Dhanbad for ground water sources in Muri and as per the report all the parameters are well within the limit.</p> <p>. Abandoned Red Mud Pond (RMP2) has been rehabilitated and covered by development of green cover.</p>
(vi)	As and when the new pond for red mud disposal is to be constructed, it shall be lined with geo lining to prevent leaching of effluent into the ground water.	<p>Compliance condition on Geo Membrane Lining of Red Mud Pond will be adhered whenever new red mud yard will be constructed. As of now old red mud yard is in operation and no fresh dumping is being done as more than 100% red mud disposed to cement industries. Approx 8.23 lac MT of legacy Red Mud has been evacuated &</p>



EC Compliance Status Report**Ref. No. J-11011/131/2005-IA.II (I) dated 20.09.05**

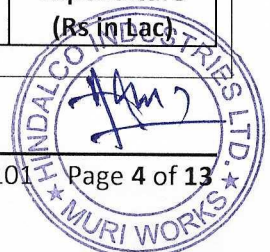
		despatched to cement industries and NHAI for Road in the last few years. Moreover, green cover is under development in Red mud yard #3 and till now around 45 acres green cover completed as per the rehabilitation plan.
(vii)	Green belt of adequate width and density shall be developed in 5 ha. of area in addition to 48.97 ha of plant area already under green belt as per the CPCB guidelines.	Additional 5 Ha is green covered including red mud rehabilitation area. Current plantation area is in Red Mud Yard 3.
(viii)	Occupational Health Surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers is being done regularly and record maintained as per FA.
(ix)	All the recommendations of the Charter for Corporate Responsibility for Environment Protection (CREP) for the aluminium sector shall be strictly implemented.	Charter for Corporate Responsibility for Environment Protection (CREP) as applicable for our process is being complied and detailed report is enclosed as Annexure - 2 .
(x)	The environmental clearance for the expansion of alumina refinery and establishment of coal based co-generation proposal is subject to the condition that the company shall not undertake any construction or operation of the proposed expansion activity till the environmental clearance for the linked mining proposal is obtained.	Complied.

B. GENERAL CONDITIONS:

Sr. No	Condition	Compliance Status
(i)	The project authorities must strictly adhere to the stipulations made by the Jharkhand State Pollution Control Board and the State Government.	Point noted and being adhered.
(ii)	No further expansion or modifications in the plant should be carried out without prior approval of the Ministry of Environment and Forests.	Agreed & complied.
(iii)	Adequate ambient air quality-monitoring stations should be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and NO ₂ are anticipated in consultation with the State Pollution Control Board. Data on ambient air quality, fugitive emission and stack emissions shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the State Pollution Control Board/Central Pollution Control Board once in six months.	4 Nos. of Continuous Ambient air quality monitoring station have been installed with the consultation of SPCB and real time data is being displayed at factory main gate and connected to JSPCB and CPCB server. Ambient air quality, fugitive emission and stack emissions monitoring done on regular basis & data submitted. Please refer Annexure - 1

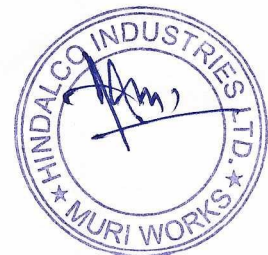


(iv)	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. The treated wastewater should be utilized for plantation purpose.	The quality of wastewater is being confirmed as per the prescribed standards and recycled in the process. Domestic wastewater after treatment being used for the plantation and dust suppression system purpose. The online effluent quality monitoring system installed and real time data is being transferred to the JSPCB & CPCB servers.																											
(v)	The overall noise levels in and around the plant area shall be kept well within the standard (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).	The noise control measures have taken and maintained the noise level within the prescribed limit. The ambient noise levels are maintained as per the EPA Rule, 1989. Please refer the Annexure – 3 .																											
(vi)	The project proponent shall also comply with the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	<p>All the necessary measures have been adopted towards environmental protection and socio-economic welfare of neighbouring area is being carried out under company's CSR activities. The details of expenditure spent thereon are given as below. Total expense is Rs 266.46 lacs (October'25-March'26)</p> <table border="1" data-bbox="879 1111 1417 1715"> <thead> <tr> <th colspan="3">CSR Expenditure for the period from October- 2025 to March- 2026</th> </tr> <tr> <th>Sr. No.</th> <th>Description</th> <th>Expenditure (in Lacs)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Education</td> <td>₹ 87.77</td> </tr> <tr> <td>2</td> <td>Health care</td> <td>₹ 26.10</td> </tr> <tr> <td>3</td> <td>Sustainable Livelihood</td> <td>₹ 83.83</td> </tr> <tr> <td>4</td> <td>Infrastructure Development</td> <td>₹ 34.30</td> </tr> <tr> <td>5</td> <td>Social Change</td> <td>₹ 34.46</td> </tr> <tr> <td>6</td> <td>If any other specify here</td> <td>₹ 0.00</td> </tr> <tr> <td colspan="2">Total Rs.</td> <td>₹ 266.46</td> </tr> </tbody> </table>	CSR Expenditure for the period from October- 2025 to March- 2026			Sr. No.	Description	Expenditure (in Lacs)	1	Education	₹ 87.77	2	Health care	₹ 26.10	3	Sustainable Livelihood	₹ 83.83	4	Infrastructure Development	₹ 34.30	5	Social Change	₹ 34.46	6	If any other specify here	₹ 0.00	Total Rs.		₹ 266.46
CSR Expenditure for the period from October- 2025 to March- 2026																													
Sr. No.	Description	Expenditure (in Lacs)																											
1	Education	₹ 87.77																											
2	Health care	₹ 26.10																											
3	Sustainable Livelihood	₹ 83.83																											
4	Infrastructure Development	₹ 34.30																											
5	Social Change	₹ 34.46																											
6	If any other specify here	₹ 0.00																											
Total Rs.		₹ 266.46																											
(vii)	The project authorities will provide requisite funds both recurring and non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.	<p>Requisite fund has been provided for environment protection measures and it has not been diverted for any other purpose. Recurring and non-recurring environmental expenditure details are given below.</p> <table border="1" data-bbox="879 1899 1417 2031"> <thead> <tr> <th>FY</th> <th>Recurring Expenditure (Rs in Lac)</th> <th>Non-Recurring Expenditure (Rs in Lac)</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	FY	Recurring Expenditure (Rs in Lac)	Non-Recurring Expenditure (Rs in Lac)																								
FY	Recurring Expenditure (Rs in Lac)	Non-Recurring Expenditure (Rs in Lac)																											



EC Compliance Status Report**Ref. No. J-11011/131/2005-IA.II (I) dated 20.09.05**

		2025-26 (H1)	163.49	412.07
		2025-26 (H2)	174.89	566.83
(viii)	The Regional Office of this Ministry at Bhubaneswar/Central Pollution Control Board/State Pollution Control Board will monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation should be submitted to them regularly.	Point noted, the monitored data along with EC compliance report is being submitted once in every six months to the concerned authorities.		
(ix)	The project proponent should inform the public that the project has been accorded environmental clearance by the ministry and copies of the clearance letter are available with the State Pollution Control board/Committee and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in . This should be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office.	The accorded environmental clearance by the ministry for the project has been informed to the public by advertisement in two local newspapers namely 'Prabhat Khabar' in Hindi and 'Hindustan' in English dtd. 30 th Sep'2005 as well as the copy of the same forwarded to the concerned authorities.		
(x)	The Project Authorities should inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Point noted and complied.		



Ambient Air Quality monitoring report:



SCIENTIFIC RESEARCH LABORATORY

An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization
 Accredited by Jharkhand State Pollution Control Board
 Analytical & Environmental Engineering Laboratory
 Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand
 Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srfranchilab@gmail.com



TC-11163

TEST REPORT

ULR No.: TC111632600000115F	Test Report No.	: SRL/R/AAQ/FEB/26/117
Customer's Name & Address;	Report Issue Date	: 26.02.2026
M/s Hindalco Industries Limited. At.: Chota Muri, P.S.: Muri, District: Ranchi, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: In-front of 'B' Block Quarter
	Date of Sampling	: 16.02.2026 to 17.02.2026
	Sample Receipt Date	: 17.02.2026
	Analysis Date	: 17.02.2026 to 24.02.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Clear	Ambient Temperature (°C): 32	Relative Humidity (%): 46
Atmospheric Pressure (mmHg): 758	Wind Speed (km/hr.): 6.0	Wind Direction : NW

TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO ₂)	µg/m ³	09.60	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO ₂)	µg/m ³	23.40	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM ₁₀	µg/m ³	63.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM _{2.5}	µg/m ³	37.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH ₃)	µg/m ³	<20.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O ₃)	µg/m ³	20	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m ³	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m ³	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m ³	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

*NAAQS: National Ambient Air Quality Standards, 2009.

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full without written approval of the laboratory.

Niraj

Verified & issued by;
 Dr. Niraj Kumar Singh
 (Authorized Signatory)

-- End of the Report --



SAVE THE EARTH WITH THE RIGHT PRACTICE



SCIENTIFIC RESEARCH LABORATORY

An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization
 Accredited by Jharkhand State Pollution Control Board
 Analytical & Environmental Engineering Laboratory
 Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand
 Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srfranchilab@gmail.com



TC-11163

TEST REPORT

ULR No.: TC111632600000116F	Test Report No.	: SRL/R/AAQ/FEB/26/118
Customer's Name & Address;	Report Issue Date	: 26.02.2026
M/s Hindalco Industries Limited. At.: Chota Muri, P.S.: Muri, District: Ranchi, Jharkhand.	Type of Sample	: Ambient Air
	Sampling Location	: North Plot, In-front of Installed AAQMS
	Date of Sampling	: 16.02.2026 to 17.02.2026
	Sample Receipt Date	: 17.02.2026
	Analysis Date	: 17.02.2026 to 24.02.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Clear	Ambient Temperature (°C): 32	Relative Humidity (%): 46
Atmospheric Pressure (mmHg): 758	Wind Speed (km/hr.) : 6.0	Wind Direction : NW

TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO ₂)	µg/m ³	08.40	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO ₂)	µg/m ³	21.00	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM ₁₀	µg/m ³	58.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM _{2.5}	µg/m ³	35.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH ₃)	µg/m ³	<20.00	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O ₃)	µg/m ³	24	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines
7.	Arsenic (As)	ng/m ³	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines
8.	Lead (Pb)	µg/m ³	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m ³	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

*NAAQS: National Ambient Air Quality Standards, 2009.

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full without written approval of the laboratory.

Niraj

Verified & issued by;
 Dr. Niraj Kumar Singh
 (Authorized Signatory)

-- End of the Report --



SAVE THE EARTH WITH THE RIGHT PRACTICE



SCIENTIFIC RESEARCH LABORATORY

An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization
 Accredited by Jharkhand State Pollution Control Board
 Analytical & Environmental Engineering Laboratory
 Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand
 Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srfranchilab@gmail.com



TC-11163

TEST REPORT

ULR No.: TC111632600000117F	Test Report No.	: SRL/R/AAQ/FEB/26/119
Customer's Name & Address;	Report Issue Date	: 26.02.2026
M/s Hindalco Industries Limited.	Type of Sample	: Ambient Air
At.: Chota Muri, P.S.: Muri,	Sampling Location	: Football Ground (In-front of Installed AAQMS)
District: Ranchi, Jharkhand.	Date of Sampling	: 16.02.2026 to 17.02.2026
	Sample Receipt Date	: 17.02.2026
	Analysis Date	: 17.02.2026 to 24.02.2025
	Sample Collected by	: SRL Team
	Sample Condition	: Sealed and refrigerated

Weather Condition: Clear	Ambient Temperature (°C): 32	Relative Humidity (%): 46
Atmospheric Pressure (mmHg): 758	Wind Speed (km/hr.): 6.0	Wind Direction : NW

TEST RESULTS

Sl. No.	Parameters	Unit	Results	Standards Value*	Test Method
1.	Sulphur Dioxide, (SO ₂)	µg/m ³	07.80	80 (24 hrs.)	IS: 5182 (Part- 2)
2.	Nitrogen Dioxide, (NO ₂)	µg/m ³	19.60	80 (24 hrs.)	IS: 5182 (Part- 6)
3.	Particulate Matter, PM ₁₀	µg/m ³	66.00	100 (24 hrs.)	IS: 5182 (Part- 23)
4.	Particulate Matter, PM _{2.5}	µg/m ³	39.00	60 (24 hrs.)	IS: 5182 (Part- 24)
5.	Ammonia (NH ₃)	µg/m ³	<20	400 (24 hrs.)	IS: 5182 (Part- 25)
6.	Ozone (O ₃)	µg/m ³	24	180 (1 hr.)	CPCB, Vol. I (NAAQMS Monitoring & Analysis Guidelines)
7.	Arsenic (As)	ng/m ³	<1.00	6 (Annual)	CPCB, Volume I (NAAQMS Monitoring & Analysis Guidelines)
8.	Lead (Pb)	µg/m ³	<0.02	1 (24 hr.)	IS 5182 (Part-22)
9.	Nickel (Ni)	ng/m ³	<5.00	20 (Annual)	IS 5182 (Part-26): 2020

*NAAQS: National Ambient Air Quality Standards, 2009.

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full without written approval of the laboratory.

Niraj

Verified & issued by;
 Dr. Niraj Kumar Singh
 (Authorized Signatory)

-- End of the Report --



SAVE THE EARTH WITH THE RIGHT PRACTICE

Stack monitoring report:

**SCIENTIFIC RESEARCH LABORATORY**

An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization

Accredited by Jharkhand State Pollution Control Board

Analytical & Environmental Engineering Laboratory

Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand

Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com



TC-11163

TEST REPORT

ULR No.: TC111632600000120F	Test Report No.	: SRL/R/ST/FEB/26/122
Customer's Name & Address;	Report Issue Date	: 26.02.2026
M/s Hindalco Industries Limited.	Type of Sample	: Stack Emission
At.: Chota Muri, P.S.: Muri,	Date of Sampling	: 17.02.2026
District: Ranchi, Jharkhand.	Sample Receipt Date	: 17.02.2025
	Analysis Date	: 17.02.2026 to 21.02.2026

A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Calcination Stack (CFBC Stack)
Emission due to	: Burning of Furnace Oil
Material of construction of stack	: MS
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 85
Height of the sampling point from ground level (in meter)	: 46
Diameter of the stack at sampling point (in meter)	: 3
Fuel used & Consumption	: Furnace Oil
Production Capacity	: 78 litre/ton of Calcined Alumina
Stack connected to	: ESP

B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	31	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	183	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	758	-
Stack gas velocity, (m/sec)	8.43	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm ³ /hr),	1,40,217	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	3.93	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	5.8	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	<0.2%	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm ³	236	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm ³	79	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm ³	28	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 28 mg/Nm³ against prescribed limit of 50 mg/Nm³. (MOEF&CC Notification dated 7th Dec, 2015)

Note:

- The results relate only to the items sampled and tested.
- Test report shall not be reproduced except in full without written approval of the laboratory.

Verified & issued by;
Dr. Niraj Kumar Singh
(Authorized Signatory)

-- End of Report --

SAVE THE EARTH WITH THE RIGHT PRACTICE



SCIENTIFIC RESEARCH LABORATORY

An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization
 Accredited by Jharkhand State Pollution Control Board
 Analytical & Environmental Engineering Laboratory
 Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand
 Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srfranchilab@gmail.com



TC-11163

TEST REPORT

ULR No.: TC111632600000121F	Test Report No.	: SRL/R/ST/FEB/26/123
Customer's Name & Address;	Report Issue Date	: 26.02.2026
M/s Hindalco Industries Limited.	Type of Sample	: Stack Emission
At.: Chota Muri, P.S.: Muri,	Date of Sampling	: 16.02.2026
District: Ranchi, Jharkhand.	Sample Receipt Date	: 17.02.2026
	Analysis Date	: 17.02.2026 to 21.02.2026

A. INFORMATION OF PHYSICAL CHARACTERISTICS OF STACK

Stack number if any	: Boiler Stack (CGPP)
Emission due to	: Burning of Coal
Material of construction of stack	: Concrete
Shape of stack	: Circular
Whether stack is provided with permanent platform/ ladder	: Yes
Height of the stack from ground level (in meter)	: 115
Height of the sampling point from ground level (in meter)	: 40
Diameter of the stack at sampling point (in meter)	: 8
Fuel used & Consumption	: Coal (92 T/Hr.)
Production Capacity	: 30 MW (15 MW x 2)
Stack connected to	: ESP

B. DETAIL OF STACK EMISSION SAMPLING AND TEST REPORT

Parameters (Units)	Results	Test Method
Ambient air temperature (°C)	33	IS 11255 (Part 3): 2008 RA 2013
Stack gas temperature, (°C)	131	IS 11255 (Part 3): 2008 RA 2013
Barometric Pressure, (mm of Hg)	758	-
Stack gas velocity, (m/sec)	6.70	IS 11255 (Part 3): 2008 RA 2013
Volumetric flow rate (in Nm ³ /hr),	8,94,556	IS 11255 (Part 3): 2008 RA 2013
Emission rate (in kg/hr)	36.68	IS 11255 (Part 3): 2008 RA 2013
Conc. of Carbon dioxide, (% v/v by Orsat method)	6.2	IS 13270; 1992 RA 2019
Conc. of Carbon monoxide, (% v/v by Orsat method)	<0.2%	IS 13270; 1992 RA 2019
Conc. of Sulphur Dioxides, mg/Nm ³	436	IS: 11255 (Part 2) 1985 RA 2019
Conc. of Oxides of Nitrogen, mg/Nm ³	94	IS: 11255 (Part 7) 2005 RA 2017
Conc. of Particulate Matter, mg/Nm ³	41	IS: 11255 (Part 1) 1985 RA 2019

Remarks: Dust concentration was found 41 mg/Nm³ against prescribed limit of 50 mg/Nm³. (MoEF&CC Notification dated 7th Dec, 2015).

Note:

1. The results relate only to the items sampled and tested.
2. Test report shall not be reproduced except in full without written approval of the laboratory.

Niraj

Verified & issued by;
 Dr. Niraj Kumar Singh
 (Authorized Signatory)

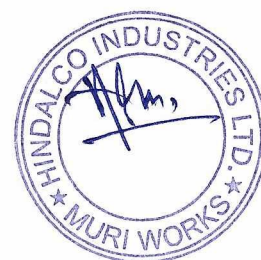
-- End of Report --

SAVE THE EARTH WITH THE RIGHT PRACTICE



Charter on Corporate Responsibility for Environmental Protection (CREP) action points on red mud

S. No.	Action Points / Recommendations	Targets	Status																		
1.	Phasing Wet disposal Red Mud utilisation	To achieve minimum 50% solid in red mud by 2005	We have installed 3 no's Pressure filter to get around 75%.																		
		A proposal for practical utilization to be prepared by Aluminium Association of India within six months	<p>We are sending 100 % Red Mud generated to cement industry. Moreover, we are also dispatching red mud from red mud yard. In last 3 years' mud despatched to the cement industry and NHAI is given in the below – As is basis:</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Red Mud Generation Qty. (MT)</th> <th>Red Mud Disposal Qty. (MT)</th> <th>Despatch To</th> </tr> </thead> <tbody> <tr> <td>2023-24</td> <td>810254</td> <td>914948</td> <td>Dalmia Cement (Bharat) Limited, UltraTech Cement Ltd., Ambuja Cement Ltd., Shiva Cement Limited, Wonder Cements Ltd., RCCPL Pvt. Ltd, The India cements Limited, GREEN VALLIEY INDUSTRIES LTD, Star Cement Limited, NHAI</td> </tr> <tr> <td>2024-25</td> <td>802426</td> <td>1017977</td> <td></td> </tr> <tr> <td>2025-26 (H1)</td> <td>336732</td> <td>466220</td> <td></td> </tr> <tr> <td>2025-26 (H2)</td> <td>398749</td> <td>524110</td> <td></td> </tr> </tbody> </table>	Year	Red Mud Generation Qty. (MT)	Red Mud Disposal Qty. (MT)	Despatch To	2023-24	810254	914948	Dalmia Cement (Bharat) Limited, UltraTech Cement Ltd., Ambuja Cement Ltd., Shiva Cement Limited, Wonder Cements Ltd., RCCPL Pvt. Ltd, The India cements Limited, GREEN VALLIEY INDUSTRIES LTD, Star Cement Limited, NHAI	2024-25	802426	1017977		2025-26 (H1)	336732	466220		2025-26 (H2)	398749
Year	Red Mud Generation Qty. (MT)	Red Mud Disposal Qty. (MT)	Despatch To																		
2023-24	810254	914948	Dalmia Cement (Bharat) Limited, UltraTech Cement Ltd., Ambuja Cement Ltd., Shiva Cement Limited, Wonder Cements Ltd., RCCPL Pvt. Ltd, The India cements Limited, GREEN VALLIEY INDUSTRIES LTD, Star Cement Limited, NHAI																		
2024-25	802426	1017977																			
2025-26 (H1)	336732	466220																			
2025-26 (H2)	398749	524110																			



Noise Monitoring Data:



SCIENTIFIC RESEARCH LABORATORY

An ISO 9001:2015 (QMS) & OHSMS 45001:2018 Certified Organization
 Accredited by Jharkhand State Pollution Control Board
 Analytical & Environmental Engineering Laboratory
 Address: C-144, Aman Green City, Pundag, Ranchi- 834 004, Jharkhand
 Tele No.: 0651-4057244, Mobile: 94701 30700, E-mail: srlranchilab@gmail.com



TC-11163

TEST REPORT

ULR No.: TC111632600000118F	Test Report No.	: SRL/R/N/FEB/26/120
Customer's Name & Address;	Report Issue Date	: 26.02.2026
M/s Hindalco Industries Limited.	Type of Sample	: Ambient Noise
At.: Chota Muri, P.S.: Muri,	Date of Sampling	: 16.02.2026 to 17.02.2026
District: Ranchi, Jharkhand.	Sample Receipt Date	: 17.02.2026
	Analysis Date	: 20.02.2026
	Sample Collected by	: SRL Team
	Weather Condition	: Clear
	Atmospheric Temp.(°C)	: 32
	Test Method	: IS 9989

AMBIENT NOISE MONITORING DATA

Sl. No.	Monitoring Location	Date of Monitoring	Sound Pressure Level, dB(A)	
			Day Time (06.00-22.00 hr.)	Night Time (22.00-06.00 hr.)
1.	In-front of 'B' Block Quarter	16.02.2026 to 17.02.2026	54.9	47.2
2.	North Plot (In-front of Installed AAQMS)	16.02.2026 to 17.02.2026	51.5	46.4
3.	Football Ground (In-front of Installed AAQMS)	16.02.2026 to 17.02.2026	56.3	49.7

Norms: National Ambient Air Quality Standards (NAAQS) in respect of Noise as per CPCB, New Delhi,
 Industrial Area : Day Time 75 dB(A) Leq and Night Time 70 dB(A) Leq
 Commercial Area : Day Time 65 dB(A) Leq and Night Time 55 dB(A) Leq
 Residential Area : Day Time 55 dB(A) Leq and Night Time 45 dB(A) Leq
 Silence Zone : Day Time 50 dB(A) Leq and Night Time 40 dB(A) Leq

Niraj

Verified & issued by;
 Dr. Niraj Kumar Singh
 (Authorized Signatory)

– End of the Report –



SAVE THE EARTH WITH THE RIGHT PRACTICE
