

Vimta Labs Limited

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सूचना का अधिकार
अधिनियम, 2005 के अंतर्गत

Vimta

Driven by Quality. Inspired by Science.

ISSUED TO:
M/s. Bharat Aluminium Company Limited
KORBA (C.G.)

Report No: VLL/VLS/24-25/23041/PL-1
Issue Date: 2025-03-05
P.O No: 8500005780
P.O Date: 2022-06-29

Sample Particular:- STACK EMISSION MONITORING AT POTLINE - 1

Analysis starting date :- 2025-02-03

Analysis Completion date :- 2025-02-18

Test Required :- PM, Particulate Fluoride, Gaseous Fluoride, SO₂;

TEST RESULTS									
POTLINE - 1 (INLET)					POTLINE - 1 FTP - 1	POTLINE - 1 FTP - 2	POTLINE - 1 FTP - 3	POTLINE - 1 FTP - 4	Method
S No.	Location	Parameter	Limits	Units	2025-02-01	2025-02-15	2025-02-06	2025-02-12	
1	POTLINE - 1 (INLET)	Height of the stack	-	m	80	80	80	80	-
2		Diameter	-	m	2.74*5.87	2.74*5.87	2.74*5.87	2.74*5.87	-
3		Area of Cross section	-	m ²	16.08	16.08	16.08	16.08	-
4		Stack Temperature	-	°C	128	129	124	128	-
5		Stack Pressure	-	mmHg	734	731	733	733	-
6		Velocity	-	m/s	19.8	16.2	18.2	18.2	USEPA M-2
7		Volumetric Flow Rate	-	Nm ³ /Hr	822637	668648	762739	755131	
8		Particulate Matter (PM)	50	mg/Nm ³	1697.4	1178.3	1374.0	1482.6	USEPA M-5
9		Particulate Fluoride	-	mg/Nm ³	8.4	11.4	7.8	8.3	USEPA M-138
10		Gaseous Fluoride	-	mg/Nm ³	115.0	119.0	96.9	99.6	
11		Sulphur Dioxide as SO ₂	-	mg/Nm ³	226	232	200	212	Measured by Portable Combustion Analyser

*Instrument Used - Vayubodhan Stack Sampler KII

*ND - Not Deducted

*USD - Unit Under Shut Down



Dr. Subba Reddy Mallampati
Manager - Environment

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ISSUED TO:**M/s. Bharat Aluminium Company Limited
KORBA (C.G.)**

Report No.: VLL/VLS/24-25/23041/PL-2

Issue Date: 2025-03-05

P.O No: 8500005780

P.O Date: 2022-06-29

Sample Particular:- STACK EMISSION MONITORING AT POTLINE - 2

Analysis starting date :- 2025-02-14

Analysis Completion date :- 2025-02-22

Test Required :- PM, Particulate Fluoride, Gaseous Fluoride, SO₂;**TEST RESULTS**

POTLINE - 2 (INLET)					POTLINE - 2 FTP - 1	POTLINE - 2 FTP - 2	Method
S No.	Location	Parameter	Limits	Units	2025-02-19	2025-02-13	
1	POTLINE - 2 (INLET)	Height of the stack	-	m	80	80	-
2		Diameter	-	m	4.924	4.924	-
3		Area of Cross section	-	m ²	19.05	19.05	-
4		Stack Temperature	-	°C	127	128	-
5		Stack Pressure	-	mmHg	737	729	-
6		Velocity	-	m/s	19.8	22.1	USEPA M-2
7		Volumetric Flow Rate	-	Nm ³ /Hr	981009	1080378	
8		Particulate Matter (PM)	50	mg/Nm ³	1571.5	1427.6	USEPA M-5
9		Particulate Fluoride	-	mg/Nm ³	13.1	9.3	USEPA M-13B
10		Gaseous Fluoride	-	mg/Nm ³	187.3	137.4	
11		Sulphur Dioxide as SO ₂	-	mg/Nm ³	263	232	Measured by Portable Combustion Analyser

*Instrument Used - Vayubodhan Stack Sampler Kit

*ND - Not Deducted

*USD - Unit Under Shut Down

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	maintenance with requisite water sprinkling arrangements shall be ensured.	
12	Industry shall ensure that the poly-aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) shall not exceed 2 mg/Nm ³ . The data on PAH shall be monitored quarterly and report shall be submitted regularly to CECB.	<p>The poly-aromatic hydrocarbon (PAH) emission from carbon plant (Anode Bake Oven) is within 2 mg/Nm³ for the existing facility.</p> <p>Monitoring will be conducted, and report will be submitted to MoEF & CC and CECB once the project is implemented for expansion facility.</p>
13	Industry shall ensure that particulate fluoride emissions shall not be more than 0.65 mg/Nm ³ and fugitive particulate fluoride emissions from pot room shall not be more than 1.85 mg/Nm ³ .	<p>Particulate Fluoride emission and fugitive particulate Fluoride emissions from pot rooms for the existing facility.</p> <p>The same will be ensured for the expansion facility implementing similar pollution control equipment like FTPs.</p>
14	Industry shall control SO ₂ and NO _x emissions by replacing Furnace Oil with Low Sulphur Heavy Stock (LSHS) within 6 months. Compliance status in this regard shall be submitted to CECB.	<p>Complied with.</p> <p>HFO has been replaced with LSHS completely.</p>
15	Industry shall ensure the fluoride consumption less than 10 kg/tonne of Aluminium production for the existing 5.75 LTPA Aluminium smelter within three months and for the proposed 5.1 LTPA expansion project right from the day of commissioning of the unit.	<p>The following actions have already been undertaken to reduce the Fluoride consumption:</p> <ol style="list-style-type: none"> 1. Improvement in hooding efficiency- Continuous 2. Improvement of PL2 suction efficiency - Continuous 3. Retrofitting of FTP chambers - Continuous 4. Reduction of Soda in Alumina - Continuous 5. Bellow change in FTP – Continuous <p>Draft Gazette notification from MoEF & CC published on 1st Nov'24 for Aluminium Plants stipulating AIF3 consumption of 20 Kg /t-Al.</p>
16	The laser-based advance technology shall be in place by March 2023 for continuously monitor gaseous fluoride emissions from pot rooms on real time basis.	Complied with.