

BALCO/ENV/A -02(A)/2026/215

Date: 29.05.2026

To,  
The Integrated Regional Office (IRO),  
Ministry of Environment, Forest & Climate Change,  
Aranya Bhawan,  
North Block, Sector-19,  
Nava Raipur, Atal Nagar (CG) 492002.

**Sub:** Half Yearly Compliance Status Report (October 2025 to March 2026) of the 540 MW Power Plant.

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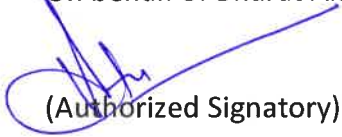
Respected Sir,

As per the Environment Clearance No. J- 13011/3/2003.IA-II (T) dated 23.06.2004, received for the expansion of Captive Power Plant by M/s Bharat Aluminium Company Limited, Korba, please find enclosed herewith the compliance report along with the necessary supporting documents and monitoring reports.

We hope that the above is in line with the requirements under the referred Environment Clearance. In case your good office requires any further information or clarification, we would be glad to furnish the same.

Thanking you,

Yours Truly,  
On behalf of Bharat Aluminium Company Ltd.

  
(Authorized Signatory)

Encl: a/a

Copy to: The Regional Officer, Chhattisgarh Environment Conservation Board, Korba.

*BOk*

**COMPLIANCE STATUS OF 675 MW COAL BASED CAPTIVE POWER PLANT  
KORBA (C.G.) of M/s BHARAT ALUMINIUM CO.LTD  
Duration: October 2025 to March 2026  
MOEF&CC – No. J-13011/3/2003.IA-II (T) / Dated: 23 June 2004**

S. No	Environmental Clearance Conditions	Compliance Status
i	All the conditions stipulated by Chhattisgarh Environment Conservation Board vide their letter no. 580/TS/CECB/2002 dated 17.02.2003 should be strictly implemented.	Complied.
ii	No additional land shall be acquired.	No additional land has been acquired.
iii	Coal requirement is estimated at 10800 TPD having calorific value of 3000-3675 K.Cal/kg with 40% ash content and 0.3-0.5% sulphur content. Copy of coal linkage approval should be submitted to the Ministry within three months.	Coal consumption is within the limit defined and having calorific value ranging from 3000-3650 KCal/kg. The ash content in coal on feed basis is 37.42% and sulphur content in coal on feed basis is 0.43 %.  With respect to this point, please note that there has been a MoEFCC notification dated 21.05.2020 and subsequent amendments that substituted Rule 3(8) of the Environment (Protection) Rules, 1986 and stated that the TPPs can use coal without any stipulations as to ash content or distance subject to fulfilment of certain conditions such conditions include technology solution for emission norms, management of ash pond, safe transportation among others. It is submitted that such conditions are being complied with in letter and spirit.  Coal linkage approval has already been submitted to the Ministry. Please refer <b>Annexure-I</b> .
iv	A single flue stack of 275 m height shall be provided with continuous online monitoring equipment.	Complied with.  A single flue stack of 275 m height with four-flue cans for 4 units of 135 MW each has been provided with continuous on-line monitoring equipment and are connected with CPCB and CECB server.
v	High efficiency Electrostatic precipitator (ESP) should be installed to limit outlet SPM emission 75 mg/Nm <sup>3</sup> .	High efficiency Hybrid Electrostatic precipitators (Hybrid ESP) have been installed to limit outlet SPM emission to less than 50 mg/Nm <sup>3</sup> in all the units.  Please refer <b>Annexure -II</b> for monitoring report.
vi	Space provision should be made for flue Gas De-sulphurisation (FGD) unit.	Space provision for flue gas De-sulphurisation (FGD) is being ensured.
vii	Ash generation will be 9326 TPD fly ash 1166 TPD bottom ash. Ash disposal would be done through high concentration slurry disposal system on abandoned red mud pond. Fly ash utilization plan generated should be used in a phased manner as per provisions of the	Fly ash generation was 2105.23 TPD and Bottom ash 526.30 TPD during FY 2025-26.  Ash is transported through a high concentration slurry disposal system to ash dykes.  As per our action plan, the fly ash is being utilized in sustainable avenues like exhausted mine void

	Notification on Fly Ash Utilization issued by the Ministry in September 1999 and its subsequent amendments. By the end of 9 <sup>th</sup> year full fly ash utilization should be ensured.	filing, road construction/NHAI, supply to cement industry, brick making etc. in line with the fly ash notification and amendments. Please refer <b>Annexure-III</b> for the HCSD system flow diagram.
viii	Necessary drainage network at the proposed CPP site should be developed.	Necessary drainage network has been constructed within the Power Plant. Please refer <b>Annexure-IV</b> .
ix	Water requirement should not exceed 51240 m <sup>3</sup> /day. No ground water and/or other surface water should be used. Copy of confirmed water withdrawal should be submitted to the Ministry within three months.	Complied with. A copy of water withdrawal agreement has been submitted to the Ministry. Please refer <b>Annexure-V</b> .
x	Waste water of coal handling plant should be treated before disposal.	Wastewater of coal handling plant is being treated in ETP and being recycled back into the system.
xi	Appropriate water harvesting technology should be finalized in consultation with Central Ground Water Authority/Board, within a period of two months from the date of issue of the clearance letter.	Complied.
xii	Regular monitoring of water quality including heavy metals should be undertaken around ash disposal and the project area ascertain change in the water quality, if any, due to leaching of contaminants from ash disposal area.	Monitoring of the ground and surface water is being carried out regularly for all parameters including heavy metals. The results of the ground and surface water are within the norm. Please refer <b>Annexure-VI</b> (October 2025 to March 2026)
xiii	Study on fluoride concentration in foliage, analysis of ground water and storm water runoff from the existing CPP site drain should be carried out regularly.	Analysis of fluoride concentration in forage and ground water is being done on monthly basis. Please refer <b>Annexure-VII</b> for forage fluoride report and <b>Annexure-VI</b> for water report (October 2025 to March 2026)
xiv	Noise level should be limited to 75 Leq and regular maintenance of equipment should be undertaken. For people working in the area of generate or and other high noise area, earplug should be provided.	Noise level is being regularly monitored and is below 75 Leq. Personal protective equipment like earplugs and earmuffs have been provided to people working in noise prone areas. Please refer <b>Annexure-VIII</b> for the monitoring report from (October 2025 to March 2026)
xv	A greenbelt should be developed around the power plant periphery and ash pond area, covering an area of 75 acres. Tree density of 1500 – 2000 trees per ha should be maintained. Greenbelt development plan should be submitted to the Ministry.	Extensive tree plantation is being carried out in all open spaces available in and around the plant premises. Approximately 77000 saplings have been planted around BALCO's premises including ash dykes, township and plant premises during FY 2025-26. Please refer <b>Annexure-IX</b> for details on green belt development.
xvi	Regular monitoring of the air quality should be carried out in and around the power plant and records be maintained. Periodic six	Air quality monitoring is regularly carried out. Please refer <b>Annexure-X</b> for the monitoring report from (October 2025 to March 2026).

	monthly reports should be submitted to this Ministry.	
xvii	For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.	Dust extraction equipment and water sprinklers have been provided for controlling fugitive dust. Wheel wash systems have been installed at entry and exit gate of Power Plant.
xviii	Recommendations of the Chhattisgarh State Bio-diversity Strategy and Action plan (CBSAP) be implemented and the conservation plan for likely habitat of migratory Elephants from Orissa be prepared in consultation with state wildlife Dept.	We have already requested the Chief Conservator of Forest (Wildlife) to ensure BALCO's participation as per Chhattisgarh State Bio-diversity Strategy and Action plan (CBSAP). Please Refer <b>Annexure–XI</b> . Also, Wildlife conservation plan has been prepared and approved by PCCF Wildlife for BALCO. For the implementation of the Wildlife Conservation/ Management Plan, INR 1.53 Cr. has been deposited with the Forest Department for the mitigative measures as approved in the Wildlife Conservation/Management Plan. The copy of the letter from DFO in this regard is attached as <b>Annexure-XII</b> .
xix	All other mitigative measures shall be taken as enumerated in chapter 3 of the EIA report.	All mitigative measures taken as enumerated in the EIA report.
xx	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the state pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Complied with. We had advertised in three newspapers. Please Refer <b>Annexure–XIII</b> .
xxi	A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	A separate environment-monitoring cell with suitably qualified professionals under a senior level executive is in place.
xxii	Half yearly report on the state of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry/Regional Officer/CPCB/SPCB.	We are complying with this condition. Last report was submitted vide letter no: BALCO/ENV/A - 02(A)/2025/490 dated 16 <sup>th</sup> October 2025.
xxiii	Regional officer of the Ministry of Environment and Forests located at Bhopal will monitor the implementation of the stipulated conditions. Complete set of Environmental Impact Assessment Report and Environment Management plan should	Complete set of Environmental Impact Assessment Report and Environment Management plan has been submitted to the Regional Officer of MoEF along with the consent to establish.

	be forwarded to the Regional Officer for their use during monitoring.	
xxiv	Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. These costs should be included as part of the project cost. The funds earmarked for environmental protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Separate funds are allocated for the implementation of environmental protection measures. The expenses incurred in environmental protection measures have been mentioned in Environment Statement and it is submitted to ministry every year.
xxv	Full cooperation should be extended to the Scientists/Officers from the Ministry/Regional Officer of the Ministry at Bhopal/the CPCB/the SPCB who would be monitoring the compliance of environmental status.	Full cooperation is extended to the Scientists/Officers from the Ministry/Regional Officer of the Ministry at Bhopal/the CPCB/the SPCB monitoring the compliance of environmental status.
4	The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.	Noted.
5	The environmental clearance accorded shall be valid for a period of 5 years for construction/operation of the power plant in case, if the project authorities fail to do so within this stipulated period, this environmental clearance shall stand lapsed automatically.	Noted.
6	In case of any deviation or alteration in the project proposed from those submitted to this Ministry of clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.	Noted.
7	The above stipulations would be enforced among others under the water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the Public Liability insurance Act, 1991 and its amendments, the Environment Impact Assessment Notification of January, 1994 and its amendments.	Noted.

**Compliance status of Office Memorandum F.No.22-13/2019-IA.III MoEF&CC dated 28<sup>th</sup> August 2019.**

S. No	Condition	Status
i	The guidelines prepared by CPCB for the disposal of fly Ash for reclamation of low lying areas and in stowing /backfilling of abandoned mines/quarries shall be followed during disposal of ash in abandoned or working mines, as annexed.	The guidelines prepared by CPCB are being followed while disposal of fly ash for backfilling of abandoned mines/ quarries. Due permission is sought from Chhattisgarh Environment Conservation Board (CECB) and Regional Office for backfilling of abandoned mines.
ii	There should at least be clearance of 500 m of safe distance be maintained from River and water body in case of ash disposal in abandoned mines to prevent embankment failure and fly ash flowing into the nearby water body.	Noted and Complied.
iii	The top layer of the fly ash disposal area in the abandoned mines shall be kept moist during disposal.	Noted and Complied.
iv	Top layer of disposal area should have 70 cm overburden or Gravels/stones and then 30 cm sweet soil cover. Subsequently, the vegetation shall be raised on the soil cover.	Noted and Complied.
v	Bioaccumulation and bio-magnification tests shall be conducted around the surrounding flora and fauna (tree leaves, vegetation, crop yields and cattle population) during pre-monsoon and post monsoon to find out any trace metals escaped through ground water or runoff.	Noted.
vi	Surface runoff and supernatant water, in any case shall not be let in to the surrounding areas. It shall be collected by providing adequate drains around the mine. The supernatant water along with surface runoff shall be treated and re-used for mixing ash and plant operations.	The surface run-off and supernatant water is being collected and recycled/ reused.

vii	To the extent possible, only decanted water from mine, make up water from treated effluents such as cooling tower blow down and treated sewage water shall be used for making ash slurry.	The water from treated effluent such as cooling tower blowdown is utilized for slurry making.
Viii	Fly ash to be used as soil conditioner in agriculture needs and to be applied in controlled manner to limit excessive application so as to prevent soil degradation. The optimize proportion of ash to be applied which is to be certified by the State Agriculture Universities /Collages based on the soil testing.	Presently, fly ash is not used as soil conditioner in agricultural needs.
ix	Approval from DGMS shall be obtained before disposing the ash in the mine voids.	Complied.
x	Technology for conversion of fly ash into coarse granules for stowing in the underground mines to be explored.	Presently, fly ash is being sent to Sustainable avenues like Cement manufacturing, Brick manufacturing, Road construction/NHAI, Mine void filling etc., Technology for conversion of fly ash into coarse granules will be explored if needed in future as demand for stowing in the underground mines arises.
xi	All the power plants should install different silos for dry collection of fly ash.	We have installed separate silos for dry collection of fly ash and the same are utilized for utilization of fly ash in cement and brick plants.
Xii	Records pertaining to details of month wise quantity of fly ash disposed and water consumption along with nature /source of water shall be maintained and submitted to Ministry /Regional Office annually.	Monthly details of quantity of fly ash disposed in mines is submitted to Regional Office-CECB and with half yearly compliance report to IRO-MOEF&CC. Also, Specific Water consumption is being reported to Ministry /Regional Office quarterly basis. Copies of report are attached herewith as <b>Annexure-XIV</b> .
xiii	Before starting the disposal of ash into mine voids, the NOC/permission from the mine owner is to be obtained in case the mine closure activities are not completed or State Government in case the mine has been handed over to the State Govt. after its closure. A copy of such NOC/Permission is to be submitted to the Ministry and its Regional Offices.	No fly ash has been sent for mine void filling between October 2025 to March 2026.

**Compliance status of MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE NOTIFICATION dated 21st May 2020**

S. No	Condition	Status
i	<b>Setting Up Technology Solution for emission norms:</b> Compliance of specified emission norms for Particulate Matter, as per extant notifications and instructions of Central Pollution Control Board, issued from time to time.	Hybrid Electrostatic precipitator (ESP followed with bag filters) with efficiency of 99.99% has been provided for ensuring emission level below the norms i.e. 50 mg/Nm <sup>3</sup> .

ii	<p><b>Management of Ash Ponds:</b> The thermal powers plants shall comply with conditions, as notified in the Fly Ash notification issued from time to time, without being entitled to additional capacity of fly ash pond (for existing power generation capacity) on ground of switching from washed coal to unwashed coal.</p>	<p>We are complying with the conditions as notified in the Fly Ash notification. Presently, fly ash is being sent to Sustainable avenues like Cement manufacturing, Brick manufacturing, Road construction/NHAI, Mine void filling etc.</p>
iii	<p><b>Management of Ash Ponds:</b> Appropriate Technology solutions shall be applied to optimise water consumption for Ash management;</p>	<p>HCS D system has been adopted to optimize water consumption for ash management. Please refer to <b>Annexure-III</b>. Further decanted water from ash pond is recycled back for ash slurry making. Additionally treated water from power plant is also being used for ash slurry making. This ensures water consumption at optimum level.</p>
iv	<p><b>Management of Ash Ponds:</b> The segregation of ash may be done at the Electro-Static Precipitator stage, if required, based on site specific conditions, to ensure maximum utilization of fly ash;</p>	<p>Separate dry ash collection is in place for collection of fly ash. The dry ash is provided to cement plants, brick manufacturers through these silos itself.</p>
v	<p><b>Management of Ash Ponds:</b> The thermal power plants to dispose fly ash in abandoned or working mines (to be facilitated by mine owner) with environmental safeguards.</p>	<p>No fly ash has been sent for mine void feeling between October 2025 to March 2026.</p>
vi	<p><b>Transportation:</b> Coal transportation may be undertaken by covered Railway wagon (railway wagons covered by tarpaulin or other means) and/or covered conveyer beyond the mine area. However, till such time enabling Rail transport/conveyer infrastructure is not available, road transportation may be undertaken in trucks, covered by tarpaulin or other means.</p>	<p>Mode of transportation of coal is rail and road with mitigative measures. a. For the transportation of coal by railway it may be noted that it contains 10% to 15% moisture in dry season. As a result, there is no chance of particulate matter getting airborne - or spillage during transportation. b. For the transportation of coal by road, the coal is received in tarpaulin-covered trucks. We are complying with the office order dated 26.06.2024 given by CECB regarding transportation of materials using tarpaulin covered trucks (<b>Annexure-XV</b>).</p>
vii	<p><b>Transportation:</b> It shall be ensured by the thermal power plant that a. Rail siding facility or conveyor facility is set up at or near the power plant, for transportation by rail or conveyor; and b. If transportation by rail or conveyor facility is not available, ensure that the coal is transported out from the Delivery Point of the respective mine in covered trucks (By tarpaulin or other means), or any mechanized closed trucks by road.</p>	<p>The plant receives coal through rail and road. a. For the transportation of coal by railways, railway siding facility has been set up inside the plant premises for unloading of coal. b. For the transportation of coal through road, the coal is received in tarpaulin-covered trucks.</p>



**छत्तीसगढ़ CHHATTISGARH COAL SUPPLY AGREEMENT**

E 200858

**BETWEEN**

**SOUTH EASTERN COALFIELDS LIMITED**

**AND**

**BHARAT ALUMINIUM COMPANY LIMITED**

PARTICULARS	Quantity (In Tonnes)
Total LOA Quantity	26,00,600
Quantity for which Long term PPA furnished (ACQ) including admissible quantity for transmission loss and auxiliary consumption	Nil
Quantity for which long term PPA not furnished (inoperative ACQ)	26,00,600

“Coal Supplies under the FSA to commence subject to submission of Long term Power Purchase Agreement”.

This Agreement is made on this 28<sup>th</sup> day of August'2013 between South Eastern Coalfields Limited, a company registered under the Companies Act, 1956 and having its registered office at Seepat Road, Bilaspur (CG)-495006 hereinafter called the “Seller” (which expression shall unless excluded by or repugnant to the subject or context, include its legal representatives, successors and permitted assigns) of the one part,

**AND**

M/s Bharat Aluminium Company Limited, a company registered under the Companies Act, 1956 having its registered office at Aluminium Sadan, Core-6, Scope Office Complex, 7, Lodi Road, New Delhi-110003 hereinafter called the “Purchaser” (which term shall unless excluded or repugnant to the subject or context include its legal representatives, successors and permitted assigns) of the other part

*Prahalad Rawat*

*[Handwritten signature]*

*[Handwritten signature]*



**Vimta Labs Limited**

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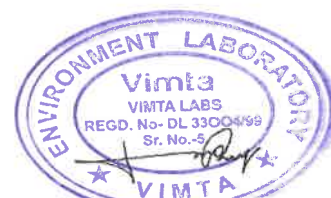
ISSUED TO:					Report No: VLL/VLS/25-26/15704/CP2				
M/s. Bharat Aluminium Company Limited KORBA ( C.G.)					Issue Date: 2025-11-05				
					P.O No: 8500005780				
					P.O Date: 2022-06-29				
<b>Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW</b>									
Analysis starting date :- 2025-10-16					Analysis Completion date :- 2025-11-04				
Test Required :- PM, NO <sub>x</sub> , CO and Hg;									
TEST RESULTS									
540 MW Power Plant				Unit-1		Unit-2		Method	
S No.	Location	Parameter	Limits	Units	2025-10-17	2025-10-24	2025-10-15		2025-10-24
1	POWER PLANT	Height of the stack	-	m	275	275	275	275	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6	5 X 6	5 X 6	-
3		Surface Area	-	m <sup>2</sup>	30	30	30	30	-
4		Stack Temperature	-	°C	116	115	117	121	-
5		Stack Pressure	-	mmHg	727	728	728	726	-
6		Velocity	-	m/s	15.2	14.8	14.8	14.5	USEPA M-2
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1202970	1175947	1169917	1131449	
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	18.6	37.2	30.5	46.8	USEPA M-5
9		<b>Average</b>			<b>27.9</b>	<b>38.7</b>			
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	384	416	437	415	Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>400</b>	<b>426</b>			
12		Carbon Monoxide as CO			-	mg/Nm <sup>3</sup>	26	8	
13		<b>Average</b>	<b>17</b>	<b>8</b>					
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.006	0.005	0.006	0.004	USEPA M-29
15		<b>Average</b>			<b>0.006</b>	<b>0.005</b>			

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



Dr. Subba Reddy Mallampati  
Manager - Environment

<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)					Report No:	VLL/VLS/25-26/15704/ CPP2	
					Issue Date:	2025-11-05	
					P.O No:	8500005780	
					P.O Date:	2022-06-29	
<b>Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW</b>							
Analysis starting date :- 2025-10-16				Analysis Completion date :- 2025-11-04			
Test Required :- PM, NO <sub>x</sub> , CO and Hg;							
<b>TEST RESULTS</b>							
<b>540 MW Power Plant</b>				<b>Unit-3</b>		<b>Unit-4</b>	
S No.	Location	Parameter	Limits	Units	2025-10-15	2025-10-24	Method
1	<b>POWER PLANT</b>	Height of the stack	-	m	275	275	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6	-
3		Surface Area	-	m <sup>2</sup>	30	30	-
4		Stack Temperature	-	°C	113	123	-
5		Stack Pressure	-	mmHg	727	725	-
6		Velocity	-	m/s	14.7	14.9	-
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1172441	1155196	USEPA M-2
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	43.3	29.8	USEPA M-5
9		<b>Average</b>			<b>36.6</b>		
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	426	413	Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>420</b>		
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	4	8	
13		<b>Average</b>			<b>6</b>		
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.005	0.006	USEPA M-29
15		<b>Average</b>			<b>0.006</b>		

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



**Dr. Subba Reddy Mallampati**  
Manager - Environment

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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)	Report No:	VLL/VLS/25-26/18084/ CPP2
	Issue Date:	2025-12-05
	P.O No:	3402001553
	P.O Date:	2025-10-01

**Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW**

Analysis starting date :- 2025-11-10 Analysis Completion date :- 2025-12-04

Test Required :- PM, NO<sub>x</sub>, CO and Hg;

TEST RESULTS									
540 MW Power Plant					Unit-1		Unit-2		Method
S No.	Location	Parameter	Limits	Units	2025-11-08	2025-11-25	2025-11-08	2025-11-25	
1	POWER PLANT	Height of the stack	-	m	275	275	275	275	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6	5 X 6	5 X 6	-
3		Surface Area	-	m <sup>2</sup>	30	30	30	30	-
4		Stack Temperature	-	°C	115	118	125	124	-
5		Stack Pressure	-	mmHg	733	732	732	731	-
6		Velocity	-	m/s	14.4	14.8	14.8	13.8	USEPA M-2
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1152023	1173336	1152700	1076050	
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	32.6	39.1	20.8	27.4	USEPA M-5
9		<b>Average</b>			<b>35.9</b>		<b>24.1</b>		
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	412	432	422	439	Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>422</b>		<b>431</b>		
12		Carbon Monoxide as CO			-	mg/Nm <sup>3</sup>	4	15	
13		<b>Average</b>			<b>10</b>		<b>36</b>		
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.008	0.006	0.006	0.007	USEPA M-29
15		<b>Average</b>			<b>0.007</b>		<b>0.007</b>		

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)					Report No:	VLL/VLS/25-26/18084/ CPP2										
					Issue Date:	2025-12-05										
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					P.O Date:	2025-10-01										
<b>Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW</b>																
Analysis starting date :- 2025-11-10					Analysis Completion date :- 2025-12-04											
<b>Test Required :- PM, NO<sub>x</sub>, CO and Hg;</b>																
<b>TEST RESULTS</b>																
<b>540 MW Power Plant</b>					<b>Unit-3</b>		<b>Unit-4</b>		<b>Method</b>							
<b>S No.</b>	<b>Location</b>	<b>Parameter</b>	<b>Limits</b>	<b>Units</b>	<b>2025-11-08</b>	<b>2025-11-25</b>	<b>USD</b>									
1	<b>POWER PLANT</b>	Height of the stack	-	m	275	275			-							
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6					-					
3		Surface Area	-	m <sup>2</sup>	30	30							-			
4		Stack Temperature	-	°C	110	121									-	
5		Stack Pressure	-	mmHg	733	731										
6		Velocity	-	m/s	15.9	15.2			-							
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1288632	1194239					USEPA M-2					
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	23.8	30.3					USEPA M-5					
9		<b>Average</b>			<b>27.1</b>						Measured by Portable Combustion Analyser					
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	385	416							Measured by Portable Combustion Analyser			
11		<b>Average</b>			<b>401</b>											
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	68	10			USEPA M-29							
13		<b>Average</b>			<b>39</b>											
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.004	0.006					USEPA M-29					
15		<b>Average</b>			<b>0.005</b>											

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)					Report No: VLL/VLS/25-26/20775/ CPP2				
					Issue Date: 2026-01-05				
					P.O No: 3402001553				
					P.O Date: 2025-10-01				
<b>Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW</b>									
Analysis starting date :- 2026-12-17					Analysis Completion date :- 2026-01-04				
Test Required :- PM, NO <sub>x</sub> , CO and Hg;									
<b>TEST RESULTS</b>									
<b>540 MW Power Plant</b>					<b>Unit-1</b>		<b>Unit-2</b>		<b>Method</b>
<b>S No.</b>	<b>Location</b>	<b>Parameter</b>	<b>Limits</b>	<b>Units</b>	<b>2025-12-16</b>	<b>2025-12-29</b>	<b>2025-12-16</b>	<b>2025-12-29</b>	
1	<b>POWER PLANT</b>	Height of the stack	-	m	275	275	275	275	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6	5 X 6	5 X 6	-
3		Surface Area	-	m <sup>2</sup>	30	30	30	30	-
4		Stack Temperature	-	°C	128	133	130	122	-
5		Stack Pressure	-	mmHg	736	732	735	732	-
6		Velocity	-	m/s	14.6	15.8	14.7	14.2	USEPA M-2
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1134783	1206337	1135340	1114368	
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	45.2	38.4	30.4	43.7	USEPA M-5
9		<b>Average</b>			<b>41.8</b>		<b>37.1</b>		
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	436	406	416	425	Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>421</b>		<b>421</b>		
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	14	3	34	13	
13		<b>Average</b>			<b>9</b>		<b>24</b>		
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.007	0.005	0.007	0.006	USEPA M-29
15		<b>Average</b>			<b>0.006</b>		<b>0.007</b>		

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down

  
**Dr. Subba Reddy Mallampati**  
Manager Environment

ISSUED TO: M/s. Bharat Aluminium Company Limited KORBA ( C.G.)	Report No:	VLL/VLS/25-26/20775/_CPP2
	Issue Date:	2026-01-05
	P.O No:	3402001553
	P.O Date:	2025-10-01

**Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW**

Analysis starting date :- 2025-12-17 Analysis Completion date :- 2026-01-04

Test Required :- PM, NO<sub>x</sub>, CO and Hg;

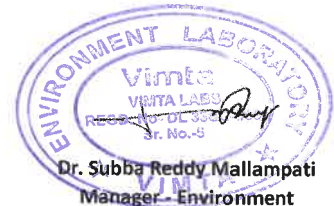
TEST RESULTS								
540 MW Power Plant					Unit-3		Unit-4	Method
S No.	Location	Parameter	Limits	Units	2025-12-16	2025-12-29		
1	POWER PLANT	Height of the stack	-	m	275	275	USD	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6		-
3		Surface Area	-	m <sup>2</sup>	30	30		-
4		Stack Temperature	-	°C	126	129		-
5		Stack Pressure	-	mmHg	736	733		-
6		Velocity	-	m/s	14.9	14.6		-
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1163905	1127346		USEPA M-2
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	21.8	23.4		USEPA M-5
9		<b>Average</b>			<b>22.6</b>			
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	433	417		Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>425</b>			
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	35	8		
13		<b>Average</b>			<b>22</b>			
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.005	0.004		USEPA M-29
15		<b>Average</b>			<b>0.005</b>			

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down

  
**Dr. Subba Reddy Mallampati**  
Manager - Environment

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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)					Report No: VLL/VLS/25-26/23223/CP2				
					Issue Date: 2026-02-05				
					P.O No: 3402001553				
					P.O Date: 2025-10-01				
<b>Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW</b>									
Analysis starting date :- 2026-01-07					Analysis Completion date :- 2026-02-04				
Test Required :- PM, NO <sub>x</sub> , CO and Hg;									
<b>TEST RESULTS</b>									
540 MW Power Plant				Unit-1		Unit-2		Method	
S No.	Location	Parameter	Limits	Units	2026-01-06	2026-01-24	2026-01-06		2026-01-24
1	POWER PLANT	Height of the stack	-	m	275	275	275	275	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6	5 X 6	5 X 6	-
3		Surface Area	-	m <sup>2</sup>	30	30	30	30	-
4		Stack Temperature	-	°C	112	124	117	117	-
5		Stack Pressure	-	mmHg	737	735	738	737	-
6		Velocity	-	m/s	14.4	16.1	15.2	14.1	USEPA M-2
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1167335	1262261	1218041	1128362	
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	43.8	29.5	27.1	24.4	USEPA M-5
9		<b>Average</b>			<b>36.7</b>		<b>25.8</b>		
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	415	363	390	435	Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>389</b>		<b>413</b>		
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	14	23	66	75	
13		<b>Average</b>			<b>19</b>		<b>71</b>		
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.005	0.006	0.004	0.006	USEPA M-29
15		<b>Average</b>			<b>0.006</b>		<b>0.005</b>		

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)	Report No:	VLL/VLS/25-26/23223/_CPP2
	Issue Date:	2026-02-05
	P.O No:	3402001553
	P.O Date:	2025-10-01

**Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW**

Analysis starting date :- 2026-01-07

Analysis Completion date :- 2026-02-04

Test Required :- PM, NO<sub>x</sub>, CO and Hg;

**TEST RESULTS**

540 MW Power Plant					Unit-3		Unit-4	Method
S No.	Location	Parameter	Limits	Units	2026-01-06	2026-01-24		
1	POWER PLANT	Height of the stack	-	m	275	275	USD	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6		-
3		Surface Area	-	m <sup>2</sup>	30	30		-
4		Stack Temperature	-	°C	126	122		-
5		Stack Pressure	-	mmHg	738	735		-
6		Velocity	-	m/s	15.3	15.0		-
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1198399	1181974		USEPA M-2
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	27.3	39.2		USEPA M-5
9		<b>Average</b>			<b>33.3</b>			
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	421	403		Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>412</b>			
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	10	3		
13		<b>Average</b>			<b>7</b>			
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.006	0.005		USEPA M-29
15		<b>Average</b>			<b>0.006</b>			

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)					Report No: VLL/VLS/25-26/24935/CPP2		Issue Date: 2026-03-05		P.O No: 3402001553		P.O Date: 2025-10-01									
<b>Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW</b>																				
Analysis starting date :- 2026-02-06					Analysis Completion date :- 2026-03-04															
Test Required :- PM, NO <sub>x</sub> , CO and Hg:																				
<b>TEST RESULTS</b>																				
540 MW Power Plant					Unit-1			Unit-2			Method									
S No.	Location	Parameter	Limits	Units	2026-02-05		2026-02-05		2026-02-24											
1	POWER PLANT	Height of the stack	-	m	275		275		275		-									
2		Dimensions at Sampling Point	-	m	5 X 6		5 X 6		5 X 6				-							
3		Surface Area	-	m <sup>2</sup>	30		30		30						-					
4		Stack Temperature	-	°C	114		113		115								-			
5		Stack Pressure	-	mmHg	728		727		728										-	
6		Velocity	-	m/s	14.6		13.1		13.7											
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1163054		1044828		1088546		USEPA M-5									
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	32.1		27.9		39.7				Measured by Portable Combustion Analyser							
9		<b>Average</b>			<b>32.1</b>		<b>33.8</b>													
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	328		354		243						-					
11		<b>Average</b>			<b>328</b>		<b>299</b>													
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	26		36		59								USEPA M-29			
13		<b>Average</b>			<b>26</b>		<b>48</b>													
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.006		0.005		0.006		-									
15		<b>Average</b>			<b>0.006</b>		<b>0.006</b>													

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)	Report No:	VLL/VLS/25-26/24935/CPP2
	Issue Date:	2026-03-05
	P.O No:	3402001553
	P.O Date:	2025-10-01

**Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW**

Analysis starting date :- 2026-02-06

Analysis Completion date :- 2026-03-04

Test Required :- PM, NO<sub>x</sub>, CO and Hg;

**TEST RESULTS**

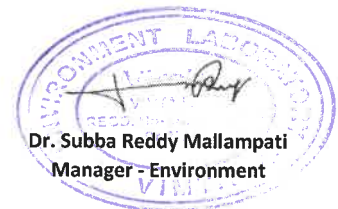
540 MW Power Plant					Unit-3		Unit-4	Method
S No.	Location	Parameter	Limits	Units	2026-02-05	2026-02-24		
1	POWER PLANT	Height of the stack	-	m	275	275	USD	-
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6		-
3		Surface Area	-	m <sup>2</sup>	30	30		-
4		Stack Temperature	-	°C	128	136		-
5		Stack Pressure	-	mmHg	729	730		-
6		Velocity	-	m/s	15.1	14.6		-
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1162483	1103517		USEPA M-2
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	34.8	26.5		USEPA M-5
9		<b>Average</b>			<b>30.7</b>			
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>			450	mg/Nm <sup>3</sup>		
11		<b>Average</b>	<b>401</b>					
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	21	38		USEPA M-29
13		<b>Average</b>	<b>30</b>					
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.005	0.003		
15		<b>Average</b>			<b>0.004</b>			

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)	Report No:	VLL/VLS/25-26/28724/_CPP2
	Issue Date:	2026-04-04
	P.O No:	3402001553
	P.O Date:	2025-10-01

**Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW**

Analysis starting date :- 2026-03-05

Analysis Completion date :- 2026-04-04

Test Required :- PM, NO<sub>x</sub>, CO and Hg;

**TEST RESULTS**

540 MW Power Plant					Unit-1	Unit-2		Method	
S No.	Location	Parameter	Limits	Units		2026-03-03	2026-03-26		
1	POWER PLANT	Height of the stack	-	m	USD			-	
2		Dimensions at Sampling Point	-	m					
3		Surface Area	-	m <sup>2</sup>					
4		Stack Temperature	-	°C					
5		Stack Pressure	-	mmHg					
6		Velocity	-	m/s					
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr					
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>					USEPA M-2
9		<b>Average</b>							
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>					USEPA M-5
11		<b>Average</b>							
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>					Measured by Portable Combustion Analyser
13		<b>Average</b>							
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>					USEPA M-29
15		<b>Average</b>							

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited KORBA ( C.G.)					Report No:	VLL/VLS/25-26/28724/ CPP2		
					Issue Date:	2026-04-04		
					P.O No:	3402001553		
					P.O Date:	2025-10-01		
<b>Sample Particular:- STACK EMISSION MONITORING AT POWER PLANT 540 MW</b>								
Analysis starting date :- 2026-03-05				Analysis Completion date :- 2026-04-04				
<b>Test Required :- PM, NO<sub>x</sub>, CO and Hg;</b>								
<b>TEST RESULTS</b>								
<b>540 MW Power Plant</b>				<b>Unit-3</b>		<b>Unit-4</b>		
S No.	Location	Parameter	Limits	Units	2026-03-03	2026-03-26	Method	
1	<b>POWER PLANT</b>	Height of the stack	-	m	275	275	<b>USD</b>	
2		Dimensions at Sampling Point	-	m	5 X 6	5 X 6		
3		Surface Area	-	m <sup>2</sup>	30	30		
4		Stack Temperature	-	°C	126	124		
5		Stack Pressure	-	mmHg	731	730		
6		Velocity	-	m/s	13.7	14.1		
7		Volumetric Flow Rate	-	Nm <sup>3</sup> /Hr	1062898	1097938		
8		Particulate Matter (PM)	50	mg/Nm <sup>3</sup>	24.2	39.7		USEPA M-2
9		<b>Average</b>			<b>32.0</b>			USEPA M-5
10		Oxides of Nitrogen NO <sub>x</sub> as NO <sub>2</sub>	450	mg/Nm <sup>3</sup>	434	404		Measured by Portable Combustion Analyser
11		<b>Average</b>			<b>419</b>			
12		Carbon Monoxide as CO	-	mg/Nm <sup>3</sup>	8	26		
13		<b>Average</b>			<b>17</b>			
14		Mercury as Hg	0.03	mg/Nm <sup>3</sup>	0.006	0.004		USEPA M-29
15		<b>Average</b>			<b>0.005</b>			

\*PM and Nox values are corrected to 6% O<sub>2</sub> values.

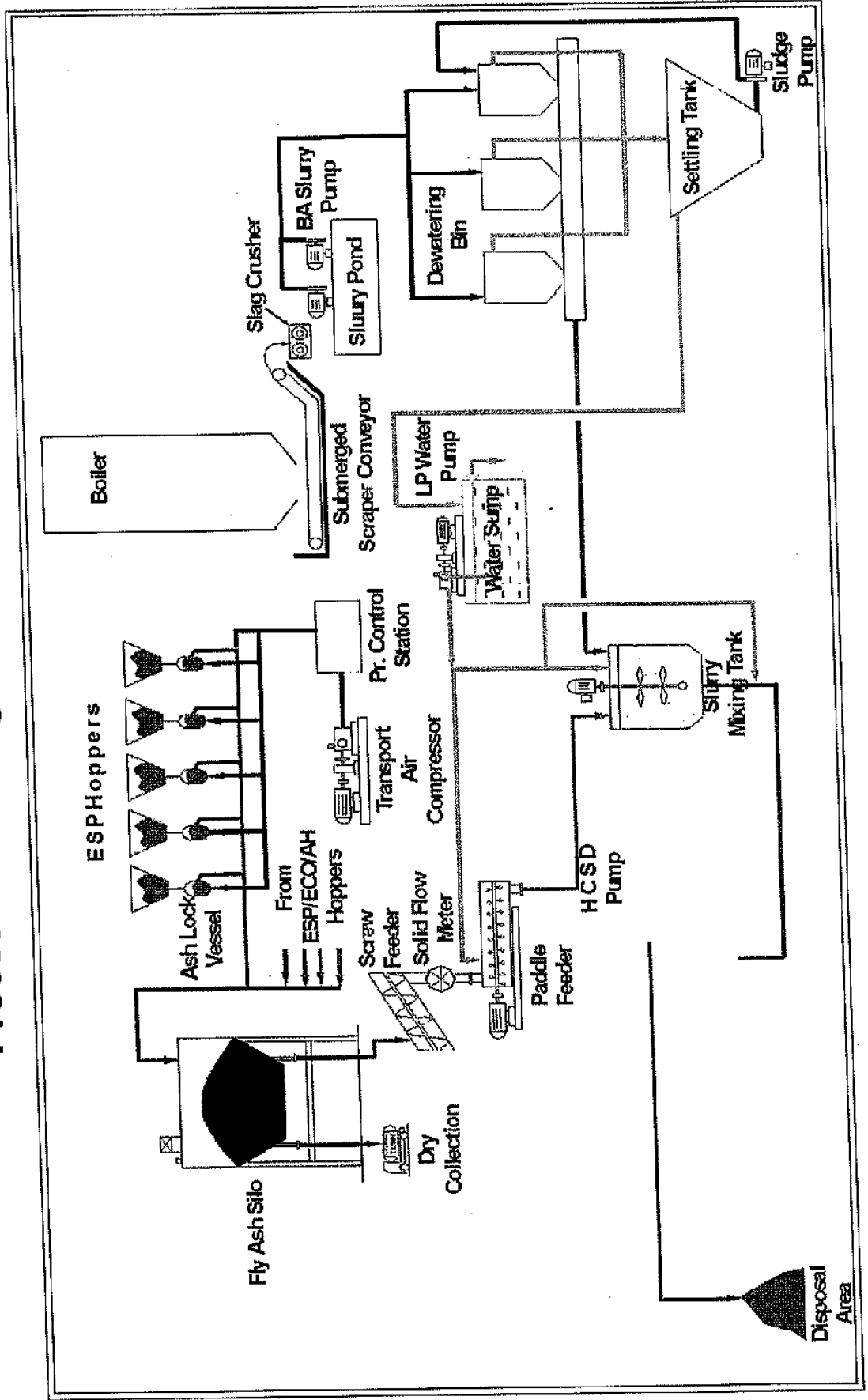
\*Instrument Used - Vayubodhan Stack Sampler Kit

\*ND - Not Deducted

\*USD - Unit Under Shut Down



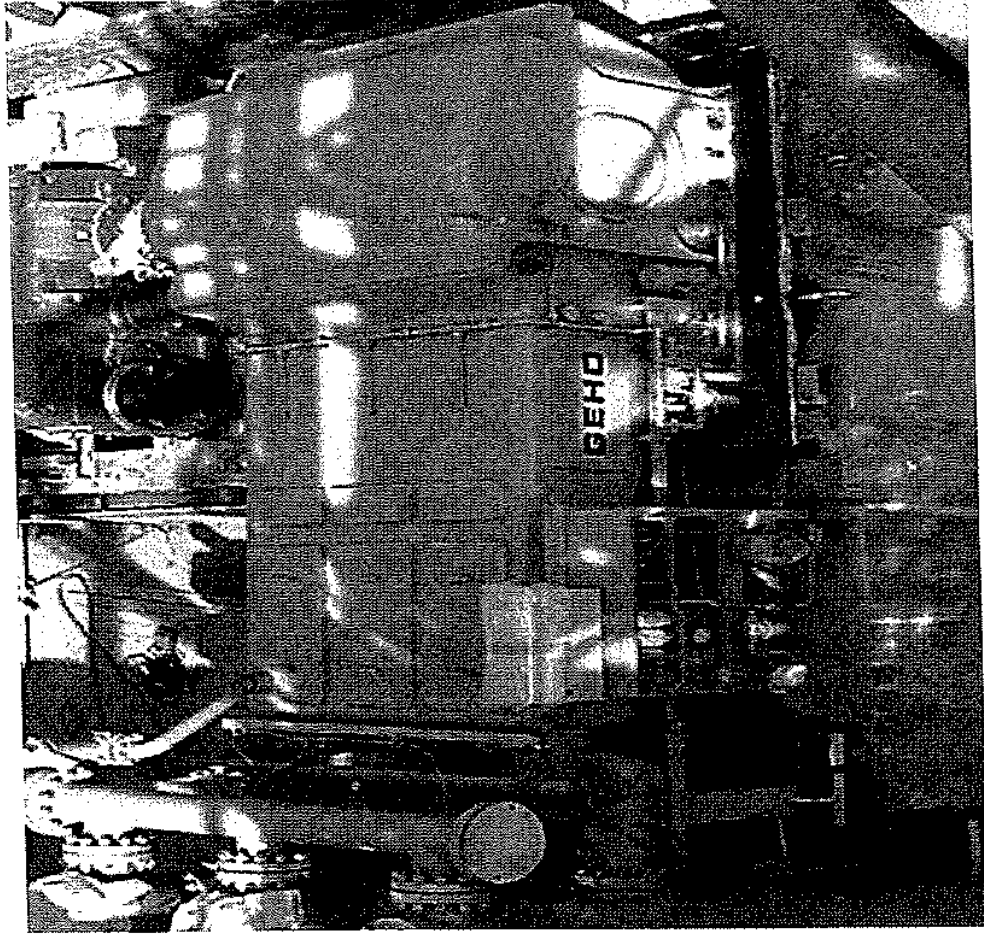
# 540 MW Captive Power Plant Process Flow Diagram for HCSD System



## 540 MW Captive Power Plant

### Advantages of HCSD System

- Less disposal area
- No ash retaining structure at dyke
- Less water consumption
- Less power consumption
- No ash water recovery and treatment
- Self distribution of slurry
- Compact disposal site
- Dense, compact deposit with rapid drying.



• High Concentrate Ash Slurry Disposal Pump supplied by M/s GEHO Netherlands

• Capacity : 208 M<sup>3</sup> / Hr



कार्यालय कार्यपालन अभियंता  
हसदेव बरॉज जल प्रबंध संभाग  
रामपुर / कोरबा

दूरभाष क्रमांक कार्यालय 07759-221052

फैक्स क्रमांक 07759-221014

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पत्र क्रं.  
प्रति,

/तक.

रामपुर / कोरबा,

दिनांक

/01 / 2016

अधीक्षण अभियंता  
हसदेव परियोजना मंडल  
रामपुर / कोरबा

विषय:- मेसर्स बाल्को, कोरबा के स्मेल्टर प्लांट विस्तारीकरण एवं 540 (4x135) मेगावाट केप्टिव ताप विद्युत संयंत्र हेतु हसदेव बांगो परियोजना से पूर्व में आबंटित 16.50 मि.घ.मी. वार्षिक जल की मात्रा को कम कर संशोधित 13.00 मि.घ.मी. वार्षिक जल आबंटन/प्रदाय करने की स्वीकृति बाबत।

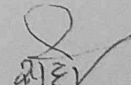
संदर्भ:- मुख्य अभियंता, मिनीमाता (हसदेव) बांगो परियोजना बिलासपुर का पत्र क्र. 176/165/कार्य/एम/82/बाल्को प्लांट से संबंधित ज.आ.पत्राचार/बिलासपुर दिनांक 07.01.2016 (आपको सम्बोधित)

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उपरोक्त संदर्भित पत्र में लेख है कि पत्र के साथ संलग्न छ.ग. शासन जल संसाधन विभाग मंत्रालय रायपुर का पत्र क्र. 39/194/ज.प्र./तशा/औ.ज.प्र./01/डी-4 नया रायपुर दिनांक 06.01.2016 द्वारा मेसर्स बाल्को, कोरबा के स्मेल्टर प्लांट विस्तारीकरण एवं 540 (4x135) मेगावाट केप्टिव ताप विद्युत संयंत्र हेतु हसदेव बांगो परियोजना से पूर्व में आबंटित 16.50 मि.घ.मी. वार्षिक जल की मात्रा को कम कर संशोधित 13.00 मि.घ.मी. वार्षिक जल आबंटन को स्वीकृति पत्र जारी होने के दिनांक 06.01.2016 से लागू कर दिया गया है। उक्त आदेश की प्रति को, संस्थान के साथ दिनांक 29.08.2011 को किये गये अनुबंध का एक भाग के रूप में संलग्न कर लिया गया है।

अतः पालन प्रतिवेदन आपकी ओर सादर सूचनार्थ संप्रेषित।

सहपत्र:- स्वीकृति पत्र की  
हस्ताक्षरित प्रति।

  
कार्यपालन अभियंता  
हसदेव बरॉज जल प्रबंध संभाग  
रामपुर / कोरबा

क्रमशः // 2 //

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**ISSUED TO:**

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BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/15704/001  
Issued Date : 2025-11-05  
P.O. No. : 8500005780  
P.O. Date : 2022-06-29**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-10-11 Sampling Date : 2025-10-04  
Analysis Starting Date : 2025-10-11 Analysis Completion Date : 2025-10-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
1	pH value	-	6.5-8.5 (NR)	6.91	6.96	6.82	7.04
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	3	2	4
6	Total dissolved solids at 180°C	mg/l	500(2000)	172	205	310	269
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	115	134	203	190
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	50	55	110	90
9	Calcium as Ca	mg/l	75(200)	30.0	37.6	61.0	58.4
10	Magnesium as Mg	mg/l	30(100)	9.8	9.7	12.3	10.5
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.034	0.026	0.018	0.029
13	Chlorides as Cl	mg/l	250(1000)	40.0	51.2	69.3	72.2
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	29.1	34.2	34.8	22.3
15	Fluorides as F	mg/l	1.0(1.5)	0.192	0.137	0.319	0.274
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	1.6	2.7	1.5	1.2
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

  
**Dr. Subba Reddy Mallampati  
(Manager - Environment)**

**ISSUED TO:**

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Sample Registration Date : 2025-10-11 Sampling Date : 2025-10-04  
Analysis Starting Date : 2025-10-11 Analysis Completion Date : 2025-10-29  
Test Required : Water Analysis as per IS 10500 : 2012

SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	<0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	0.011	0.014	0.008	0.016
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.043	0.028	0.052	0.031
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.012	0.018	0.026	0.009
32	Aluminum as Al	mg/l	0.03(0.2)	0.016	0.024	0.015	0.031
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.012	0.023	0.013	0.022
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025

Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1 (NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06 (NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2 (NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
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SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

-END OF THE REPORTS-

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Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies (B/W)	Bhadrapada (D/W)
1	pH value	-	6.5-8.5 (NR)	7.19	6.85	6.87	7.05
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	3	2	2	3
6	Total dissolved solids at 180°C	mg/l	500(2000)	279	201	250	230
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	186	138	166	150
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	85	75	80	70
9	Calcium as Ca	mg/l	75(200)	55.2	40.0	48.5	45
10	Magnesium as Mg	mg/l	30(100)	11.6	9.2	10.8	9.1
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.036	0.014	0.043	0.037
13	Chlorides as Cl	mg/l	250(1000)	79.4	44.0	61.7	63.5
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	25.4	23.5	29.5	23.5
15	Fluorides as F	mg/l	1.0(1.5)	0.359	0.256	0.174	0.118
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	2.6	1.3	2.1	1.3
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides as CN	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
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**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	<0.01	0.024	0.037	0.009
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.024	0.036	0.041	0.019
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.022	0.015	0.028	0.013
32	Aluminum as Al	mg/l	0.03(0.2)	0.017	0.025	0.014	0.008
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.008	0.011	0.017	0.019
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
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Name and Designation of Authorized Signatory



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SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoforn	mg/l	0.1 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1 (NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



**Dr. Subba Reddy Mallampati**  
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**ISSUED TO:**

**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/15704/001  
Issued Date : 2025-11-05  
P.O. No. : 8500005780  
P.O. Date : 2022-06-29**

Page 4 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-10-11 Sampling Date : 2025-10-04  
Analysis Starting Date : 2025-10-11 Analysis Completion Date : 2025-10-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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Report Number : VLL/VLS/25-26/15704/001  
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P.O. No. : 8500005780  
P.O. Date : 2022-06-29

Page 1 of 1

## SAMPLE PARTICULARS : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2025-10-11 Sampling Date : 2025-10-04  
Analysis Starting Date : 2025-10-11 Analysis Completion Date : 2025-10-24  
Samples Details : SW1-Bailgiri Nala (U/S)-Near Baigiri Village, SW2-Bailgiri Nala (D/S)-Near Bailgiri Basti,  
SW3- Dhengu Nala (U/S) Risbabasti SW4- Dhengu Nala (D/S)-near Check post Balco

SAMPLE COLLECTED BY VIMTA LABS LTD.

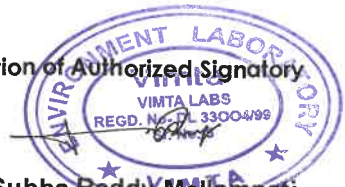
## TEST REPORT

Sr. No.	Parameters	Unit	SW1	SW2	SW3	SW4
1	pH	-	7.24	7.09	7.17	7.21
2	Colour	Hazen	1	3	1	3
3	Conductivity	µS/cm	125	174	145	193
4	TDS	mg/l	79	110	90	119
5	DO	mg/l	6.8	5.2	5.4	5.6
6	BOD	mg/l	0.7	1.9	0.8	2.2
7	COD	mg/l	2.4	7.2	3.2	9.6
8	Turbidity	NTU	7.0	13.0	15.0	11.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	36	56	50	68
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	30	40	35	42
11	Calcium as Ca	mg/l	8.5	15.6	11	16
12	Magnesium as Mg	mg/l	3.5	4.1	5.5	6.7
13	Chlorides as Cl	mg/l	19.4	21.8	22.6	28.5
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	<0.01	0.03	0.02	0.04
16	Sulphates as SO <sub>4</sub>	mg/l	4.5	11	3.8	9.7
17	Fluorides as F	mg/l	0.094	0.172	0.153	0.116
18	Nitrates as NO <sub>3</sub>	mg/l	0.5	0.9	0.6	1.1
19	Sodium as Na	mg/l	12.3	14	9.7	13
20	Potassium as K	mg/l	0.3	0.8	0.4	0.4
21	Total Boron as B	mg/l	0.007	0.024	0.012	0.054
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.020	0.078	0.052	0.038
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.024	0.160	0.074	0.043
33	Aluminum as Al	mg/l	0.014	0.019	0.022	0.023
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001
35	SAR	-	0.90	0.82	0.60	0.69
36	Insecticides	mg/l	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	210	220	180	290

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory



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## ISSUED TO:

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KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/15704/002  
Issued Date : 2025-11-05  
P.O. No. : 8500005780  
P.O. Date : 2022-06-29

Page 1 of 1

**SAMPLE PARTICULARS** : **SURFACE WATER SAMPLE (BALCO PLANT)**  
Sample Registration Date : 2025-10-11 Sampling Date : 2025-10-04  
Analysis Starting Date : 2025-10-11 Analysis Completion Date : 2025-10-24  
Samples Details : SW5- Hasdeo river near Ramgarh (U/S) SW6- Hasdeo river near Gerwaghat, SW7- Hasdeo river near kohariya, SW8- Hasdeo river near kobra(D/S)-1, SW9- Hasdeo River near Kobra (D/S)-2.  
SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	Unit	SW5	SW6	SW7	SW8	SW9
1	pH	-	7.37	7.41	7.36	7.21	7.23
2	Colour	Hazen	1	2	2	3	2
3	Conductivity	µS/cm	148	160	152	174	168
4	TDS	mg/l	81	100	94	105	112
5	DO	mg/l	7.7	7.9	7.4	7.1	7.3
6	BOD	mg/l	1.6	1.5	1.7	2.3	2.2
7	COD	mg/l	5.6	8.0	7.2	8.8	8.0
8	Turbidity	NTU	7.0	9.0	6.0	12.0	10.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	38	50	49	54	57
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	30	38	35	50	55
11	Calcium as Ca	mg/l	10.2	12.5	13.5	14.3	16.2
12	Magnesium as Mg	mg/l	3.1	4.3	3.8	4.5	3.9
13	Chlorides as Cl	mg/l	15.2	22.3	18.4	15.4	17.3
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.02	0.04	0.01	0.03	0.02
16	Sulphates as SO <sub>4</sub>	mg/l	3.7	6.8	7.3	4.2	4.9
17	Fluorides as F	mg/l	0.429	0.518	0.473	0.494	0.517
18	Nitrates as NO <sub>3</sub>	mg/l	0.9	1.1	1.2	0.6	0.7
19	Sodium as Na	mg/l	15.8	13.8	12.7	14.3	11.6
20	Potassium as K	mg/l	1.6	0.9	1.2	1.1	1.4
21	Total Boron as B	mg/l	<0.01	0.013	0.037	0.019	0.015
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.017	0.032	0.028	0.034	0.017
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.063	0.150	0.097	0.058	0.073
33	Aluminum as Al	mg/l	0.014	0.028	0.026	0.019	0.027
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
35	SAR	-	1.11	0.86	0.79	0.84	0.67
36	Insecticides	mg/l	Absent	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	220	580	370	490	610

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory



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**ISSUED TO:**

**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/18084/001  
Issued Date : 2025-12-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

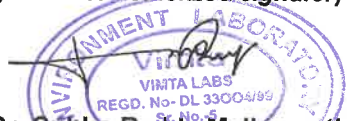
Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
1	pH value	-	6.5-8.5 (NR)	6.98	7.18	6.95	7.26
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2.3	1.2	1.6	1.9
6	Total dissolved solids at 180°C	mg/l	500(2000)	326	255	445	360
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	161	155	233	206
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	120	90	165	130
9	Calcium as Ca	mg/l	75(200)	35.6	42.6	58.0	52.5
10	Magnesium as Mg	mg/l	30(100)	17.4	11.8	21.4	18.2
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.05	0.03	0.05	0.04
13	Chlorides as Cl	mg/l	250(1000)	67.8	55.4	97.5	85.3
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	37.2	29.8	44	28.5
15	Fluorides as F	mg/l	1.0(1.5)	0.192	0.137	0.319	0.874
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	2.8	3.2	4.1	2.4
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides	mg/l	0.05(NR)	<0.02	<0.02	<0.02	<0.02

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

**Name and Designation of Authorized Signatory**

  
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**P.O. No.** : **3402001553**  
**P.O. Date** : **2025-10-01**

Page 2 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date	: 2025-11-10	Sampling Date	: 2025-11-03
Analysis Starting Date	: 2025-11-10	Analysis Completion Date	: 2025-11-26
Test Required	: Water Analysis as per IS 10500 : 2012		
SAMPLE COLLECTED BY VIMTA LABS LTD.			

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01 (0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	0.02	<0.01	0.02	0.01
24	Lead as Pb	mg/l	0.01 (NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1 (0.3)	0.02	<0.01	0.01	0.01
26	Molybdenum as Mo	mg/l	0.07 (NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.01	<0.01	<0.01	<0.01
28	Iron as Fe	mg/l	0.3(NR)	0.07	0.04	0.12	0.06
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.03	0.06	0.03	0.05
32	Aluminum as Al	mg/l	0.03(0.2)	0.02	0.01	0.02	0.02
33	Mercury as Hg	mg/l	0.001 (NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.014	0.021	0.015	0.011
38	Silver as Ag	mg/l	0.1 (NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025

Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

  
**Dr. Subba Reddy Mallampati**  
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P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 3 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1 (NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06 (NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2 (NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

**Name and Designation of Authorized Signatory**

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BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/18084/001  
Issued Date : 2025-12-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

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P.O. Date : 2025-10-01**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
1	pH value	-	6.5-8.5 (NR)	7.38	7.41	7.11	7.29
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2.5	2.7	1.5	1.1
6	Total dissolved solids at 180°C	mg/l	500(2000)	298	285	434	285
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	173	130	205	176
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	95	110	140	85
9	Calcium as Ca	mg/l	75(200)	45.0	31.0	54.5	48.0
10	Magnesium as Mg	mg/l	30(100)	14.6	12.5	16.8	13.5
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.09	0.03	0.11	0.08
13	Chlorides as Cl	mg/l	250(1000)	83.7	58.6	97.8	77.6
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	24.3	26.8	56.9	31.6
15	Fluorides as F	mg/l	1.0(1.5)	0.459	0.256	0.174	0.118
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	3.2	2.1	3.9	2.9
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides as CN	mg/l	0.05(NR)	<0.02	<0.02	<0.02	<0.02

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

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**P.O. Date : 2025-10-01**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-11-10      Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10      Analysis Completion Date : 2025-11-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies (B/W)	Bhadrapada (D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	<0.01	0.02	0.03	0.02
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.01	<0.01	<0.01	<0.01
28	Iron as Fe	mg/l	0.3(NR)	0.17	0.19	0.08	0.06
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.08	0.07	0.05	0.08
32	Aluminum as Al	mg/l	0.03(0.2)	0.03	0.02	0.01	0.02
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.027	0.038	0.029	0.024
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

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**SAMPLE PARTICULARS****GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1 (NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Airazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyriphos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

**Name and Designation of Authorized Signatory**

  
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P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

**Name and Designation of Authorized Signatory**

  
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## ISSUED TO:

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Page 1 of 1

## SAMPLE PARTICULARS : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-21  
Samples Details : SW1-Bailgiri Nala (U/S)-Near Baigiri Village, SW2-Bailgiri Nala (D/S)-Near Bailgiri Basti,  
SW3- Dhengu Nala (U/S) Risbabasti SW4- Dhengu Nala (D/S)-near Check post Balco  
SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	Unit	SW1	SW2	SW3	SW4
1	pH	-	7.54	7.26	7.84	7.39
2	Colour	Hazen	1	2	1	2
3	Conductivity	µS/cm	175	210	160	220
4	TDS	mg/l	108	115	98	130
5	DO	mg/l	6.7	6.1	6.3	6.0
6	BOD	mg/l	0.5	2.1	0.9	2.3
7	COD	mg/l	2.6	7.5	3.5	10.7
8	Turbidity	NTU	3.6	4.7	3.3	5.6
9	Total Hardness as CaCO <sub>3</sub>	mg/l	56	82	55	80
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	40	55	40	50
11	Calcium as Ca	mg/l	10.5	17	12.5	18
12	Magnesium as Mg	mg/l	7.3	9.5	5.9	8.4
13	Chlorides as Cl	mg/l	29.3	43.5	23.2	54.3
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.01	0.03	0.02	0.06
16	Sulphates as SO <sub>4</sub>	mg/l	5.2	8.6	4.8	7.5
17	Fluorides as F	mg/l	0.131	0.343	0.346	0.412
18	Nitrates as NO <sub>3</sub>	mg/l	1.1	2.3	0.9	2.8
19	Sodium as Na	mg/l	14.4	21.5	10.5	26.6
20	Potassium as K	mg/l	0.5	1.1	0.9	1.8
21	Total Boron as B	mg/l	0.01	0.078	0.017	0.095
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.02	<0.02	<0.02	<0.02
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	0.02	0.011
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.017	0.052	0.064	0.087
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.017	0.089	0.056	0.038
33	Aluminum as Al	mg/l	0.011	0.024	0.017	0.028
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001
35	SAR	-	0.84	1.04	0.61	1.30
36	Insecticides	mg/l	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	230	350	190	310

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

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Page 1 of 1

## SAMPLE PARTICULARS : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2025-11-10 Sampling Date : 2025-11-03  
Analysis Starting Date : 2025-11-10 Analysis Completion Date : 2025-11-21  
Samples Details : SW5- Hasdeo river near Ramgarh (U/S) SW6- Hasdeo river near Gerwaghat, SW7- Hasdeo river near kohariya, SW8- Hasdeo river near kobra(D/S)-1, SW9- Hasdeo River near Kobra (D/S)-2.

SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	Unit	SW5	SW6	SW7	SW8	SW9
1	pH	-	7.48	7.56	7.28	7.65	7.51
2	Colour	Hazen	2	3	2	3	3
3	Conductivity	µS/cm	160	218	175	182	157
4	TDS	mg/l	104	135	110	120	103
5	DO	mg/l	6.9	7.2	7.3	6.8	6.7
6	BOD	mg/l	1.5	1.7	1.9	2.8	2.6
7	COD	mg/l	5.2	6.8	6.6	9.3	8.1
8	Turbidity	NTU	4.3	5.6	5.2	5.4	5.7
9	Total Hardness as CaCO <sub>3</sub>	mg/l	40	60	50	52	45
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	40	45	40	55	50
11	Calcium as Ca	mg/l	10.8	15.3	14.2	15.5	12.5
12	Magnesium as Mg	mg/l	3.5	5.2	4.1	3.2	3.1
13	Chlorides as Cl	mg/l	21.1	34.6	25.7	19.8	14.2
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.02	0.03	0.02	0.01	0.02
16	Sulphates as SO <sub>4</sub>	mg/l	7.8	11.5	8.7	5.4	5.1
17	Fluorides as F	mg/l	0.436	0.384	0.534	0.413	0.521
18	Nitrates as NO <sub>3</sub>	mg/l	1.5	2.3	1.1	1.5	1.3
19	Sodium as Na	mg/l	17.2	21.7	15.8	16.7	14.8
20	Potassium as K	mg/l	1.2	1.4	1.1	2.1	1.2
21	Total Boron as B	mg/l	0.01	0.026	0.021	0.037	0.028
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.02	<0.02	<0.02	<0.02	<0.02
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.035	0.073	0.041	0.053	0.067
30	Chromium as Cr <sup>+6</sup>	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.021	0.096	0.072	0.084	0.049
33	Aluminum as Al	mg/l	0.013	0.026	0.018	0.015	0.021
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
35	SAR	-	1.16	1.22	0.95	1.01	0.97
36	Insecticides	mg/l	Absent	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	210	340	280	320	330

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

Dr. Subba Reddy Mallampati  
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## ISSUED TO:

M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/20775/001  
Issued Date : 2026-01-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 4

## SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-30  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
1	pH value	-	6.5-8.5 (NR)	7.17	7.24	6.98	7.32
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	1	2	2	1
6	Total dissolved solids at 180°C	mg/l	500(2000)	375	245	450	334
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	180	150	220	197
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	140.0	85.0	170.0	120.0
9	Calcium as Ca	mg/l	75(200)	41.6	37.5	49.3	43.7
10	Magnesium as Mg	mg/l	30(100)	18.3	13.4	23.2	21.4
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.027	0.019	0.021	0.017
13	Chlorides as Cl	mg/l	250(1000)	75.8	57.4	89.5	79.3
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	43.8	26.7	47.4	31.9
15	Fluorides as F	mg/l	1.0(1.5)	0.231	0.156	0.341	0.375
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	3.1	2.5	3.9	2.8
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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Page 2 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-30  
Test Required : Water Analysis as per IS 10500 : 2012

SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**


Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	<0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	0.007	0.012	0.009	0.013
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.032	0.021	0.045	0.029
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.023	0.014	0.032	0.01
32	Aluminum as Al	mg/l	0.03(0.2)	0.017	0.022	0.013	0.028
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.014	0.019	0.023	0.016
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025

Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

  
Dr. Subba Reddy Mallampati  
(Manager - Environment)

**ISSUED TO:**

**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-30  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1 (NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

**Name and Designation of Authorized Signatory**



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## ISSUED TO:

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## SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-30  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

  
Dr. Subba Reddy Mallampati  
(Manager Environment)

**ISSUED TO:**

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Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-30  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
1	pH value	-	6.5-8.5 (NR)	7.21	7.36	6.95	7.31
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	1	3	2
6	Total dissolved solids at 180°C	mg/l	500(2000)	320	270	470	275
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	200	125	221	166
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	90.0	95.0	160.0	80.0
9	Calcium as Ca	mg/l	75(200)	52.4	28.8	56.2	42.5
10	Magnesium as Mg	mg/l	30(100)	16.7	13.4	19.5	14.6
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.024	0.013	0.035	0.018
13	Chlorides as Cl	mg/l	250(1000)	89.4	64.5	106.4	78.5
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	37.5	24.7	53.8	29.4
15	Fluorides as F	mg/l	1.0(1.5)	0.323	0.282	0.195	0.137
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	4.8	1.9	4.1	2.3
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides as CN	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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Page 2 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date	: 2025-12-11	Sampling Date	: 2025-12-02
Analysis Starting Date	: 2025-12-11	Analysis Completion Date	: 2025-12-30
Test Required	: Water Analysis as per IS 10500 : 2012		
SAMPLE COLLECTED BY VIMTA LABS LTD.			

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies (B/W)	Bhadrapada D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	0.02	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	<0.01	0.018	0.021	0.007
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.015	0.027	0.038	0.014
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.019	0.022	0.029	0.018
32	Aluminum as Al	mg/l	0.03(0.2)	0.016	0.023	0.017	0.011
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.012	0.021	0.015	0.021
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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(Manager - Environment)**

**ISSUED TO:**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

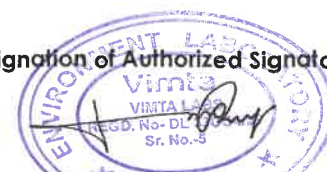
Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-30  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1 (NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1 (NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06 (NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2 (NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyriphos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



**Dr. Subba Reddy Mallampati  
(Manager - Environment)**

**ISSUED TO:**

M/s. Bharat Aluminum Company Limited,  
**BALCO**  
**KORBA**  
**Chhattisgarh**

Report Number : VLL/VLS/25-26/20775/001  
Issued Date : 2026-01-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 4 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-30  
Test Required : Water Analysis as per IS 10500 : 2012

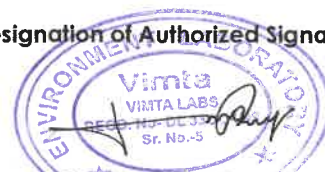
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



**Dr. Subba Reddy Mallampati**  
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## ISSUED TO:

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KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/20775/001  
Issued Date : 2026-01-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 1

## SAMPLE PARTICULARS : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-27  
Samples Details : SW1-Bailgiri Nala (U/S)-Near Baigiri Village, SW2-Bailgiri Nala (D/S)-Near Bailgiri Basti,  
SW3- Dhengu Nala (U/S) Risbabasti SW4- Dhengu Nala (D/S)-near Check post Balco

SAMPLE COLLECTED BY VIMTA LABS LTD.


## TEST REPORT

Sr. No.	Parameters	Unit	SW1	SW2	SW3	SW4
1	pH	-	7.48	7.31	7.65	7.28
2	Colour	Hazen	1	2	1	2
3	Conductivity	µS/cm	154	232	146	261
4	TDS	mg/l	95	143	90	160
5	DO	mg/l	7.1	6.7	6.9	6.4
6	BOD	mg/l	0.5	1.6	0.7	1.8
7	COD	mg/l	2.1	6.3	2.9	8.7
8	Turbidity	NTU	3.4	7.4	4.6	7.5
9	Total Hardness as CaCO <sub>3</sub>	mg/l	48	73	45	75
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	35	50	30	45
11	Calcium as Ca	mg/l	11.6	15.5	10.8	16.5
12	Magnesium as Mg	mg/l	4.6	8.3	4.3	7.8
13	Chlorides as Cl	mg/l	25.6	38.7	26.6	52.2
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	<0.01	0.02	0.03	0.03
16	Sulphates as SO <sub>4</sub>	mg/l	4.5	7.4	3.8	6.3
17	Fluorides as F	mg/l	0.156	0.197	0.184	0.212
18	Nitrates as NO <sub>3</sub>	mg/l	0.8	1.7	1.1	3.2
19	Sodium as Na	mg/l	13.1	18.9	12.6	24.8
20	Potassium as K	mg/l	0.4	1.2	0.8	2.3
21	Total Boron as B	mg/l	<0.01	0.018	0.009	0.043
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.018	0.065	0.048	0.027
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.015	0.098	0.056	0.038
33	Aluminum as Al	mg/l	0.016	0.021	0.026	0.018
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001
35	SAR	-	0.82	0.96	0.82	1.26
36	Insecticides	mg/l	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	180	260	140	270

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

  
VIMTA LABS  
REGD. No- DL 3300489  
Dr. Subba Reddy Mallampati  
(Manager - Environment)

**ISSUED TO:**

M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/20775/002  
Issued Date : 2026-01-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 1

**SAMPLE PARTICULARS**

: SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2025-12-11 Sampling Date : 2025-12-02  
Analysis Starting Date : 2025-12-11 Analysis Completion Date : 2025-12-27  
Samples Details : SW5- Hasdeo river near Ramgarh (U/S) SW6- Hasdeo river near Genwaghat, SW7- Hasdeo river near kohariya, SW8- Hasdeo river near kobra(D/S)-1, SW9- Hasdeo River near Kobra (D/S)-2.

SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	Unit	SW5	SW6	SW7	SW8	SW9
1	pH	-	7.34	7.43	7.15	7.54	7.27
2	Colour	Hazen	1	3	3	2	2
3	Conductivity	µS/cm	139	205	170	195	175
4	TDS	mg/l	90	126	110	125	112
5	DO	mg/l	7.2	6.8	7.2	6.8	6.9
6	BOD	mg/l	1.4	1.6	1.6	2.0	1.8
7	COD	mg/l	5.2	7.6	6.8	7.8	7.4
8	Turbidity	NTU	7.8	8.3	5.3	11.3	9.7
9	Total Hardness as CaCO <sub>3</sub>	mg/l	36	56	48	58	50
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	35	40	38	50	45
11	Calcium as Ca	mg/l	9.7	14.6	13.2	16.3	13.8
12	Magnesium as Mg	mg/l	2.9	4.8	3.7	4.1	3.5
13	Chlorides as Cl	mg/l	18.5	35.8	26.4	27.3	22.5
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.04	0.03	0.02	0.04	0.03
16	Sulphates as SO <sub>4</sub>	mg/l	5.9	7.8	6.4	7.3	8.4
17	Fluorides as F	mg/l	0.327	0.194	0.442	0.314	0.426
18	Nitrates as NO <sub>3</sub>	mg/l	1.2	2.1	1.4	1.3	1.1
19	Sodium as Na	mg/l	14.6	19.8	16.2	17.5	16.8
20	Potassium as K	mg/l	0.9	1.2	0.8	1.8	1.5
21	Total Boron as B	mg/l	<0.01	0.018	0.024	0.023	0.031
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.014	0.023	0.036	0.022	0.015
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.071	0.087	0.104	0.063	0.082
33	Aluminum as Al	mg/l	0.012	0.031	0.022	0.017	0.021
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
35	SAR	-	1.06	1.15	1.02	1.00	1.05
36	Insecticides	mg/l	Absent	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	110	160	120	140	190

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory



**Dr. Subba Reddy Mallampati**  
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**ISSUED TO:**

**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/23223/001  
Issued Date : 2026-02-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-01-09      Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10      Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
1	pH value	-	6.5-8.5 (NR)	6.95	6.81	6.80	7.27
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	3	2	2
6	Total dissolved solids at 180°C	mg/l	500(2000)	490	258	480	427
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	172	144	148	154
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	190	110	185	170
9	Calcium as Ca	mg/l	75(200)	46.4	36.8	38.4	43.2
10	Magnesium as Mg	mg/l	30(100)	13.6	12.6	12.6	11.2
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.021	0.015	0.017	0.023
13	Chlorides as Cl	mg/l	250(1000)	87.5	49.3	125.2	58.1
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	30.1	18.7	40.9	27.8
15	Fluorides as F	mg/l	1.0(1.5)	0.128	0.106	0.360	0.271
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	4.6	2.8	5.9	3.8
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

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**ISSUED TO:**

M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/23223/001  
Issued Date : 2026-02-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 2 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	0.01	<0.01	<0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	0.01	0.008	<0.01	0.011
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.047	0.016	0.034	0.018
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.016	0.008	0.024	<0.01
32	Aluminum as Al	mg/l	0.03(0.2)	0.014	0.011	0.018	0.023
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.017	0.021	0.027	0.018
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

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KORBA  
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Issued Date : 2026-02-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 3 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001(NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1(NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS: 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



**Dr. Subba Reddy Mallampati  
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## ISSUED TO:

M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/23223/001  
Issued Date : 2026-02-05  
P.O. No. : 3402001553  
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## SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)

Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1 (NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

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**ISSUED TO:**

**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/23223/001  
Issued Date : 2026-02-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-01-09      Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10      Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
1	pH value	-	6.5-8.5 (NR)	7.34	7.00	6.90	6.87
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	2	3	3
6	Total dissolved solids at 180°C	mg/l	500(2000)	285	310	193	358
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	150	100	102	128
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	140	110	70	80
9	Calcium as Ca	mg/l	75(200)	32.8	20.8	25.6	30.4
10	Magnesium as Mg	mg/l	30(100)	16.5	11.7	9.2	12.6
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.032	0.019	0.042	0.015
13	Chlorides as Cl	mg/l	250(1000)	42.5	74.8	38.6	131.2
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	16.8	21.6	23.1	23.0
15	Fluorides as F	mg/l	1.0(1.5)	0.388	0.250	0.179	0.125
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	2.9	3.4	2.8	3.7
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides as CN	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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BALCO  
KORBA  
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Report Number : VLL/VLS/25-26/23223/001  
Issued Date : 2026-02-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012

SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies (B/W)	Bhadrapada (D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	<0.01	0.016	0.019	0.008
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.012	0.039	0.046	0.012
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.015	0.026	0.031	0.013
32	Aluminum as Al	mg/l	0.03(0.2)	0.019	0.027	0.013	0.01
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.014	0.029	0.012	0.029
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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KORBA  
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Issued Date : 2026-02-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 3 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

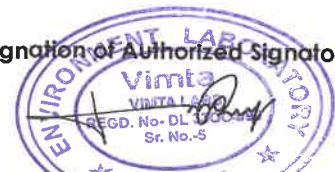
Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001(NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1(NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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**Report Number : VLL/VLS/25-26/23223/001  
Issued Date : 2026-02-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-29  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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## ISSUED TO:

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Report Number : VLL/VLS/25-26/23223/001  
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P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 1

## SAMPLE PARTICULARS : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-24  
Samples Details : SW1-Bailgiri Nala (U/S)-Near Baigiri Village, SW2-Bailgiri Nala (D/S)-Near Bailgiri Basti,  
SW3- Dhengu Nala (U/S) Risbabasti SW4- Dhengu Nala (D/S)-near Check post Balco

SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	Unit	SW1	SW2	SW3	SW4
1	pH	-	7.48	7.31	7.65	7.28
2	Colour	Hazen	1	2	1	2
3	Conductivity	µS/cm	134	210	150	100
4	TDS	mg/l	85	132	95	135
5	DO	mg/l	6.8	5.2	5.4	5.6
6	BOD	mg/l	0.6	1.9	0.8	2.0
7	COD	mg/l	2.4	7.2	3.2	9.6
8	Turbidity	NTU	5.0	8.0	7.0	9.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	38	65	46	48
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	30	50	40	42
11	Calcium as Ca	mg/l	9.6	12.8	11.2	10.4
12	Magnesium as Mg	mg/l	3.4	8.3	4.4	5.3
13	Chlorides as Cl	mg/l	16.0	22.5	16.0	28.8
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.01	0.04	0.02	0.05
16	Sulphates as SO <sub>4</sub>	mg/l	13.0	18.8	10.5	19.9
17	Fluorides as F	mg/l	0.108	0.133	0.126	0.163
18	Nitrates as NO <sub>3</sub>	mg/l	0.50	0.90	0.80	0.90
19	Sodium as Na	mg/l	12.6	16.5	12.6	24.8
20	Potassium as K	mg/l	1.1	1.6	0.8	2.3
21	Total Boron as B	mg/l	0.010	0.013	0.010	0.038
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.021	0.054	0.037	0.023
30	Chromium as Cr <sup>+6</sup>	mg/l	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.011	0.067	0.041	0.015
33	Aluminum as Al	mg/l	0.012	0.018	0.024	0.022
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001
35	SAR	-	0.89	0.88	0.81	1.56
36	Insecticides	mg/l	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	9.4	38	14	35

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory



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## ISSUED TO:

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Issued Date : 2026-02-05  
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Page 1 of 1

**SAMPLE PARTICULARS** : **SURFACE WATER SAMPLE (BALCO PLANT)**  
Sample Registration Date : 2026-01-09 Sampling Date : 2026-01-03  
Analysis Starting Date : 2026-01-10 Analysis Completion Date : 2026-01-24  
Samples Details : SW5- Hasdeo river near Ramgarh (U/S) SW6- Hasdeo river near Gerwaghat, SW7- Hasdeo river near kohariya, SW8- Hasdeo river near kobra (D/S)-1, SW9- Hasdeo River near Kobra (D/S)-2.  
SAMPLE COLLECTED BY VIMTA LABS LTD.

## TEST REPORT

Sr. No.	Parameters	Unit	SW5	SW6	SW7	SW8	SW9
1	pH	-	7.31	7.37	7.42	7.39	7.27
2	Colour	Hazen	1	2	2	3	2
3	Conductivity	µS/cm	154	182	167	180	164
4	TDS	mg/l	97	115	104	110	103
5	DO	mg/l	7.7	7.9	7.4	7.1	7.3
6	BOD	mg/l	1.5	1.7	1.7	2.2	1.9
7	COD	mg/l	5.6	8.0	7.2	8.8	8.0
8	Turbidity	NTU	6.0	8.0	6.0	9.0	8.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	50	57	50	52	46
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	30	43	40	41	35
11	Calcium as Ca	mg/l	10.5	13.2	10.4	10.4	11.2
12	Magnesium as Mg	mg/l	5.3	5.8	5.8	6.3	4.4
13	Chlorides as Cl	mg/l	26.0	27.0	24.0	26.8	25.8
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.03	0.06	0.03	0.05	0.04
16	Sulphates as SO <sub>4</sub>	mg/l	9.4	6.8	6.2	8.2	7.9
17	Fluorides as F	mg/l	0.442	0.587	0.523	0.608	0.537
18	Nitrates as NO <sub>3</sub>	mg/l	0.8	1.7	1.1	1.2	0.9
19	Sodium as Na	mg/l	13.6	15.2	14.8	16.4	15.6
20	Potassium as K	mg/l	0.7	1.1	0.6	1.4	1.3
21	Total Boron as B	mg/l	<0.01	0.021	0.032	0.027	0.018
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.011	0.035	0.028	0.019	0.023
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.058	0.073	0.098	0.043	0.065
33	Aluminum as Al	mg/l	0.019	0.036	0.021	0.015	0.031
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
35	SAR	-	0.85	0.88	0.91	0.99	1.00
36	Insecticides	mg/l	Absent	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	32	39	34	38	33

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory



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KORBA  
Chhattisgarh**

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Issued Date : 2026-03-05  
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P.O. Date : 2025-10-01**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
1	pH value	-	6.5-8.5 (NR)	6.92	6.89	6.83	7.23
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	4	2	3
6	Total dissolved solids at 180°C	mg/l	500(2000)	395	265	421	410
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	172	150	128	156
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	160	100	140	158
9	Calcium as Ca	mg/l	75(200)	41.6	43.2	36.8	46.4
10	Magnesium as Mg	mg/l	30(100)	16.5	10.2	8.7	9.7
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.037	0.019	0.023	0.015
13	Chlorides as Cl	mg/l	250(1000)	136.1	66.1	143.8	64.1
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	27.1	18.9	39.1	26.1
15	Fluorides as F	mg/l	1.0(1.5)	0.131	0.098	0.342	1.450
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	3.6	2.1	4.7	4.1
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

**Dr. Subba Reddy Mallampati  
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**ISSUED TO:**

**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/24935/001**  
**Issued Date : 2026-03-05**  
**P.O. No. : 3402001553**  
**P.O. Date : 2025-10-01**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

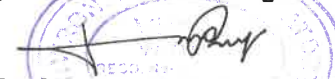
Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	<0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	0.013	<0.01	0.008	<0.01
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.038	0.012	0.027	0.011
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.024	0.010	0.021	0.01
32	Aluminum as Al	mg/l	0.03(0.2)	0.013	0.023	0.015	0.018
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.015	0.018	0.021	0.014
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025

Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

  
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KORBA  
Chhattisgarh**

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P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

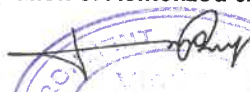
Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001(NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1(NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

**Name and Designation of Authorized Signatory**

  
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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

  
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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

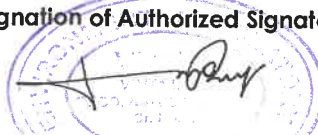
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Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
1	pH value	-	6.5-8.5 (NR)	7.42	7.03	6.94	6.81
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	3	4	3
6	Total dissolved solids at 180°C	mg/l	500(2000)	212	310	202	360
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	124	136	106	102
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	95	110	80	95
9	Calcium as Ca	mg/l	75(200)	30.8	35.2	27.2	20.0
10	Magnesium as Mg	mg/l	30(100)	11.5	11.7	9.2	12.6
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.045	0.012	0.035	0.017
13	Chlorides as Cl	mg/l	250(1000)	35.5	78.1	37.2	110.0
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	18.4	21.6	21.9	33.2
15	Fluorides as F	mg/l	1.0(1.5)	0.369	0.287	0.164	0.131
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	2.2	3.9	2.1	3.2
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides as CN	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
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Test Required : Water Analysis as per IS 10500 : 2012

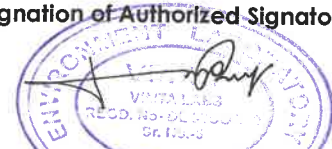
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	<0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	0.012	0.009	0.014	<0.01
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.01	<0.01	<0.01	<0.01
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.015	0.031	0.039	0.026
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01
31	Zinc as Zn	mg/l	5.0(15)	0.017	0.029	0.034	0.021
32	Aluminium as Al	mg/l	0.03(0.2)	0.013	0.016	0.024	0.021
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.021	0.017	0.015	0.023
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001(NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1(NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

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### SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)

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Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-26  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

### TEST REPORT

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies (B/W)	Bhadrapada (D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

Dr. Subba Reddy Mallampati  
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## ISSUED TO:

M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/24935/001  
Issued Date : 2026-03-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 1

## SAMPLE PARTICULARS : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-23  
Samples Details : SW1-Baigiri Nala (U/S)-Near Baigiri Village, SW2-Baigiri Nala (D/S)-Near Baigiri Basti,  
SW3- Dhengu Nala (U/S) Risbabasti SW4- Dhengu Nala (D/S)-near Check post Balco

SAMPLE COLLECTED BY VIMTA LABS LTD.

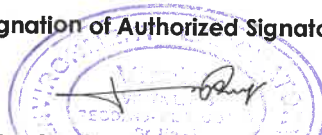
## TEST REPORT

Sr. No.	Parameters	Unit	SW1	SW2	SW3	SW4
1	pH	-	6.79	7.21	7.34	7.41
2	Colour	Hazen	1	3	2	4
3	Conductivity	µS/cm	185	142	84	114
4	TDS	mg/l	97	158	112	144
5	DO	mg/l	6.7	4.9	5.1	5.7
6	BOD	mg/l	0.8	1.7	1.0	1.8
7	COD	mg/l	3.2	6.4	4.0	8.8
8	Turbidity	NTU	4.0	7.0	8.0	6.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	52	72	50	68
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	33	58	38	48
11	Calcium as Ca	mg/l	12.0	19.2	12.0	18.4
12	Magnesium as Mg	mg/l	5.3	5.8	4.9	5.3
13	Chlorides as Cl	mg/l	16.0	22.5	16.0	28.8
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.02	0.035	0.03	0.046
16	Sulphates as SO <sub>4</sub>	mg/l	16.6	29.8	19.7	21.6
17	Fluorides as F	mg/l	0.075	0.284	0.132	0.358
18	Nitrates as NO <sub>3</sub>	mg/l	0.5	0.9	0.8	0.9
19	Sodium as Na	mg/l	12.6	16.5	12.6	24.8
20	Potassium as K	mg/l	1.1	1.6	0.8	2.3
21	Total Boron as B	mg/l	<0.01	0.012	0.008	0.026
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.017	0.048	0.026	0.031
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.023	0.054	0.038	0.018
33	Aluminum as Al	mg/l	0.011	0.021	0.018	0.034
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001
35	SAR	-	0.76	0.85	0.78	1.31
36	Insecticides	mg/l	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	11	36	18	42

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

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## ISSUED TO:

M/s. Bharat Aluminum Company Limited,  
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Report Number : VLL/VLS/25-26/24935/002  
Issued Date : 2026-03-05  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 1

## SAMPLE PARTICULARS

SAMPLE COLLECTED BY VIMTA LABS LTD. : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2026-02-09 Sampling Date : 2026-02-04  
Analysis Starting Date : 2026-02-09 Analysis Completion Date : 2026-02-23  
Samples Details : SW5- Hasdeo river near Ramgarh (U/S) SW6- Hasdeo river near Gerwaghat, SW7- Hasdeo river near kohariya, SW8- Hasdeo river near kobra(D/S)-1, SW9- Hasdeo River near Kobra (D/S)-2.

## TEST REPORT

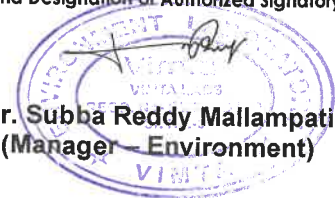
Sr. No.	Parameters	Unit	SW5	SW6	SW7	SW8	SW9
1	pH	-	7.35	7.36	7.58	7.24	7.22
2	Colour	Hazen	1	3	3	4	2
3	Conductivity	µS/cm	176	165	154	168	159
4	TDS	mg/l	110	98	90	105	102
5	DO	mg/l	7.2	7.6	7.3	7.4	7.6
6	BOD	mg/l	1.2	1.5	1.8	2.1	1.9
7	COD	mg/l	4.8	7.2	8.0	8.5	8.0
8	Turbidity	NTU	7.0	9.0	6.0	11.0	8.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	50	54	51	52	50
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	43	40	40	42	41
11	Calcium as Ca	mg/l	11.2	12.0	12.8	10.4	12.8
12	Magnesium as Mg	mg/l	5.3	5.8	4.7	6.3	4.4
13	Chlorides as Cl	mg/l	26.0	27.0	24.0	26.8	25.8
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.02	0.062	0.041	0.06	0.05
16	Sulphates as SO <sub>4</sub>	mg/l	7.8	4.1	5.2	7.6	6.1
17	Fluorides as F	mg/l	0.407	0.564	0.502	0.589	0.542
18	Nitrates as NO <sub>3</sub>	mg/l	1.1	1.8	1.6	1.4	1.2
19	Sodium as Na	mg/l	16.7	12.5	11.5	14.0	13.1
20	Potassium as K	mg/l	1.1	1.0	0.8	1.2	1.1
21	Total Boron as B	mg/l	<0.01	0.018	0.029	0.034	0.015
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.003	<0.003	<0.003	<0.003	<0.003
26	Arsenic as As	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
27	Copper as Cu	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
28	Lead as Pb	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
29	Iron as Fe	mg/l	0.015	0.042	0.034	0.022	0.031
30	Chromium as Cr <sup>+6</sup>	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
32	Zinc as Zn	mg/l	0.047	0.065	0.087	0.035	0.049
33	Aluminum as Al	mg/l	0.026	0.041	0.029	0.013	0.025
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
35	SAR	-	1.03	0.74	0.70	0.84	0.81
36	Insecticides	mg/l	Absent	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	34	32	35	39	38

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

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(Manager - Environment)



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**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/28724/001  
Issued Date : 2026-04-04  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
1	pH value	-	6.5-8.5 (NR)	6.84	7.15	6.81	7.03
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	3	2	3
6	Total dissolved solids at 180°C	mg/l	500(2000)	604	262	624	403
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	294	118	267	231
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	180	90	230	195
9	Calcium as Ca	mg/l	75(200)	71.2	26.8	74.0	64.8
10	Magnesium as Mg	mg/l	30(100)	28.2	12.4	20.0	16.7
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.026	0.012	0.037	0.023
13	Chlorides as Cl	mg/l	250(1000)	163.8	54	143.1	55.2
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	65.8	34.1	46.8	29.7
15	Fluorides as F	mg/l	1.0(1.5)	0.246	0.404	0.680	1.070
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	4.9	3.2	5.2	3.5
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory

  
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**BALCO**  
**KORBA**  
Chhattisgarh

**Report Number** : VLL/VLS/25-26/28724/001  
**Issued Date** : 2026-04-04  
**P.O. No.** : 3402001553  
**P.O. Date** : 2025-10-01

Page 2 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
Test Required : Water Analysis as per IS 10500 : 2012

SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

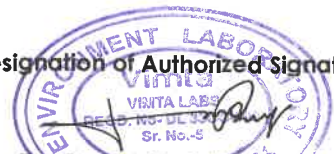
Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	<0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	0.011	<0.005	0.012	<0.005
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.001	<0.001	<0.001	<0.001
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.026	0.01	0.019	0.023
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.001	<0.001	<0.001	<0.001
31	Zinc as Zn	mg/l	5.0(15)	0.034	0.013	0.027	0.016
32	Aluminum as Al	mg/l	0.03(0.2)	0.021	0.016	0.018	0.023
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.024	0.019	0.028	0.017
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025

Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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**Report Number : VLL/VLS/25-26/28724/001  
Issued Date : 2026-04-04  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 3 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001(NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoform	mg/l	0.1(NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroform	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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**Report Number : VLL/VLS/25-26/28724/001  
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 P.O. Date : 2025-10-01**

Page 4 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
 Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
 Test Required : Water Analysis as per IS 10500 : 2012  
 SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Rogbheri (B/W)	Rogbheri (D/W)	Bailgiri Basti(B/W)	Bailgiri Basti(D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1 (NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
 Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
 Analysis as per IS 10500: 2012 Drinking Water specification

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

**Dr. Subba Reddy Mallampati**  
 (Manager - Environment)

**Vimta Labs Limited**

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**ISSUED TO:**

**M/s. Bharat Aluminum Company Limited,  
BALCO  
KORBA  
Chhattisgarh**

**Report Number : VLL/VLS/25-26/28724/001  
Issued Date : 2026-04-04  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01**

Page 1 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

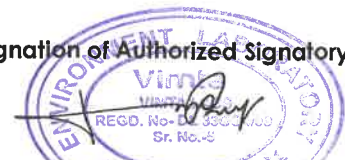
Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
1	pH value	-	6.5-8.5 (NR)	7.39	6.79	6.72	6.92
2	Color	Hazen	5(15)	Colorless	Colorless	Colorless	Colorless
3	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	NTU	1(5)	2	4	3	2
6	Total dissolved solids at 180°C	mg/l	500(2000)	300	147	174	335
7	Total Hardness as CaCO <sub>3</sub>	mg/l	200(600)	144	50	90	146
8	Total Alkalinity as CaCO <sub>3</sub>	mg/l	200(600)	120	50	60	60
9	Calcium as Ca	mg/l	75(200)	36.0	8.8	19.2	32.0
10	Magnesium as Mg	mg/l	30(100)	13.1	6.8	10.2	16.0
11	Free Residual chlorine	mg/l	0.2(1.0)	<0.1	<0.1	<0.1	<0.1
12	Boron as B	mg/l	0.5(1.0)	0.034	0.011	0.028	0.031
13	Chlorides as Cl	mg/l	250(1000)	68.4	31	37.5	135
14	Sulphate as SO <sub>4</sub>	mg/l	200(400)	17.5	16.5	21.1	27.1
15	Fluorides as F	mg/l	1.0(1.5)	0.960	0.428	0.232	0.309
16	Nitrates as NO <sub>3</sub>	mg/l	45(NR)	1.9	3.1	3.5	2.9
17	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	mg/l	0.001(0.002)	<0.001	<0.001	<0.001	<0.001
18	Cyanides as CN	mg/l	0.05(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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**P.O. Date : 2025-10-01**

Page 2 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
Test Required : Water Analysis as per IS 10500 : 2012

SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies (B/W)	Bhadrapada (D/W)
19	Anionic detergents as MBAS	mg/l	0.2(1.0)	<0.02	<0.02	<0.02	<0.02
20	Mineral oil	mg/l	0.5(NR)	Absent	Absent	Absent	Absent
21	Cadmium as Cd	mg/l	0.003(NR)	<0.003	<0.003	<0.003	<0.003
22	Total Arsenic as As	mg/l	0.01(0.05)	<0.01	<0.01	<0.01	<0.01
23	Copper as Cu	mg/l	0.05(1.5)	<0.01	<0.01	<0.01	<0.01
24	Lead as Pb	mg/l	0.01(NR)	<0.01	<0.01	<0.01	<0.01
25	Manganese as Mn	mg/l	0.1(0.3)	0.008	0.01	0.017	<0.005
26	Molybdenum as Mo	mg/l	0.07(NR)	<0.001	<0.001	<0.001	<0.001
27	Nickel as Ni	mg/l	0.02(NR)	<0.005	<0.005	<0.005	<0.005
28	Iron as Fe	mg/l	0.3(NR)	0.013	0.028	0.024	0.031
29	Total Chromium as Cr	mg/l	0.05(NR)	<0.005	<0.005	<0.005	<0.005
30	Selenium as Se	mg/l	0.05(NR)	<0.001	<0.001	<0.001	<0.001
31	Zinc as Zn	mg/l	5.0(15)	0.028	0.031	0.025	0.018
32	Aluminum as Al	mg/l	0.03(0.2)	0.027	0.015	0.029	0.014
33	Mercury as Hg	mg/l	0.001(NR)	<0.001	<0.001	<0.001	<0.001
34	Sulphide as H <sub>2</sub> S	mg/l	0.05(NR)	<0.05	<0.05	<0.05	<0.05
35	Chloramines as Cl <sub>2</sub>	mg/l	4.0(NR)	<0.05	<0.05	<0.05	<0.05
36	Ammonia (as total ammonia-N)	mg/l	0.5(NR)	<0.05	<0.05	<0.05	<0.05
37	Barium as Ba	mg/l	0.7(NR)	0.020	0.025	0.013	0.018
38	Silver as Ag	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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Page 3 of 4

**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

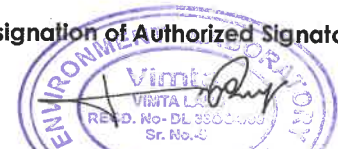
Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies (B/W)	Bhadrapada (D/W)
39	Polychlorinated biphenyls	mg/l	0.0005(NR)	Absent	Absent	Absent	Absent
40	Polynuclear aromatic hydrocarbon as PAH	mg/l	0.0001(NR)	<0.0001	<0.0001	<0.0001	<0.0001
41	Bromoforn	mg/l	0.1(NR)	<0.0001	<0.0001	<0.0001	<0.0001
42	Dibromochloromethane	mg/l	0.1(NR)	<0.01	<0.01	<0.01	<0.01
43	Bromodichloromethane	mg/l	0.06(NR)	<0.01	<0.01	<0.01	<0.01
44	Chloroforn	mg/l	0.2(NR)	<0.001	<0.001	<0.001	<0.001
(A)	<b>Pesticides</b>						
45	Alachlor	µg/l	20	<0.01	<0.01	<0.01	<0.01
46	Atrazine	µg/l	2	<0.01	<0.01	<0.01	<0.01
47	Aldrin	µg/l	0.03	<0.01	<0.01	<0.01	<0.01
48	Alpha HCH	µg/l	0.01	<0.01	<0.01	<0.01	<0.01
49	Beta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
50	Butachlor	µg/l	125	<0.01	<0.01	<0.01	<0.01
51	Chlorpyrifos	µg/l	30	<0.01	<0.01	<0.01	<0.01
52	Delta HCH	µg/l	0.04	<0.01	<0.01	<0.01	<0.01
53	2,4-Dichlorophenoxyacetic acid	µg/l	30	<0.01	<0.01	<0.01	<0.01
54	DDT	µg/l	1	<0.01	<0.01	<0.01	<0.01
55	Endosulfan (alpha, beta and Sulphate)	µg/l	0.4	<0.01	<0.01	<0.01	<0.01
56	Ethion	µg/l	3	<0.01	<0.01	<0.01	<0.01
57	Gamma HCH	µg/l	2	<0.01	<0.01	<0.01	<0.01
58	Isoproturon	µg/l	9	<0.01	<0.01	<0.01	<0.01

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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P.O. Date : 2025-10-01**

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**SAMPLE PARTICULARS : GROUND WATER SAMPLES (BALCO PLANT)**

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-11 Analysis Completion Date : 2026-03-25  
Test Required : Water Analysis as per IS 10500 : 2012  
SAMPLE COLLECTED BY VIMTA LABS LTD.

**TEST REPORT**

Sr. No.	Parameters	UOM	Limit IS 10500 : 2012	Parsabhata (B/W)	Parsabhata (D/W)	Karma Talkies(B/W)	Bhadrapada D/W)
59	Malathion	µg/l	190	BDL	BDL	BDL	BDL
60	Methyl parathion	µg/l	0.3	BDL	BDL	BDL	BDL
61	Monocrotophos	µg/l	1	BDL	BDL	BDL	BDL
62	Phorate	µg/l	2	BDL	BDL	BDL	BDL
63	E.coli	Per 100 ml	Absent	Absent	Absent	Absent	Absent
64	Total Coliforms	MPN/100ml	Absent	Absent	Absent	Absent	Absent
(B)	<b>Radioactive</b>						
65	Alpha emitters	Bq/l	0.1(NR)	BDL	BDL	BDL	BDL
66	Beta emitters	Bq/l	1.0(NR)	BDL	BDL	BDL	BDL

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)  
Analysis as per IS 10500: 2012 Drinking Water specification

Name and Designation of Authorized Signatory



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## ISSUED TO:

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Chhattisgarh

Report Number : VLL/VLS/25-26/28724/001  
Issued Date : 2026-04-04  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 1

## SAMPLE PARTICULARS : SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-10 Analysis Completion Date : 2026-03-23  
Samples Details : SW1-Bailgiri Nala (U/S)-Near Baigiri Village, SW2-Bailgiri Nala (D/S)-Near Bailgiri Basti,  
SW3- Dhengu Nala (U/S) Risbabasti SW4- Dhengu Nala (D/S)-near Check post Balco

SAMPLE COLLECTED BY VIMTA LABS LTD.

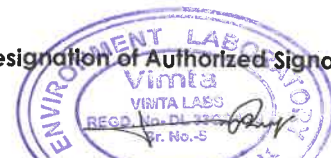
## TEST REPORT

Sr. No.	Parameters	Unit	SW1	SW2	SW3	SW4
1	pH	-	7.03	7.69	7.68	6.19
2	Colour	Hazen	1	2	1	3
3	Conductivity	µS/cm	56	243	88	115
4	TDS	mg/l	60	150	75	72
5	DO	mg/l	6.3	4.4	5.8	5.2
6	BOD	mg/l	0.5	3.0	2.0	1.5
7	COD	mg/l	1.6	11.2	7.2	6.4
8	Turbidity	NTU	3.0	8.0	6.0	8.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	18	68	32	42
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	14	55	25	45
11	Calcium as Ca	mg/l	4.8	16.0	6.4	8.8
12	Magnesium as Mg	mg/l	1.5	6.8	3.9	4.9
13	Chlorides as Cl	mg/l	15.0	21.0	16.3	19.7
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.023	0.032	0.011	0.024
16	Sulphates as SO <sub>4</sub>	mg/l	10.6	12.5	10.0	22.7
17	Fluorides as F	mg/l	0.186	0.284	0.351	0.399
18	Nitrates as NO <sub>3</sub>	mg/l	0.3	1.1	1.0	1.2
19	Sodium as Na	mg/l	12.6	16.5	12.6	24.8
20	Potassium as K	mg/l	1.1	1.6	0.8	2.3
21	Total Boron as B	mg/l	<0.005	0.015	0.009	0.032
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.005	<0.005	<0.005	<0.005
26	Arsenic as As	mg/l	<0.001	<0.001	<0.001	<0.001
27	Copper as Cu	mg/l	<0.005	<0.005	<0.005	<0.005
28	Lead as Pb	mg/l	<0.005	<0.005	<0.005	<0.005
29	Iron as Fe	mg/l	0.010	0.035	0.014	0.031
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.005	<0.005	<0.005	<0.005
32	Zinc as Zn	mg/l	0.017	0.048	0.021	0.032
33	Aluminum as Al	mg/l	0.008	0.031	0.010	0.025
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001
35	SAR	-	1.29	0.87	0.97	1.67
36	Insecticides	mg/l	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	13	42	26	38

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory



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## ISSUED TO:

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BALCO  
KORBA  
Chhattisgarh

Report Number : VLL/VLS/25-26/28724/002  
Issued Date : 2026-04-04  
P.O. No. : 3402001553  
P.O. Date : 2025-10-01

Page 1 of 1

## SAMPLE PARTICULARS

: SURFACE WATER SAMPLE (BALCO PLANT)

Sample Registration Date : 2026-03-10 Sampling Date : 2026-03-03  
Analysis Starting Date : 2026-03-10 Analysis Completion Date : 2026-03-23  
Samples Details : SW5- Hasdeo river near Ramgarh (U/S) SW6- Hasdeo river near Gerwaghat, SW7- Hasdeo river near kohariya, SW8- Hasdeo river near kobra(D/S)-1, SW9- Hasdeo River near Kobra (D/S)-2.

SAMPLE COLLECTED BY VIMTA LABS LTD.

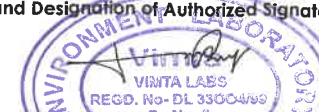
## TEST REPORT

Sr. No.	Parameters	Unit	SW5	SW6	SW7	SW8	SW9
1	pH	-	7	7.31	7.46	7.21	7.26
2	Colour	Hazen	1	2	2	3	2
3	Conductivity	µS/cm	164	172	161	169	162
4	TDS	mg/l	105	108	103	110	105
5	DO	mg/l	7.6	7.4	7.1	7.5	7.7
6	BOD	mg/l	1.6	1.9	1.7	2.0	1.9
7	COD	mg/l	5.6	6.4	5.6	7.2	6.4
8	Turbidity	NTU	5.0	7.0	8.0	6.0	9.0
9	Total Hardness as CaCO <sub>3</sub>	mg/l	50	52	56	54	52
10	Total Alkalinity as CaCO <sub>3</sub>	mg/l	40	42	45	40	42
11	Calcium as Ca	mg/l	12.8	12	14.4	15.2	14.4
12	Magnesium as Mg	mg/l	4.8	5.3	4.8	3.9	4.0
13	Chlorides as Cl	mg/l	25.0	26.4	21.1	24.8	22.3
14	Residual free chlorine	mg/l	<0.2	<0.2	<0.2	<0.2	<0.2
15	Phosphates as PO <sub>4</sub>	mg/l	0.013	0.028	0.017	0.021	0.015
16	Sulphates as SO <sub>4</sub>	mg/l	5.9	4.4	4.7	6.9	5.4
17	Fluorides as F	mg/l	0.623	0.594	0.576	0.621	0.619
18	Nitrates as NO <sub>3</sub>	mg/l	0.5	0.9	0.6	1.2	1.1
19	Sodium as Na	mg/l	14.2	15.1	11.5	13.5	12.8
20	Potassium as K	mg/l	0.8	1.1	0.7	1.1	1.0
21	Total Boron as B	mg/l	<0.005	0.016	0.018	0.025	0.019
22	Phenolic Compounds	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
23	Cyanides as CN	mg/l	<0.01	<0.01	<0.01	<0.01	<0.01
24	Oil & grease	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
25	Cadmium as Cd	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005
26	Arsenic as As	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
27	Copper as Cu	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005
28	Lead as Pb	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005
29	Iron as Fe	mg/l	0.015	0.031	0.027	0.029	0.036
30	Chromium as Cr <sup>6+</sup>	mg/l	<0.05	<0.05	<0.05	<0.05	<0.05
31	Selenium as Se	mg/l	<0.005	<0.005	<0.005	<0.005	<0.005
32	Zinc as Zn	mg/l	0.039	0.051	0.041	0.036	0.031
33	Aluminum as Al	mg/l	0.028	0.036	0.024	0.019	0.027
34	Mercury as Hg	mg/l	<0.001	<0.001	<0.001	<0.001	<0.001
35	SAR	-	0.86	0.91	0.67	0.80	0.77
36	Insecticides	mg/l	Absent	Absent	Absent	Absent	Absent
37	Anionic detergents as MBAS	mg/l	Absent	Absent	Absent	Absent	Absent
38	Total Coliforms	MPN/100	47	52	44	72	67

Method of Testing: As per APHA 23<sup>rd</sup> edition and IS: 3025  
Instrument Used: ICP-OES (Perkin-Elmer) & ICP-MS (agilent)

-END OF THE REPORTS-

Name and Designation of Authorized Signatory

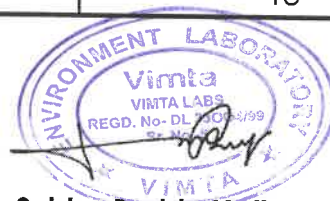
  
VIMTA LABS  
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Sr. No- 8  
Dr. Subba Reddy Mallampati  
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<b>ISSUED TO:</b>		Report No.:	VLL/VLS/25-26/15704/Forage	
<b>M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)</b>		Issue Date:	2025-11-05	
		P.O.No:	8500005780	
		P.O. Date:	2022-06-29	
<b>FORAGE FLUORIDE</b>				
<b>Registration Date: 2025-10-07</b>		<b>Sampling Date: 2025-10-04</b>		
<b>Analysis starting date: 2025-10-07</b>		<b>Analysis Completion date: 2025-10-10</b>		
<b>Test Required :- Fluoride;</b>				
<b>TEST RESULTS</b>				
S. No.	Location	Unit	Norms	Results
1	In Side of the plant	PPM	80	39
2	Near Parsabhata	PPM	80	16
3	Near Lal ghat	PPM	80	23
4	Near check post	PPM	80	18
5	Near Sharma petrol pump	PPM	80	25
6	Bhadrapara	PPM	80	19
7	Risdi	PPM	80	16
8	Rampur	PPM	80	9
9	Manikpur	PPM	80	12
10	jambahar	PPM	80	11
11	Rumgarha	PPM	80	18
12	Gerwan	PPM	80	13



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	Issue Date:	2025-12-05		
	P.O.No:	3402001553		
	P.O. Date:	2025-10-01		
<b>FORAGE FLUORIDE</b>				
<b>Registration Date: 2025-11-10</b>		<b>Sampling Date: 2025-11-04</b>		
<b>Analysis starting date: 2025-11-10</b>		<b>Analysis Completion date: 2025-11-14</b>		
<b>Test Required :- Fluoride;</b>				
<b>TEST RESULTS</b>				
S. No.	Location	Unit	Norms	Results
1	In Side of the plant	PPM	80	36
2	Near Parsabhata	PPM	80	18
3	Near Lal ghat	PPM	80	27
4	Near check post	PPM	80	23
5	Near Sharma petrol pump	PPM	80	26
6	Bhadrapara	PPM	80	17
7	Risdi	PPM	80	18
8	Rampur	PPM	80	10
9	Manikpur	PPM	80	15
10	jambahar	PPM	80	12
11	Rumgarha	PPM	80	16
12	Gerwan	PPM	80	14

  
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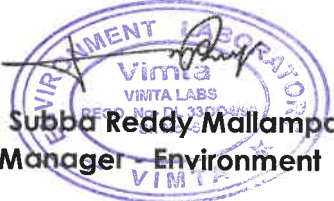

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	Issue Date:	2026-02-05		
	P.O.No:	3402001553		
	P.O. Date:	2025-10-01		
<b>FORAGE FLUORIDE</b>				
<b>Registration Date: 2026-01-15</b>		<b>Sampling Date: 2026-01-13</b>		
<b>Analysis starting date: 2026-01-15</b>		<b>Analysis Completion date: 2026-01-20</b>		
<b>Test Required :- Fluoride;</b>				
<b>TEST RESULTS</b>				
S. No.	Location	Unit	Norms	Results
1	In Side of the plant	PPM	80	37
2	Near Parsabhata	PPM	80	19
3	Near Lal ghat	PPM	80	24
4	Near check post	PPM	80	25
5	Near Sharma petrol pump	PPM	80	20
6	Bhadrapara	PPM	80	16
7	Risdi	PPM	80	14
8	Rampur	PPM	80	13
9	Manikpur	PPM	80	10
10	jambahar	PPM	80	11
11	Rumgarha	PPM	80	12
12	Gerwan	PPM	80	9

  
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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/28724/Forage
	Issue Date:	2026-04-04
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**FORAGE FLUORIDE**

Registration Date: 2026-03-09      Sampling Date: 2026-03-06  
Analysis starting date: 2026-03-09      Analysis Completion date: 2026-03-17

Test Required :- Fluoride;

**TEST RESULTS**

S. No.	Location	Unif	Norms	Results
1	In Side of the plant	PPM	80	38
2	Near Parsabhata	PPM	80	17
3	Near Lal ghat	PPM	80	24
4	Near check post	PPM	80	18
5	Near Sharma petrol pump	PPM	80	14
6	Bhadrapara	PPM	80	20
7	Risdi	PPM	80	10
8	Rampur	PPM	80	12
9	Manikpur	PPM	80	14
10	jambahar	PPM	80	13
11	Rumgarha	PPM	80	11
12	Gerwan	PPM	80	8

  
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<b>ISSUED TO</b>				<b>Report Number:</b> VLL/VLS/25-26/15704/004		
<b>M/s. Bharat Aluminium Company Limited</b>				<b>Issue Date:</b> 2025-11-05		
<b>KORBA (C.G)</b>				<b>P.O. No:</b> 8500005780		
				<b>P.O. Date:</b> 2022-06-29		
<b>AMBIENT NOISE MONITORING AT CPP - 2 (540 MW)</b>						
<b>Tests required: Sound Level</b>						
<b>SAMPLES COLLECTED BY VIMTA LABS LTD</b>				<b>LAB REF.: EC</b>		
<b>TEST RESULTS</b>						
S. No	Location	Unit	Norms in dB(Day)	2025-10-14	Norms in dB(Night)	2025-10-14
				6:00 to 22.00		22.00 to 6.00
1	ED Building for CW system	dB	75	73.0	70	70.5
2	Waste water Treatment basin	dB	75	54.7	70	54.1
3	Main gate power Plant	dB	75	63.7	70	62.0
4	CCR	dB	75	60.4	70	59.2

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<b>ISSUED TO</b> <b>M/s. Bharat Aluminium Company Limited</b> <b>KORBA (C.G)</b>							<b>Report Number: VLL/VLS/25-26/18084/004</b> <b>Issue Date: 2025-12-05</b> <b>P.O. No: 3402001553</b> <b>P.O. Date: 2025-10-01</b>	
<b>AMBIENT NOISE MONITORING AT CPP - 2 (540 MW)</b>								
<b>Tests required: Sound Level</b>								
<b>SAMPLES COLLECTED BY VIMTA LABS LTD</b>				<b>LAB REF.: EC</b>				
<b>TEST RESULTS</b>								
S. No	Location	Unit	Norms in dB(Day)	2025-11-13	Norms in dB(Night)	2025-11-13		
				6:00 to 22.00		22.00 to 6.00		
1	ED Building for CW system	dB	75	74.4	70	71.7		
2	Waste water Treatment basin	dB	75	56.2	70	53.9		
3	Main gate power Plant	dB	75	65.2	70	62.7		
4	CCR	dB	75	60.8	70	57.9		

  
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<b>AMBIENT NOISE MONITORING AT CPP - 2 (540 MW)</b>								
<b>Tests required: Sound Level</b>								
<b>SAMPLES COLLECTED BY VIMTA LABS LTD</b>					<b>LAB REF.: EC</b>			
<b>TEST RESULTS</b>								
S. No	Location	Unit	Norms in dB(Day)	2025-12-11		Norms in dB(Night)	2025-12-11	
				6:00 to 22.00			22.00 to 6.00	
1	ED Building for CW system	dB	75	74.1	70	70	68.9	
2	Waste water Treatment basin	dB	75	56.9	70	70	54.0	
3	Main gate power Plant	dB	75	65.3	70	70	63.0	
4	CCR	dB	75	59.9	70	70	57.4	

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							<b>Issue Date: 2026-02-05</b>	
							<b>P.O. No: 3402001553</b>	
							<b>P.O. Date: 2025-10-01</b>	
<b>AMBIENT NOISE MONITORING AT CPP - 2 (540 MW)</b>								
<b>Tests required: Sound Level</b>								
<b>SAMPLES COLLECTED BY VIMTA LABS LTD</b>					<b>LAB REF.: EC</b>			
<b>TEST RESULTS</b>								
S. No	Location	Unit	Norms in dB(Day)	2026-01-19		Norms in dB(Night)	2026-01-19	
				6:00 to 22.00			22.00 to 6.00	
1	ED Building for CW system	dB	75	74.2		70	69.1	
2	Waste water Treatment basin	dB	75	56.6		70	53.2	
3	Main gate power Plant	dB	75	64.6		70	62.0	
4	CCR	dB	75	59.7		70	57.6	

  
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<b>ISSUED TO</b> <b>M/s. Bharat Aluminium Company Limited</b> <b>KORBA (C.G)</b>							<b>Report Number: VLL/VLS/25-26/24935/004</b>	
							<b>Issue Date: 2026-03-05</b>	
							<b>P.O. No: 3402001553</b>	
							<b>P.O. Date: 2025-10-01</b>	
<b>AMBIENT NOISE MONITORING AT CPP - 2 (540 MW)</b>								
<b>Tests required: Sound Level</b>								
<b>SAMPLES COLLECTED BY VIMTA LABS LTD</b>							<b>LAB REF.: EC</b>	
<b>TEST RESULTS</b>								
S. No	Location	Unit	Norms in dB(Day)	2026-02-13	Norms in dB(Night)	2026-02-13		
				6:00 to 22.00		22.00 to 6.00		
1	ED Building for CW system	dB	75	73.4	70	67.1		
2	Waste water Treatment basin	dB	75	55.9	70	53.1		
3	DG Set	dB	75	63.7	70	61.7		
4	Main gate power Plant	dB	75	59.9	70	55.7		
5	CCR	dB	75	59.7	70	57.6		

  
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<b>ISSUED TO</b> M/s. Bharat Aluminium Company Limited KORBA (C.G)		<b>Report Number:</b> VLL/VLS/25-26/28724/004 <b>Issue Date:</b> 2026-04-04 <b>P.O. No:</b> 3402001553 <b>P.O. Date:</b> 2025-10-01				
<b>AMBIENT NOISE MONITORING AT CPP - 2 (540 MW)</b>						
<b>Tests required: Sound Level</b>						
<b>SAMPLES COLLECTED BY VIMTA LABS LTD</b>				<b>LAB REF.: EC</b>		
<b>TEST RESULTS</b>						
S. No	Location	Unit	Norms in dB(Day)	2026-03-13	Norms in dB(Night)	2026-03-13
				6:00 to 22.00		22.00 to 6.00
1	ED Building for CW system	dB	75	74.1	70	68.5
2	Waste water Treatment basin	dB	75	55.6	70	53.6
3	DG Set	dB	75	61.1	70	57.9
4	Main gate power Plant	dB	75	62.9	70	57.0
5	CCR	dB	75	59.2	70	55.9

  
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Manager - Environment  


## GREEN BELT DEVELOPMENT

### Name of the Species Planted

Dalbergia latifolia (**sheeshm**), Mangifera Indica (**Mango**), Jamarindus Indica, Dehonix Regia(**Gulmohar**), Madhuca Indica (**Mahuwa**), Emblica Officinalis (**Amala**), Syzygium Cumini (**Jamun**), Azadirachta Indica (**Neem**), Grevillea Rebusta (**Silver oak**) **Karanj**, (**Amaltash**), Ficus Religiosa (**Pipal**), Leucaena Leucoophala (**Subabul**) etc.

YEAR	BALCO		BCPP		Total	
	No of sapling	Area in Acres	No of sapling	Area in Acres	No of sapling	Area in Acres
2002-03	55000	54	10000	10	65000	64
2003-04	30000	29	10000	10	40000	39
2004-05	11000	10	21000	21	32000	31
2005-06	57000	56	10000	10	67000	66
2006-07	130000	128	5000	5	135000	134
2007-08	35000	32	5000	5	40000	37
2008-09	13000	12	1000	1	14000	13
2009-10	53500	52.5	1500	1	55000	53.5
2010-11	54850	54	150	0	55000	54
2011-12	20000	20	-	-	20000	20
2012-13	5600	5	-	-	5600	5
2013-14	4150	4	650	0.65	4800	4.65
2014-15	35700	35.6	-	-	35700	35.6
2015-16	30000	28	-	-	30000	28
2016-17	30000	28	-	-	30000	28
2017-18	5000	4	-	-	5000	4
2018-19	5000	4	-	-	5000	4
2019-20	15000	13	-	-	15000	13
2020-21	10000	9	-	-	10000	9
2021-22	14700	10	-	-	14700	10
2022-23	88887	96	34675	37	123562	133
2023-24	53936	53	31175	30	85111	83
2024-25	48023	2.5	-	-	48023	2.5
2025-26	77139	0	-	-	77139	0

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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/15704/002
	Issue Date:	2025-11-05
	P.O.No:	8500005780
	P.O. Date:	2022-06-29

**AMBIENT AIR QUALITY MONITORING AT NEW ETP (BALCO)**

Analysis starting date :- 2025-10-02

Analysis Completion date :- 2025-11-04

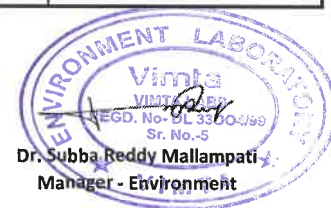
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : NEW ETP										Method
			2025-10-01	2025-10-04	2025-10-07	2025-10-09	2025-10-13	2025-10-15	2025-10-19	2025-10-21	2025-10-27		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	29.6	33.4	23.8	33.1	21.8	34.9	25.0	36.6	31.9	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	10.6	12.8	15.5	13.4	16.3	18.4	14.7	17.0	15.4	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	100	53.9	48.2	51.2	55.8	49.3	57.6	55.7	46.5	52.3	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	60	18.4	14.7	17.2	21.7	19.1	22.8	25.3	26.1	22.4	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.5	2.1	1.8	1.5	1.8	1.3	1.2	1.0	1.3	APHA 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	4.6	5.8	5.2	7.3	6.8	5.1	5.9	7.7	6.1	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.296	0.342	0.361	0.418	0.339	0.372	0.307	0.446	0.384	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	3.4	7.1	2.2	4.8	5.5	7.6	8.4	10.9	6.8	IS 5182 (PART-9) 2019	

Ø PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



Dr. Subba Reddy Mallampati  
Manager - Environment

<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/15704/003
	Issue Date:	2025-11-05
	P.O.No:	8500005780
	P.O. Date:	2022-06-29

**AMBIENT AIR QUALITY MONITORING AT GAP & BAKE OVEN ROAD (BALCO)**

Analysis starting date :- 2025-10-02 Analysis Completion date :- 2025-11-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

TEST RESULTS												
Parameters	Units	Limits	AAQ Location : GAP & BAKE OVEN									Method
			2025-10-01	2025-10-04	2025-10-07	2025-10-09	2025-10-13	2025-10-15	2025-10-19	2025-10-21	2025-10-27	
Sampling Date												
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	28.7	32.7	38.6	41.6	43.3	40.4	34.3	39.1	35.1	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	13.8	19.4	17.1	15.5	22.0	24.4	12.1	13.9	18.5	IS 5182 (PART-6) RA 2017
Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	100	52.5	57.9	53.7	59.4	64.1	54.6	60.7	59.0	56.8	IS 5182 (PART-23) RA 2017
Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	60	18.1	21.7	19.1	25.1	25.2	20.6	26.0	25.7	23.4	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.9	2.9	2.2	1.9	2.6	1.8	1.0	1.1	1.2	APHA 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.2	5.7	5.3	7.1	5.9	6.2	6.5	7.4	6.2	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.325	0.268	0.493	0.342	0.359	0.409	0.317	0.456	0.362	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	5.7	9.4	4.0	6.8	6.3	6.4	7.3	8.6	9.7	IS 5182 (PART-9) 2019

Ø PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.  
Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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<b>ISSUED TO:</b> <b>M/s. Bharat Aluminium Company Limited,</b> <b>KORBA ( C.G.)</b>	Report No.:	VLL/VLS/25-26/15704/006
	Issue Date:	2025-11-05
	P.O.No:	8500005780
	P.O. Date:	2022-06-29

## AMBIENT AIR QUALITY MONITORING AT COAL GATE (BALCO)

Analysis starting date :- 2025-10-02

Analysis Completion date :- 2025-11-04

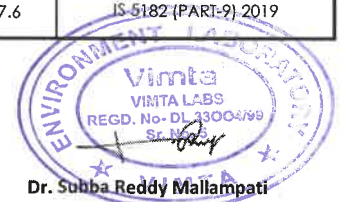
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

### TEST RESULTS

Parameters	Units	Limits	AAQ Location : COAL GATE									Method
			2025-10-01	2025-10-04	2025-10-07	2025-10-09	2025-10-13	2025-10-15	2025-10-19	2025-10-21	2025-10-27	
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	40.7	29.3	41.0	37.6	34.8	38.2	34.5	39.7	43.7	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	12.8	18.3	20.2	17.1	20.5	22.5	15.3	18.0	17.8	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	54.8	52.6	58.5	58.5	51.7	59.3	60.9	51.7	56.0	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	19.5	18.0	26.2	24.9	22.0	28.0	27.2	26.8	26.0	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.3	2.6	2.4	2.0	2.4	2.2	1.4	1.5	1.4	APHA 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.9	7.3	6.2	5.9	4.6	5.4	6.3	7.8	6.4	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.319	0.264	0.378	0.299	0.252	0.283	0.359	0.436	0.371	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	3.8	8.4	4.6	6.5	5.0	8.6	8.9	10.3	7.6	IS 5182 (PART-9) 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



Dr. Subba Reddy Mallampati  
Manager - Environment

<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/18084/001
	Issue Date:	2025-12-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT PARSABHATA GATE (BALCO)**

Analysis starting date :- 2025-11-03

Analysis Completion date :- 2025-12-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : PARSABHATA GATE										Method
			2025-11-01	2025-11-06	2025-11-08	2025-11-12	2025-11-14	2025-11-18	2025-11-20	2024-11-24	2025-11-26		
Sampling Date													
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	32.5	34.7	30.4	36.9	31.2	14.8	21.0	30.9	28.8		IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	13.3	13.0	12.0	14.9	12.5	10.7	11.2	10.0	11.6		IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	48.7	52.1	45.9	56.5	53.2	57.0	54.2	58.9	54.3		IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	14.2	18.3	16.5	23.1	17.9	23.1	20.9	24.3	19.0		IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.3	0.9	1.1	0.9	1.1	0.6	0.7	1.2	1.5		APHA 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1		USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.6	5.7	4.2	6.6	5.2	4.9	4.1	6.8	5.1		USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02		USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.274	0.327	0.284	0.239	0.294	0.301	0.244	0.286	0.315		IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	3.7	3.4	3.6	3.9	3.4	4.1	5.0	5.7	3.6		IS 5182 (PART-9) 2019

- Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.
- Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/18084/003
	Issue Date:	2025-12-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT COMPRESSOR HOUSE (BALCO)**

Analysis starting date :- 2025-11-03

Analysis Completion date :- 2025-12-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : COMPRESSOR HOUSE										Method
			2025-11-01	2025-11-06	2025-11-08	2025-11-12	2025-11-14	2025-11-18	2025-11-20	2024-11-24	2025-11-26		
Sampling Date													
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	29.7	21.8	33.5	36.8	30.8	22.7	20.9	31.3	27.4		IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	14.3	18.5	15.1	16.2	17.6	14.4	16.1	13.9	15.8		IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	50.9	47.6	54.9	63.9	58.7	51.9	55.3	57.8	60.5		IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	18.6	16.8	19.9	25.3	22.8	19.2	21.5	23.9	24.8		IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.5	1.3	1.1	1.2	1.2	1.1	1.4	1.2	1.0		APHA 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4		USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.3	5.4	6.1	6.4	5.9	5.5	4.6	7.2	6.8		USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.241	0.219	0.263	0.378	0.282	0.301	0.329	0.257	0.283		IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	8.0	5.9	6.6	4.8	6.0	2.9	3.4	4.1	3.6		IS 5182 (PART-9) 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/18084/002
	Issue Date:	2025-12-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT ETP SMELTER (BALCO)**

Analysis starting date :- 2025-11-03

Analysis Completion date :- 2025-12-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : ETP SMELTER										Method
			2025-11-01	2025-11-06	2025-11-08	2025-11-12	2025-11-14	2025-11-18	2025-11-20	2024-11-24	2025-11-26		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	38.7	34.2	32.3	30.5	36.4	30.1	34.5	29.5	33.6	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	12.8	14.8	12.2	17.5	18.5	14.0	15.3	14.3	18.0	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	46.3	57.2	49.3	54.9	52.3	55.8	57.2	51.3	56.4	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	16.3	23.5	17.1	21.9	20.7	22.8	24.3	20.7	24.1	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.1	1.4	1.2	1.5	1.2	1.6	1.0	1.1	1.4	APHA 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	5.7	5.2	6.7	6.4	5.5	4.9	6.3	5.8	5.1	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.268	0.351	0.324	0.303	0.258	0.273	0.268	0.324	0.295	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	4.5	3.1	5.6	4.7	5.3	7.2	3.7	3.9	5.3	IS 5182 (PART-9) 2019	

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/18084/004
	Issue Date:	2025-12-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT RAILWAY CONTROL ROOM (BALCO)**

Analysis starting date :- 2025-11-03

Analysis Completion date :- 2025-12-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : RAILWAY CONTROL ROOM										Method
			2025-11-01	2025-11-06	2025-11-08	2025-11-12	2025-11-14	2025-11-18	2025-11-20	2024-11-24	2025-11-26		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	19.8	24.0	18.7	27.4	26.1	11.0	12.6	21.6	18.2	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	11.0	12.5	11.0	13.0	12.2	8.2	9.7	10.1	9.5	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	53.2	48.9	55.4	58.7	46.2	56.3	50.9	54.8	57.4	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	18.7	16.3	19.3	23.3	20.6	21.8	21.7	24.6	22.8	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.0	0.8	0.9	0.6	1.0	1.2	1.0	0.9	1.1	APHA 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	4.4	4.4	5.6	4.2	3.8	5.7	6.2	4.9	5.3	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.193	0.282	0.256	0.238	0.275	0.242	0.267	0.31	0.269	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	5.2	2.7	3.2	2.5	1.8	3.1	2.7	3.1	3.2	IS 5182 (PART-9) 2019	

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.  
Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/18084/005
	Issue Date:	2025-12-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

## AMBIENT AIR QUALITY MONITORING AT 540MW, DM PLANT (BALCO)

Analysis starting date :- 2025-11-03

Analysis Completion date :- 2025-12-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

### TEST RESULTS

Parameters	Units	Limits	AAQ Location : 540MW, DM PLANT										Method
			2025-11-01	2025-11-06	2025-11-08	2025-11-12	2025-11-14	2025-11-18	2025-11-20	2024-11-24	2025-11-26		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	26.9	37.4	21.8	38.5	31.2	25.4	22.8	34.2	41.1	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	18.8	20.6	17.1	15.5	20.9	11.7	14.0	16.0	18.5	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	54.8	51.3	66.8	62.9	56.4	60.6	58.2	52.1	67.8	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	20.3	18.1	24.2	26.7	22.3	24.5	23.1	21.6	28.4	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.8	1.3	1.4	1.6	1.5	0.9	1.2	1.5	1.0	APHA 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	6.7	5.9	5.4	6.3	5.8	5.3	6.6	5.9	6.1	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	0.236	0.297	0.314	0.342	0.328	0.276	0.241	0.337	0.265	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	8.2	7.6	6.4	8.0	4.8	5.6	6.2	5.9	5.7	IS 5182 (PART-9) 2019	

∅ PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

∅ C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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ISSUED TO: M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/20775/001
	Issue Date:	2026-01-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT PARSABHATA GATE (BALCO)**

Analysis starting date :- 2025-12-05

Analysis Completion date :- 2026-01-04

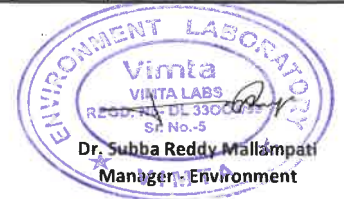
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : PARSABHATA GATE									
			2025-12-04	2025-12-06	2025-12-10	2025-12-12	2025-12-16	2025-12-18	2025-12-22	2025-12-24	2025-12-28	Method
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	19.1	16.9	27.7	24.8	39.1	26.7	35.8	31.0	37.6	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	10.9	12.8	15.3	8.1	13.2	12.7	16.4	13.1	14.9	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	57.2	65.4	63.9	58.7	65.1	67.4	61.3	64.5	59.2	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	21.8	27.1	24.9	23.4	26.3	28.6	25.4	28.1	24.2	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.1	0.6	1.3	0.8	1.2	1.0	0.4	0.6	0.9	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.3	6.8	5.4	5.9	5.2	6.6	4.8	6.1	5.5	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	152	196	171	214	125	163	185	142	175	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	3.8	4.0	3.3	3.6	1.3	7.2	1.9	2.1	2.4	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/20775/003
	Issue Date:	2026-01-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT COMPRESSOR HOUSE (BALCO)**

Analysis starting date :- 2025-12-05

Analysis Completion date :- 2026-01-04

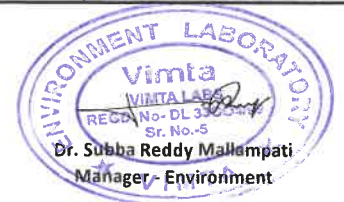
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : COMPRESSOR HOUSE									
			2025-12-04	2025-12-06	2025-12-10	2025-12-12	2025-12-16	2025-12-18	2025-12-22	2025-12-24	2025-12-28	Method
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	34.5	28.3	36.8	30.0	27.8	31.4	27.4	40.6	37.8	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	15.8	13.5	14.2	10.3	17.7	15.7	20.8	22.0	19.3	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	64.6	69.1	53.6	56.9	60.5	61.8	63.3	58.4	62.9	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	24.4	27.0	21.7	22.9	25.4	27.6	24.0	21.0	23.3	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.0	0.6	0.8	1.1	0.5	0.9	0.5	0.9	0.7	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.2	5.8	6.7	6.4	4.9	5.3	6.8	5.9	5.4	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	194	231	268	159	187	219	206	174	242	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	3.1	1.5	5.1	2.9	4.1	4.0	8.7	7.0	5.7	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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<b>ISSUED TO:</b> <b>M/s. Bharat Aluminium Company Limited,</b> <b>KORBA ( C.G.)</b>	Report No.:	VLL/VLS/25-26/20775/002
	Issue Date:	2026-01-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT ETP SMELTER (BALCO)**

Analysis starting date :- 2025-12-05

Analysis Completion date :- 2026-01-04

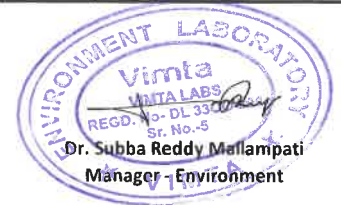
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : ETP SMELTER										Method
			2025-12-04	2025-12-06	2025-12-10	2025-12-12	2025-12-16	2025-12-18	2025-12-22	2025-12-24	2025-12-28		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	32.4	25.7	37.0	29.6	32.6	25.2	33.3	26.3	34.8	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	14.9	13.0	15.6	12.8	16.2	14.3	16.5	19.8	17.1	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	60.9	64.2	57.9	63.0	59.2	66.6	68.4	56.9	64.1	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	24.1	26.5	23.3	24.0	22.2	27.8	30.8	21.6	25.0	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.8	1.1	1.0	1.4	0.6	1.2	0.5	1.3	1.2	APHA 3rd Edition - 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	7.4	5.8	6.3	6.9	7.1	6.5	5.4	6.9	6.2	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	181	274	169	308	256	287	242	157	285	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	3.6	2.2	4.7	3.0	2.3	5.5	0.7	4.5	3.4	IS 5182 (PART-9) RA 2019	

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/20775/004
	Issue Date:	2026-01-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT RAILWAY CONTROL ROOM (BALCO)**

Analysis starting date :- 2025-12-05

Analysis Completion date :- 2026-01-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : RAILWAY CONTROL ROOM									Method
			2025-12-04	2025-12-06	2025-12-10	2025-12-12	2025-12-16	2025-12-18	2025-12-22	2025-12-24	2025-12-28	
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	25.7	20.5	27.6	19.5	27.0	22.4	37.1	25.0	34.7	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	9.7	12.2	9.8	9.7	10.5	11.4	23.2	17.2	14.4	IS 5182 (PART-6) RA 2017
Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	100	54.9	63.7	58.6	52.8	60.3	50.8	55.1	57.7	62.1	IS 5182 (PART-23) RA 2017
Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	60	20.7	29.2	23.5	21.4	26.4	20.4	23.1	25.2	28.0	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.3	0.9	0.0	0.0	0.8	0.6	0.6	0.8	0.4	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.6	4.3	5.4	6.1	4.8	5.2	4.9	5.5	6.3	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	174	196	214	172	213	145	191	168	205	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	2.5	3.8	15.7	15.4	2.4	2.2	1.6	2.1	2.4	IS 5182 (PART-9) RA 2019

Ø PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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<b>ISSUED TO:</b> <b>M/s. Bharat Aluminium Company Limited,</b> <b>KORBA ( C.G.)</b>	Report No.:	VLL/VLS/25-26/20775/005
	Issue Date:	2026-01-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

## AMBIENT AIR QUALITY MONITORING AT 540MW, DM PLANT (BALCO)

Analysis starting date :- 2025-12-05

Analysis Completion date :- 2026-01-04

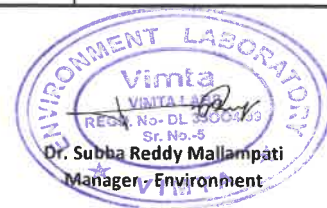
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

### TEST RESULTS

Parameters	Units	Limits	AAQ Location : 540MW, DM PLANT										Method
			2025-12-04	2025-12-06	2025-12-10	2025-12-12	2025-12-16	2025-12-18	2025-12-22	2025-12-24	2025-12-28		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	20.4	14.7	21.5	18.2	40.6	36.3	24.9	28.8	30.2	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	12.4	15.5	13.3	17.5	12.5	16.3	11.4	18.3	18.8	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	58.3	67.1	52.3	60.5	64.8	71.8	59.3	63.4	66.5	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	23.0	29.4	21.5	24.5	26.7	30.5	23.6	25.2	26.9	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.3	0.9	0.7	1.1	1.7	1.2	0.4	0.5	0.9	APHA 3rd Edition - 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	5.6	3.8	6.2	4.4	5.7	5.1	6.8	4.2	7.3	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	278	341	309	256	179	212	309	194	214	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	4.8	2.6	4.1	3.4	3.8	2.5	3.8	2.7	4.2	IS 5182 (PART-9) RA 2019	

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/23223/001
	Issue Date:	2026-02-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT PARSABHATA GATE (BALCO)**

Analysis starting date :- 2026-01-05

Analysis Completion date :- 2026-02-05

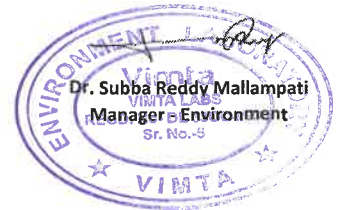
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : PARSABHATA GATE									
			2026-01-02	2026-01-08	2026-01-10	2026-01-14	2026-10-16	2026-01-20	2026-01-22	2026-01-26	2026-01-28	Method
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	15.3	22.0	26.8	33.6	30.8	32.2	18.7	20.8	24.9	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	15.1	14.7	13.6	15.0	13.4	22.0	17.6	14.7	15.9	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	61.6	57.1	53.9	64.2	58.5	63.1	56.9	57.2	63.5	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	24.2	22.0	19.0	27.5	23.8	25.6	21.2	24.6	26.4	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.9	0.7	1.0	1.0	1.0	0.9	1.0	0.9	0.8	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.4	4.8	6.3	4.1	3.9	6.2	5.4	5.2	4.9	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	186	251	237	312	208	226	185	164	243	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	5.4	2.5	2.3	3.8	3.1	2.5	2.4	1.9	2.7	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/23223/003
	Issue Date:	2026-02-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT COMPRESSOR HOUSE (BALCO)**

Analysis starting date :- 2026-01-05

Analysis Completion date :- 2026-02-05

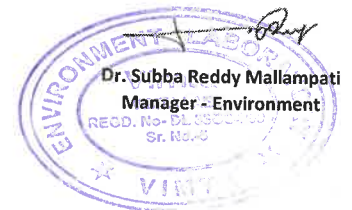
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : COMPRESSOR HOUSE										Method
			2026-01-02	2026-01-08	2026-01-10	2026-01-14	2026-10-16	2026-01-20	2026-01-22	2026-01-26	2026-01-28		
Sampling Date													
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	39.6	27.7	22.2	29.1	27.9	35.7	33.3	26.3	31.6		IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	16.1	10.0	9.3	11.9	13.1	14.9	16.1	11.9	15.4		IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	61.2	56.4	59.7	66.1	58.9	47.3	53.4	60.9	64.8		IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	25.0	21.7	23.6	27.8	23.9	19.4	20.7	25.4	28.9		IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.9	0.6	0.8	0.8	0.8	0.6	3.8	1.3	1.0		APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.1	5.9	6.3	6.9	4.7	5.2	5.8	6.9	5.4		USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	172	189	219	238	252	183	228	191	264		IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	8.4	5.0	4.4	3.3	3.7	3.2	4.0	2.7	4.5		IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/23223/002
	Issue Date:	2026-02-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT ETP SMELTER (BALCO)**

Analysis starting date :- 2026-01-05

Analysis Completion date :- 2026-02-05

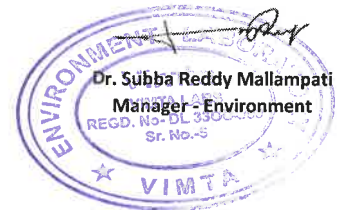
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : ETP SMELTER										Method
			2026-01-02	2026-01-08	2026-01-10	2026-01-14	2026-10-16	2026-01-20	2026-01-22	2026-01-26	2026-01-28		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	37.0	30.4	35.4	38.1	21.9	34.1	22.4	33.7	20.7	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	18.6	16.0	18.3	12.8	14.2	13.0	15.0	13.9	18.8	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	54.9	59.1	71.3	61.9	65.0	57.8	62.4	54.1	58.6	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	22.7	24.1	29.4	25.3	26.9	23.1	25.7	21.1	25.8	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.8	0.5	0.7	0.9	1.2	0.3	0.9	1.1	0.7	APHA 3rd Edition - 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	4.7	6.3	7.1	6.8	5.9	5.3	6.4	5.3	4.9	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	164	245	344	146	173	261	183	237	191	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	7.1	1.6	3.4	2.0	4.3	1.7	3.6	5.5	3.1	IS 5182 (PART-9) RA 2019	

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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Driven by Quality. Inspired by Science.

<b>ISSUED TO:</b> <b>M/s. Bharat Aluminium Company Limited,</b> <b>KORBA ( C.G.)</b>	Report No.:	VLL/VLS/25-26/23223/004
	Issue Date:	2026-02-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

## AMBIENT AIR QUALITY MONITORING AT RAILWAY CONTROL ROOM (BALCO)

Analysis starting date :- 2026-01-05

Analysis Completion date :- 2026-02-05

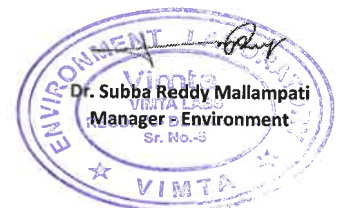
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

### TEST RESULTS

Parameters	Units	Limits	AAQ Location : RAILWAY CONTROL ROOM										Method
			2026-01-02	2026-01-08	2026-01-10	2026-01-14	2026-10-16	2026-01-20	2026-01-22	2026-01-26	2026-01-28		
Sampling Date													
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	23.0	24.2	20.6	22.2	31.6	11.5	18.4	21.7	28.1		IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	18.2	15.4	12.8	12.8	11.2	14.9	12.2	10.1	13.5		IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	57.2	63.1	54.8	51.1	62.9	59.5	56.7	49.6	60.3		IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	25.9	31.6	22.7	20.1	29.5	26.2	21.7	17.3	27.1		IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.6	0.4	0.6	0.8	1.0	0.3	0.9	0.6	0.8		APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	4.9	5.3	5.7	6.2	4.9	5.8	6.4	4.7	5.1		USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	147	193	164	214	177	184	159	136	109		IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	2.1	4.8	3.6	5.2	3.4	2.9	3.1	4.5	2.7		IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/23223/005
	Issue Date:	2026-02-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT 540MW, DM PLANT (BALCO)**

Analysis starting date :- 2026-01-05

Analysis Completion date :- 2026-02-05

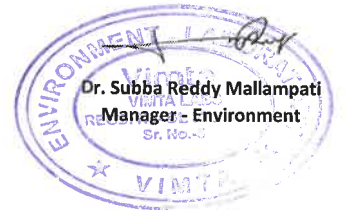
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : 540MW, DM PLANT										Method
			2026-01-02	2026-01-08	2026-01-10	2026-01-14	2026-10-16	2026-01-20	2026-01-22	2026-01-26	2026-01-28		
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	21.3	35.8	32.9	25.0	20.7	16.0	26.8	31.9	24.9	IS 5182 (PART-2) RA 2017	
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	15.6	11.1	10.5	11.5	14.4	15.8	15.1	10.5	17.2	IS 5182 (PART-6) RA 2017	
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	58.7	63.2	67.9	51.1	66.3	54.2	56.7	60.3	64.9	IS 5182 (PART-23) RA 2017	
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	22.9	26.2	31.0	21.9	27.7	20.1	22.7	24.2	27.5	IS 5182 (PART-24) 2019	
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.5	0.6	0.9	1.0	1.2	0.4	0.8	0.7	0.9	APHA 3rd Edition - 401	
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017	
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019	
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4	
Nickel as Ni	ng/m <sup>3</sup>	20	6.3	5.8	5.2	6.6	4.9	5.1	6.4	4.8	5.3	USEPA IO 3.4	
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4	
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	173	158	192	214	167	139	185	142	207	IS 5182 (PART-10) RA 2019	
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	5.4	1.0	1.9	1.7	2.8	3.4	3.8	2.5	3.6	IS 5182 (PART-9) RA 2019	

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/24935/001
	Issue Date:	2026-03-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

## AMBIENT AIR QUALITY MONITORING AT PARSABHATA GATE (BALCO)

Analysis starting date :- 2026-02-06

Analysis Completion date :- 2026-03-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

### TEST RESULTS

Parameters	Units	Limits	AAQ Location : PARSABHATA GATE								Method
			2026-02-05	2026-02-07	2026-02-11	2026-02-13	2026-02-17	2026-02-19	2026-02-23	2026-02-25	
Sampling Date											
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	39.1	37.2	24.4	32.8	34.6	22.4	28.2	25.7	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	21.9	15.8	12.5	36.8	26.8	22.8	19.9	10.8	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	57.9	61.3	53.7	58.3	56.1	64.7	60.3	54.5	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	22.5	24.1	21.6	23.4	22.1	25.7	23.4	21.0	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.8	0.9	0.8	1.6	1.1	0.8	3.0	0.8	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.3	4.8	5.6	7.3	6.8	6.1	5.9	6.6	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	195	239	264	178	147	195	226	182	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	5.0	3.8	4.2	4.8	1.8	3.8	3.7	6.1	IS 5182 (PART-9) RA 2019

∅ PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

∅ C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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<b>ISSUED TO:</b> <b>M/s. Bharat Aluminium Company Limited,</b> <b>KORBA ( C.G.)</b>	Report No.:	VLL/VLS/25-26/24935/003
	Issue Date:	2026-03-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT COMPRESSOR HOUSE (BALCO)**

Analysis starting date :- 2026-02-06

Analysis Completion date :- 2026-03-04

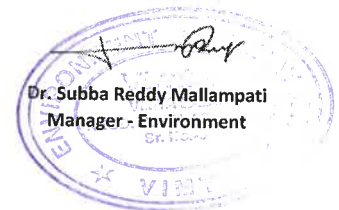
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM<sub>10</sub>), Particulate Matter (PM<sub>2.5</sub>), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : COMPRESSOR HOUSE								Method
			2026-02-05	2026-02-07	2026-02-11	2026-02-13	2026-02-17	2026-02-19	2026-02-23	2026-02-25	
Sampling Date											
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	27.7	24.2	28.7	40.1	31.3	42.8	38.1	32.3	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	13.6	11.0	12.1	28.9	13.5	20.1	17.1	9.1	IS 5182 (PART-6) RA 2017
Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	100	53.1	59.7	66.2	52.5	63.1	58.4	52.9	61.5	IS 5182 (PART-23) RA 2017
Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	60	21.9	23.6	29.1	20.7	26.4	22.7	19.5	24.9	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.7	0.7	0.9	0.5	0.8	0.5	1.5	1.4	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.3	7.8	5.2	6.1	4.6	5.8	6.7	6.4	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	291	186	237	248	195	176	219	163	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	6.4	5.8	6.2	4.4	5.0	5.5	1.2	8.2	IS 5182 (PART-9) RA 2019

Ø PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/24935/002
	Issue Date:	2026-03-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT ETP SMELTER (BALCO)**

Analysis starting date :- 2026-02-06

Analysis Completion date :- 2026-03-04

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : ETP SMELTER								Method
			2026-02-05	2026-02-07	2026-02-11	2026-02-13	2026-02-17	2026-02-19	2026-02-23	2026-02-25	
Sampling Date											
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	37.3	31.1	38.8	39.0	36.8	34.6	38.1	35.4	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	16.7	12.7	16.7	18.6	12.7	13.1	13.6	12.0	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	54.8	58.2	50.4	59.6	65.8	53.7	61.1	63.9	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	20.6	24.8	28.7	23.7	25.4	19.2	25.1	27.3	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.7	0.8	0.5	0.7	0.9	0.6	1.2	1.3	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.8	5.1	6.4	4.9	5.7	5.4	6.3	5.9	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	159	203	192	185	163	231	171	149	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	5.7	4.2	5.1	5.3	3.4	2.4	4.0	9.6	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.  
Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> <b>M/s. Bharat Aluminium Company Limited,</b> <b>KORBA ( C.G.)</b>	Report No.:	VLL/VLS/25-26/24935/004
	Issue Date:	2026-03-05
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT RAILWAY CONTROL ROOM (BALCO)**

Analysis starting date :- 2026-02-06

Analysis Completion date :- 2026-03-04

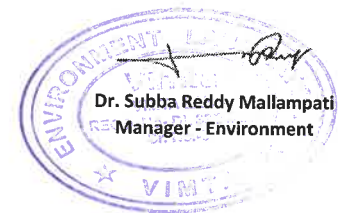
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : RAILWAY CONTROL ROOM								Method
			2026-02-05	2026-02-07	2026-02-11	2026-02-13	2026-02-17	2026-02-19	2026-02-23	2026-02-25	
Sampling Date											
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	29.3	35.3	37.8	24.7	31.2	27.7	25.2	30.3	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	13.6	12.5	10.5	14.0	17.6	17.2	20.3	8.8	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	48.5	53.7	51.9	58.1	54.2	52.4	60.8	65.3	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	19.4	21.7	20.5	23.2	21.8	19.6	24.3	26.3	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.7	0.7	0.6	0.6	0.4	0.4	1.0	1.1	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	4.1	5.7	5.4	5.9	6.3	4.8	5.1	4.9	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	158	139	183	167	197	228	164	149	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	6.4	7.2	2.7	8.9	6.5	2.2	3.7	6.3	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



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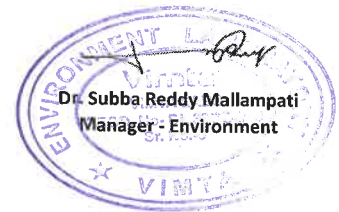


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<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)			Report No.: VLL/VLS/25-26/24935/005									
			Issue Date: 2026-03-05									
			P.O.No: 3402001553									
			P.O. Date: 2025-10-01									
<b>AMBIENT AIR QUALITY MONITORING AT 540MW, DM PLANT (BALCO)</b>												
Analysis starting date :- 2026-02-06			Analysis Completion date :- 2026-03-04									
<b>Tests required:</b> Sulphur Dioxide (SO <sub>2</sub> ), Nitrogen Dioxide (NO <sub>x</sub> ), Particulate Matter (PM <sub>10</sub> ), Particulate Matter (PM <sub>2.5</sub> ), Ammonia (NH <sub>3</sub> ), Benzene (C <sub>6</sub> H <sub>6</sub> ), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.												
<b>TEST RESULTS</b>												
<b>Parameters</b>		<b>Units</b>	<b>Limits</b>	<b>AAQ Location : 540MW, DM PLANT</b>								
<b>Sampling Date</b>				<b>2026-02-05</b>	<b>2026-02-07</b>	<b>2026-02-11</b>	<b>2026-02-13</b>	<b>2026-02-17</b>	<b>2026-02-19</b>	<b>2026-02-23</b>	<b>2026-02-25</b>	<b>Method</b>
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	34.9	35.5	27.4	40.0	21.6	26.7	32.7	32.9		IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	11.6	9.6	13.7	16.4	13.5	14.8	15.5	11.1		IS 5182 (PART-6) RA 2017
Particulate Matter (PM <sub>10</sub> )	µg/m <sup>3</sup>	100	52.9	60.7	66.8	59.3	63.1	57.4	61.7	56.2		IS 5182 (PART-23) RA 2017
Particulate Matter (PM <sub>2.5</sub> )	µg/m <sup>3</sup>	60	21.8	25.3	29.2	23.6	26.9	22.8	24.7	23.4		IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	0.9	0.9	0.9	0.6	0.9	0.7	1.4	0.5		APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.2	5.8	5.2	4.7	5.4	6.2	4.9	5.1		USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1		USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	182	249	161	159	177	215	183	154		IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	12.1	5.4	4.1	10.3	3.3	2.8	3.9	5.7		IS 5182 (PART-9) RA 2019

Ø PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/28724/001
	Issue Date:	2026-04-04
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT PARSABHATA GATE (BALCO)**

Analysis starting date :- 2026-03-06

Analysis Completion date :- 2026-04-03

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : PARSABHATA GATE								Method
			2026-03-05	2026-03-07	2026-03-11	2026-03-13	2026-03-17	2026-03-19	2026-03-25	2026-03-27	
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	31.9	45.8	36.4	39.7	37.8	33.5	27.1	35.7	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	23.2	20.4	19.1	16.7	18.7	17.3	15.6	17.5	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	65.9	72.3	63.7	57.2	56.8	61.4	52.6	59.1	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	25.3	30.8	24.4	22.5	20.7	27.0	19.5	23.2	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	3.6	2.9	1.6	3.2	2.2	3.7	3.8	2.3	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.6	7.2	4.9	6.1	4.4	5.7	7.2	5.9	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	229	154	196	206	191	242	163	147	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	17.3	8.7	13.8	20.7	9.2	11.0	20.6	15.7	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



**Dr. Subba Reddy Mallampati**  
**Manager - Environment**

<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/28724/003
	Issue Date:	2026-04-04
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT COMPRESSOR HOUSE (BALCO)**

Analysis starting date :- 2026-03-06

Analysis Completion date :- 2026-04-03

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : COMPRESSOR HOUSE								Method
			2026-03-05	2026-03-07	2026-03-11	2026-03-13	2026-03-17	2026-03-19	2026-03-25	2026-03-27	
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	34.7	30.2	24.2	25.1	33.4	26.5	31.3	28.5	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	10.0	14.2	13.1	12.9	26.1	26.8	12.5	14.7	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	56.7	77.5	64.2	58.4	61.7	66.9	70.2	63.9	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	22.1	31.4	25.8	23.2	24.6	27.5	30.2	23.4	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.2	2.1	1.2	0.9	1.0	1.3	1.1	1.4	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	6.2	5.8	7.7	6.4	5.7	4.2	5.9	5.3	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	152	194	171	231	165	148	192	186	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	15.7	12.6	8.7	24.3	27.0	17.8	9.3	11.8	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.  
Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> <b>M/s. Bharat Aluminium Company Limited,</b> <b>KORBA ( C.G.)</b>	Report No.:	VLL/VLS/25-26/28724/002
	Issue Date:	2026-04-04
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT ETP SMELTER (BALCO)**

Analysis starting date :- 2026-03-06

Analysis Completion date :- 2026-04-03

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : ETP SMELTER								Method
			2026-03-05	2026-03-07	2026-03-11	2026-03-13	2026-03-17	2026-03-19	2026-03-25	2026-03-27	
Sampling Date											
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	29.2	40.6	32.5	37.2	32.5	34.3	23.7	31.8	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	18.9	21.6	15.6	17.5	20.7	22.2	21.1	23.6	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	62.3	68.7	55.2	67.9	60.2	64.1	59.7	61.9	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	23.9	28.4	22.6	27.6	24.3	26.5	23.8	25.1	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.6	2.0	0.9	1.1	1.7	1.3	1.6	2.0	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	5.5	7.2	5.7	7.6	5.3	6.8	4.6	5.1	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	184	247	181	190	142	164	256	167	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	3.6	5.3	9.6	15.8	17.7	14.1	5.5	10.5	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/28724/004
	Issue Date:	2026-04-04
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT RAILWAY CONTROL ROOM (BALCO)**

Analysis starting date :- 2026-03-06

Analysis Completion date :- 2026-04-03

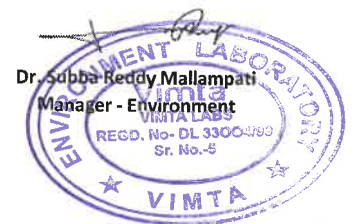
**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : RAILWAY CONTROL ROOM								Method
			2026-03-05	2026-03-07	2026-03-11	2026-03-13	2026-03-17	2026-03-19	2026-03-25	2026-03-27	
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	22.7	27.7	21.9	15.6	28.3	12.8	25.9	38.3	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	9.7	16.3	11.4	14.6	15.2	15.3	15.5	13.0	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	65.4	60.8	58.1	54.7	57.3	68.5	53.2	62.9	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	27.2	25.7	23.8	20.9	22.4	28.6	19.7	26.1	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.2	1.3	0.9	1.1	1.7	1.1	1.0	1.1	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	3.8	5.2	4.4	5.8	6.2	4.1	3.4	5.6	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	166	131	104	128	163	108	159	172	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	9.8	4.8	5.9	18.9	9.8	14.9	3.7	4.9	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



<b>ISSUED TO:</b> M/s. Bharat Aluminium Company Limited, KORBA ( C.G.)	Report No.:	VLL/VLS/25-26/28724/005
	Issue Date:	2026-04-04
	P.O.No:	3402001553
	P.O. Date:	2025-10-01

**AMBIENT AIR QUALITY MONITORING AT 540MW, DM PLANT (BALCO)**

Analysis starting date :- 2026-03-06

Analysis Completion date :- 2026-04-03

**Tests required:** Sulphur Dioxide (SO<sub>2</sub>), Nitrogen Dioxide (NO<sub>x</sub>), Particulate Matter (PM10), Particulate Matter (PM2.5), Ammonia (NH<sub>3</sub>), Benzene (C<sub>6</sub>H<sub>6</sub>), Benzo (a) Pyrene in particulate phase, Heavy metals in particulate phase for Arsenic, Nickel & Lead.

**TEST RESULTS**

Parameters	Units	Limits	AAQ Location : 540MW, DM PLANT								Method
			2026-03-05	2026-03-07	2026-03-11	2026-03-13	2026-03-17	2026-03-19	2026-03-25	2026-03-27	
Sulphur Dioxide as SO <sub>2</sub>	µg/m <sup>3</sup>	80	31.8	38.7	15.9	36.0	25.4	23.9	30.5	27.5	IS 5182 (PART-2) RA 2017
Oxides of Nitrogen as NO <sub>2</sub>	µg/m <sup>3</sup>	80	10.5	14.9	16.7	15.2	13.6	13.1	12.6	15.7	IS 5182 (PART-6) RA 2017
Particulate Matter (PM10)	µg/m <sup>3</sup>	100	60.8	68.5	54.3	59.1	64.7	71.1	56.2	69.3	IS 5182 (PART-23) RA 2017
Particulate Matter (PM2.5)	µg/m <sup>3</sup>	60	26.2	30.2	22.7	24.6	28.6	32.1	24.2	28.4	IS 5182 (PART-24) 2019
Ammonia as NH <sub>3</sub>	µg/m <sup>3</sup>	400	1.3	1.8	1.9	0.9	1.2	1.6	1.5	1.6	APHA 3rd Edition - 401
Benzene as C <sub>6</sub> H <sub>6</sub>	µg/m <sup>3</sup>	5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	IS 5182 (PART-11) RA 2017
Benzo(a) Pyrene in particulate phase	ng/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	IS 5182 (PART-12) RA 2019
Arsenic as As	ng/m <sup>3</sup>	6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	USEPA IO 3.4
Nickel as Ni	ng/m <sup>3</sup>	20	4.7	6.1	5.5	5.8	4.7	5.2	5.8	6.4	USEPA IO 3.4
Lead as Pb	µg/m <sup>3</sup>	1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	USEPA IO 3.4
Carbon Monoxide as CO	µg/m <sup>3</sup>	2000	170	158	197	131	214	168	142	183	IS 5182 (PART-10) RA 2019
Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	100	17.5	12.9	9.4	6.6	7.2	6.9	5.6	5.3	IS 5182 (PART-9) RA 2019

Ø PM2.5, PM10, SO<sub>2</sub>, NO<sub>2</sub> and NH<sub>3</sub> is monitored on 24 hrs. Basis & CO, O<sub>3</sub> is monitored on 8 hrs basis.

Ø C<sub>6</sub>H<sub>6</sub>, B (a) P & Heavy Metals (As, Ni, Pb) is monitored on 24 hrs basis.



ANNEXURE - X12

BALCO/CPP/CCOF/04

Date: 8.9.05

To,  
Chief, Conservation of Forests  
Regional Office (WR)  
DEF  
Bhopal

Subject: Chhattisgarh State Bio-Diversity Strategy and Action Plan

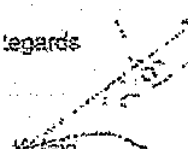
Reference:

1. Our letter No BALCO/CPP/CCOF/02 dated 18.10.04
2. Environmental Clearance issued by Ministry of Environment and Forest Government of India vide letter No J-13011/3/2003-1A-B (T) dated 23.6.04 for 675 Megawatt coal based captive power plant.

Dear Sir,

With reference to the above mentioned letter you are requested to kindly forward us a copy of Chhattisgarh State Bio Diversity Strategy and Action plan and its recommendation. It is also requested to kindly inform us the conservation Plan for the likely habitat of migratory Elephants from Orissa, so that our participation in the same can be ensured.

Regards

  
General Manager (Power)  
ALCO  
ORBA

**आदेश द्वारा पी.व्ही. नरसिंग राव, भा.व.से. प्रधान मुख्य वन संरक्षक,  
(वन्यप्राणी एवं जैव विविधता संरक्षण) सह मुख्य वन्यप्राणी  
अभिरक्षक, छत्तीसगढ़**

सेक्टर-19, नार्थ ब्लॉक, अरण्य भवन, प्रथम तल (एफ.आर.) अटल नगर, नवा रायपुर

✉ cwlwgc@gmail.com

(☎0771-2512880, 📠 0771-2512881)

//आदेश//

आदेश क्रमांक/व.प्रा./प्रबंध-540/110

नवा रायपुर, दिनांक- 02.07.2021

मुख्य वन संरक्षक (वन्यप्राणी) एवं क्षेत्र संचालक, अचानकमार टायगर रिजर्व, बिलासपुर का पत्र क्रमांक/व.प्रा./त.अधि./2021/1554 दिनांक 03.07.2021 द्वारा मेसर्स भारत एल्युमिनियम कम्पनी लिमिटेड द्वारा कोरबा वनमंडल अंतर्गत ग्राम रिसदा, तहसील व जिला कोरबा में बाल्को प्लांट के अंदर एल्युमिनियम स्मेल्टर का विस्तार हेतु कुल रकबा 39.66 हेक्ट. में व्यपर्वतन बाबत भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन, मंत्रालय के पत्र दिनांक 19.09.2017 के पालनार्थ वन्यप्राणी संरक्षण योजना तैयार कर इस कार्यालय को अनुशंसा सहित प्रस्तुत की गई है।

प्रस्तुत वन्यप्राणी संरक्षण योजना का गहन परीक्षण किया गया। आवेदक संस्थान द्वारा प्रस्तुत वन्यप्राणी संरक्षण योजना का अनुमोदन करते हुये योजना में प्रावधानित राशि का कुल 10 वर्षों में उपयोग करते हुये वर्षवार आबंटन किया जाता है। अनुमोदित योजना में वन्यजीव रहवास सुधार, वन्यजीव संरक्षण तथा जन जागरूकता आदि से संबंधित राशि का विवरण निम्नानुसार है :-

Sr. No.	Item	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10	Estimated Expenditure ( in Lakhs)
1	First aid care center for injured animals	10	5	3	1	1	1	1	1	1	1	25.00
	Temporary rescue rooms for orphan animals											
	Strengthening of Existing veterinary care unit											
	Blood analyzer											
	Portable x-ray machine											
	Laser messenger											
2	Study to assess the population of aquatic fauna in the Hasdeo River ecosystem	5	3	1	1	-	-	-	-	-	-	10.00
3	Procurement of Protection and monitoring equipment to track the movement of wildlife in Hasdeo-Achhanakmar land scape ecosystem	15	10	1	1	1	1	1	1	1	1	33.00

4	Contribution of the Tiger Conservation foundation fund to be strengthen the wildlife protection infrastructure of the Hasdeo-Achhanakmar landscape ecosystem	7.5	2.5	1	1	1	1	1	1	1	1	18.00
5	Awareness creation programs on nature Wild life conservation days	2	2	2	2	2	2	2	1	1	1	17.00
6	Establishment of Rapid response unit. System to deal with man animal conflicts in an around the mining areas.	25	10	5	1	1	1	1	1	1	1	47.00
	Procurement of transportation vehicle											
	Procurement of square cage											
	Tranquilizer gun and other chemicals											
	Hiring the veterinary expertise services on contract basis											
<b>Grand Total in lakhs</b>												<b>150.00</b>
<b>Cost escalation @2% of the total</b>												<b>3.00</b>
<b>Grand Total (One crore fifty-three lakhs only)</b>												<b>153.00</b>

उक्त वन्यप्राणी संरक्षण योजना की लागत राशि रूपये 153.00 लाख वर्तमान दरों पर है। परियोजना में देरी होने से समय लागत बढ़ेगी, जिसमें प्राईस इन्डेक्स के हिसाब से वृद्धि होगी। परियोजना के क्रियान्वयन के समय जो भी लागत आयेगी वह प्रस्तावकों को वन विभाग में एकमुश्त जमा करानी होगी, जिससे मूल्य वृद्धि के प्रभाव को समाप्त किया जा सके। वन विभाग इस प्रकार जमा की गई राशि से वन्यप्राणी संरक्षण योजना में दर्शाते समय सारणी के अनुसार क्रियान्वित करेगा।

अनुमोदित वन्यप्राणी योजना में दर्शाये गये उपरोक्त घटकों के संगत फील्ड में किये जाने वाले कार्यों का कार्यवार/स्थलवार प्रोजेक्ट संबंधित वनमण्डलाधिकारी के द्वारा तत्समय प्रचलित मार्गदर्शी सिद्धांतों (व्यय नार्मस, कार्य की प्रकृति, वन्यप्राणी प्रबंधन के संबंध में लागू होने वाले अन्य तकनीकी तथ्यों व निर्देशों) के अनुरूप तैयार कर सक्षमतानुसार तकनीकी स्वीकृति/अनुमोदन हेतु अनुशंसा सहित संबंधित मुख्य वन संरक्षक को प्रेषित किया जावेगा। संबंधित मुख्य वन संरक्षक द्वारा प्रोजेक्ट की तकनीकी स्वीकृति/अनुमोदन की अनुशंसा के साथ मुख्य वन्यप्राणी अभिरक्षक छत्तीसगढ़ को प्रेषित किया जावेगा। प्रोजेक्ट का परीक्षण वन्यप्राणी प्रबंधन की उपयुक्तता की दृष्टि से किया जाकर मुख्य वन्यप्राणी अभिरक्षक के द्वारा कार्य हेतु प्रशासकीय स्वीकृति जारी किये जाने की अनुशंसा के साथ प्रोजेक्ट, प्रशासकीय स्वीकृति/बजट आबंटन करने हेतु सक्षम अधिकारी को प्रेषित किया जावेगा। प्रशासकीय स्वीकृति आदेश जारी किये जाने के पश्चात ही कार्यों का क्रियान्वयन व.मं.अ. द्वारा किया जावेगा।

वन्यप्राणी प्रबंधन योजना के कार्यों की मॉनिटरिंग का कार्य संबंधित मुख्य वन संरक्षक व मुख्य वन्यप्राणी अभिरक्षक छ.ग. द्वारा किया जावेगा। किये जा रहे कार्यों की भौतिक व आर्थिक प्रगति से मुख्य वन्यप्राणी अभिरक्षक को प्रतिमाह वनमंडलाधिकारी द्वारा अवगत कराया जावेगा।

कृपया वन्यप्राणी संरक्षण योजना में प्रावधानित राशि रूपये 153.00 लाख एकमुश्त जमा करने हेतु परियोजना प्रस्तावकों को आदेशित करें।

प्रधान मुख्य वन संरक्षक (व.प्रा.) सह मुख्य वन्यप्राणी  
अभिरक्षक, छ.ग., अटल नगर, रायपुर

पृ.क्रमांक/व.प्रा./प्रबंध-540/2734

नवा रायपुर, दिनांक-02.08.2021

प्रतिलिपि सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :-

1. अपर प्रधान मुख्य वन संरक्षक (भू-प्रबंध) नवा रायपुर।
2. मुख्य वन संरक्षक, बिलासपुर वृत्त, बिलासपुर।
3. मुख्य वन संरक्षक वन्यजीवन और क्षेत्रीय निदेशक, अचानकमार टायगर रिजर्व बिलासपुर।
4. वनमंडलाधिकारी, कोरबा वनमंडल, कोरबा
5. मेसर्स भारत एल्युमिनियम कंपनी लिमिटेड, कोरबा छत्तीसगढ़।

प्रधान मुख्य वन संरक्षक (व.प्रा.) सह मुख्य वन्यप्राणी  
अभिरक्षक, अटल नगर, रायपुर, छ.ग.

10-10-2022

प्रति,  
वनमंडलाधिकारी,  
कोरबा वनमंडल,  
कोरबा, छग

**विषय: वन्य प्राणी संरक्षण योजना के तहत योजना राशि ₹1,53,00,000/- जमा करने के सम्बन्ध में।**

सन्दर्भ: आपके कार्यालय के पत्र क्रमांक /तक.अ./4771/कोरबा , दिनांक 24-08-2022

महोदया,

विषयान्तर्गत संदर्भित पत्र के सम्बन्ध में अवगत कराना चाहेंगे कि भारत एल्युमीनियम कंपनी लिमिटेड द्वारा वन्य प्राणी संरक्षण योजना के तहत योजना राशि **₹1,53,00,000/-** (रुपये एक करोड़ तिरपन लाख मात्र) का डिमांड ड्राफ्ट (बैंक का नाम: **आईसीआईसीआई बैंक, कोरबा ; क्रमांक: 500410, दिनांक 10-10-2022**) आपके कार्यालय में जमा किया जा रहा है।

सधन्यवाद

सहयोग की अपेक्षा के साथ  
वास्ते, भारत एल्युमीनियम कंपनी लिमिटेड



अधिकृत हस्ताक्षरकर्ता

प्रतिलिपि:

1. प्रधान मुख्य वन संरक्षक (वन्य एवं जैव विविधता संरक्षण) -सह- मुख्य वन्यप्राणी अभिरक्षक, छत्तीसगढ़ रायपुर की ओर सूचनार्थ सम्प्रेषित।
2. अपर प्रधान मुख्य वन संरक्षक (भू-प्रबंध/ व.से.अ. ) छत्तीसगढ़ रायपुर की ओर सूचनार्थ सम्प्रेषित।
3. मुख्य वन संरक्षक, बिलासपुर वृत्त, बिलासपुर की ओर सूचनार्थ सम्प्रेषित।
4. मुख्य वन संरक्षक, वन्य जीवन एवं क्षेत्रीय निदेशक, अचानकमार टाइगर रिजर्व , बिलासपुर की ओर सूचनार्थ सम्प्रेषित।



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# कार्यालय वनमण्डलाधिकारी, कोरबा वनमण्डल कोरबा (छ.ग.)

☎ का. : 07759-221273, नि. : 07759-222504, फ़ैक्स 07759-223531, Email : dfo\_korba@yahoo.co.in

क्रमांक/तक.अ/4771

कोरबा, दिनांक 24/08/2022

प्रति,

Chief Executive Officer  
& Whole Time Director  
Bharat Aluminium Company  
Limited Balco (C.G.)

विषय - "Authentication of Flora & Fauna and approval of Wild Life Conservation and Management Plan" - Regarding

- संदर्भ -
1. प्रधान मुख्य वन संरक्षक, (वन्यप्राणी एवं जैव विविधता संरक्षण) सह मुख्य वन्यप्राणी अभिरक्षक, छत्तीसगढ़ रायपुर का आदेश क/व.प्रा./प्रबंध-540/110 रायपुर दिनांक 02.08.2021
  2. मुख्य वन संरक्षक, वन्य जीवन और क्षेत्रीय निदेशक, अचानकमार टाईगर रिजर्व बिलासपुर का पत्र क./व.प्रा./तक.अ./2022/4909 दिनांक 03.08.2022

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उपरोक्त विषयांतर्गत लेख है कि संदर्भित पत्र के द्वारा भारत एल्युमिनियम कम्पनी लिमिटेड बालको को कोरबा वनमण्डल अंतर्गत ग्राम रिसदा, तहसील व जिला कोरबा में बालको प्लांट के अंदर एल्युमिनियम स्मेल्टर का विस्तार हेतु भारत सरकार पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय के पत्र दिनांक 10.09.2017 के पालनार्थ वन्यप्राणी संरक्षण योजना तैयार कर अनुशंसा सहित प्रस्तुत की गई है के परिपालन में आवेदक संस्थान से 10 वर्षों का वन्यप्राणी संरक्षण योजना राशि 153.00 लाख रुपये एकमुश्त जमा करने हेतु परियोजना प्रस्तावकों को निर्देश दिये गये।

संदर्भित पत्र के निर्देशानुसार आप वन्यप्राणी संरक्षण योजना की राशि 153.00 लाख रुपये (एक करोड़ तिरपन लाख रुपये) का अद्योहस्ताक्षर के नाम पर बैंकर चेक/डी.डी. के माध्यम से इस कार्यालय में जमा करें।

सहपत्र - उपरोक्तानुसार।

वनमण्डलाधिकारी

कोरबा वनमण्डल कोरबा

कोरबा, दिनांक 24/08/2022

पृ. क्रमांक/तक.अ/4792

प्रतिलिपि -

1. प्रधान मुख्य वन संरक्षक, (वन्यप्राणी एवं जैव विविधता संरक्षण) सह मुख्य वन्यप्राणी अभिरक्षक, छत्तीसगढ़ रायपुर की ओर संदर्भित पत्र के तारतम्य में सूचनार्थ संप्रेषित।
2. अपर प्रधान मुख्य वन संरक्षक (भू-प्रबंध/व.से.अ.) छत्तीसगढ़ रायपुर की ओर सूचनार्थ संप्रेषित।
3. मुख्य वन संरक्षक, बिलासपुर वृत्त बिलासपुर की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु संप्रेषित।
4. मुख्य वन संरक्षक, वन्य जीवन और क्षेत्रीय निदेशक, अचानकमार टाईगर रिजर्व बिलासपुर की ओर सूचनार्थ संप्रेषित।

वनमण्डलाधिकारी

कोरबा वनमण्डल कोरबा

# कार्यालय वनमण्डलाधिकारी, कोरबा वनमण्डल कोरबा (छ.ग.)

☎ का. : 07759-221273 , नि. : 07759- 222504., फ़ैक्स 07759-223531, Email : dfo\_korba@yahoo.co.in

क्रमांक/तक.अ/ 7432  
प्रति,

कोरबा, दिनांक 20/12/2022


मुख्य कार्यकारी अधिकारी  
और पूर्णकालिक निदेशक  
भारत एल्युमिनियम कंपनी लिमिटेड, कोरबा (छ.ग.)

विषय :- वन्यजीव संरक्षण/प्रबंधन योजना के संबंध में ।

संदर्भ :- आपका पत्र क्र./BALCO/Smelter 5-1 LTPA/Envt-01/282 दिनांक 6.10.2022 एवं 291 दिनांक 18.10.2022

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उपरोक्त विषयांतर्गत लेख है कि आवेदक संस्थान भारत एल्युमिनियम कंपनी लिमिटेड, कोरबा (छ.ग.) के द्वारा 10 वर्षों का वन्यप्राणी संरक्षण योजना के कार्यान्वयन के लिये वनमण्डलाधिकारी कोरबा के नाम डी.डी. के माध्यम से धनादेश क्रमांक 500410 दिनांक 10.10.2022 राशि 1,53,00,000/- रुपये प्राप्त किया है ।

  
वनमण्डलाधिकारी  
कोरबा वनमण्डल कोरबा  
✍

अंकाद 217104  
शाधना (कोरवा)

अल्पमूल्य निधि

अल्पमूल्य निधि

## सूचना

अल्पमूल्य निधि में निवेश किया जाता है कि यह निधि

भारत सरकार द्वारा

अल्पमूल्य निधि लिमिटेड को

छत्तीसगढ़ में कोरवा आधारित 675 मेगावॉट

निर्माण परियोजना के लिए पर्यावरण

प्रदान करा है। मंजूरी पत्र की प्रतिलिपि

छत्तीसगढ़ पर्यावरण संरक्षण मंडल के पास और

पर्यावरण एवं वन मंत्रालय की वेबसाइट

<http://envfor.nic.in> पर उपलब्ध है।

भारत एल्यूमिनियम कम्पनी लिमिटेड

कोरवा, छत्तीसगढ़

दैनिक आरकर खिलासपुर  
217104

अल्पमूल्य निधि लिमिटेड

कोरवा (छत्तीसगढ़)

## सूचना

अल्पमूल्य निधि में निवेश किया जाता है कि यह निधि

भारत सरकार द्वारा

अल्पमूल्य निधि लिमिटेड को

छत्तीसगढ़ में कोरवा आधारित 675 मेगावॉट के लिए तम बिजलीघर के लिए

पर्यावरण मंजूरी प्रदान कर दी है। मंजूरी पत्र की प्रतिलिपि छत्तीसगढ़

पर्यावरण संरक्षण मंडल के पास और पर्यावरण एवं वन मंत्रालय की

वेबसाइट <http://envfor.nic.in> पर उपलब्ध है।

भारत एल्यूमिनियम कम्पनी लिमिटेड

कार्य संपादन करने से संबंधित कार्य को प्रचार अधिकारी के रूप में उप निम्न कार्य संपादन करने से संबंधित कार्य को प्रचार अधिकारी के रूप में उप निम्न निर्वाचन अधिकारी श्रेयता प्राप्त अंगरे एवं एच.एल.बुतलहरे डिप्टी कलेक्टर-संयुक्त रूप से अपने दायित्वों का निर्वहन करेंगे तथा जे.आर.चौरसिया, तहसीलदार कोरबा, एच.के.बैज आसिरील, तहसीलदार एवं जे.खलखरे, तहसीलदार प्रमुख अधिकारी इस कार्य में उनके निदेशानुसार कार्य का निर्वहन प्रक्रिया से संबंधित समस्त कार्य संपादन हेतु जिन्हें अधिकारियों एवं कर्मचारियों की सूची लगाई गई है 7 नवंबर से प्रतिदिन 10-30 बजे से अपने निर्वासनस्थान पर अपने कर्तव्यों पर उपस्थित रहेंगे तथा किसी भी स्थिति में 3 बजे से पहले अपनी सोट को नहीं छोड़ेंगे तथा पूर्ण तत्परता से अपने दायित्वों का निर्वहन करेंगे। कोरबा भी अधिकारी कर्मचारी उप निम्न निर्वाचन अधिकारी को, विना अनुमति कार्यलय से प्रस्थान नहीं करेंगे।

**भारत एल्यूमिनियम कंपनी लिमिटेड**  
 कोरबा, छत्तीसगढ़

सर्वसाधारण को यह सूचित किया जाता है कि पर्यावरण व वन मंत्रालय, भारत सरकार के भारत एल्यूमिनियम कंपनी लिमिटेड (बालको) की एल्यूमिना रिफाइनरी और स्मेल्टर की विलाल परियोजना को पर्यावरणमय मंजूरी दे दी है। अनुमति पत्र की प्रति छत्तीसगढ़ पर्यावरण संरक्षण मंडल और पर्यावरण व वन मंत्रालय की वेबसाइट <http://envfor.nic.in> में उपलब्ध है।

कुते, भारत एल्यूमिनियम कंपनी लिमिटेड कोरबा, छत्तीसगढ़

# 2 CENTRAL Chronicle

RAIPUR, NOVEMBER 11, 2003

0720	A	RAIPUR	D	0820
		NAGPUR	A	0845
		RAIPUR	D	0805
RAIPUR				
IC 169		DAILY		IC 169
1080	D	MUMBAI	A	1945
1100	A	RAIPUR		
1205	D	RAIPUR		
1305	A	DHUBANESHWAR	D	1345
RAIPUR				
Ph. : 2412228 MO:0771-3414448				
2413338 98271-17227				
KORBA				
Ph. : 221826, 222826				
Mo. : 98263-24231, 94252-24488				

**Bharat Aluminium Co. Ltd.**  
 Korba, Chhattisgarh

This is to inform to general public that Ministry of Environment and Forests, Govt. of India has granted Environmental Clearance for Bharat Aluminium Company Limited's (Balco) expansion project of Alumina Refinery and Smelter. Copy of the Clearance letter is available at Chhattisgarh Environment Conservation Board and in the MOEF website <http://envfor.nic.in>.

For Bharat Aluminium Co. Ltd.  
 Korba, Chhattisgarh

BALCO/ENV/A-12/2026/21

Date: 07.01.2026

To,  
Mr. Nazimuddin,  
Divisional Head IPC-II,  
Central Pollution Control Board,  
New Delhi.

Sub : Submission of Compliance Status by Thermal Power Plants with respect to Specific Water Consumption Limit-reg.  
Ref : Your letter bearing no: B-33014/7/2018/IPC-II/TPP dated 2<sup>nd</sup> January 2019 received via E-mail.

---

Respected Sir,

With reference to the above subject, please find enclosed herewith the updated compliance status with respect to the Specific water consumption limit of 540 MW Thermal Power Plant of BALCO for the quarter of October 2025- December 2025 (Quarter 3 of FY 2025-26) in the prescribed format.

We would also like to bring to your kind notice that our 270 MW Thermal Power Plant is currently not in operation as it is under shut down since December 2015.

Hope the above is in line with your requirements.

Thanking you,  
Yours faithfully,  
(On behalf of the Bharat Aluminium Company Limited)



Mr. Mantosh Sinha

COO-Power

Bharat Aluminium Co. Ltd.

PO Box Balco Nagar

Korba - 495684



**Format for quarterly reporting of water consumption data and compliance with respect to the limit notified vide notification dated 07.12.2015 for coal/lignite based thermal power plant**

**Name of the Power Plant** : CPP-2  
**State** : Chhattisgarh  
**Capacity (total in MW)** : 540 MW  
**Unit wise Capacity** : 135 MW  
**Applicable SWC Standard** : 3.5 m<sup>3</sup>/MWh  
**Zero.wastewater Discharge Condition mandatory or not:** Mandatory  
**Remark 1:** Zero wastewater Discharge Status: Maintained  
**Remark 2:** If SWC limit not complied, explain if any: Complied

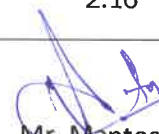
Quarter	Date	Power Generation (MWh)	Water Consumption (m <sup>3</sup> )	Sp. Water Consumption (Daily Avg. in m <sup>3</sup> /MWh)
<b>October-December 2025</b>				
October	1-Oct-25	10857	29435	2.71
	2-Oct-25	10323	25145	2.44
	3-Oct-25	8795	19121	2.17
	4-Oct-25	7407	16832	2.27
	5-Oct-25	6975	16678	2.39
	6-Oct-25	6750	16150	2.39
	7-Oct-25	7099	17051	2.40
	8-Oct-25	6773	18644	2.75
	9-Oct-25	7089	20603	2.91
	10-Oct-25	5916	22562	3.81
	11-Oct-25	5160	11064	2.14
	12-Oct-25	6085	12887	2.12
	13-Oct-25	5802	14613	2.52
	14-Oct-25	5982	18082	3.02
	15-Oct-25	5867	27995	4.77
	16-Oct-25	7340	22848	3.11
	17-Oct-25	8703	16331	1.88
	18-Oct-25	8624	20746	2.41
	19-Oct-25	8621	28779	3.34
	20-Oct-25	8069	25027	3.10
	21-Oct-25	7451	16768	2.25
	22-Oct-25	7784	16493	2.12
	23-Oct-25	8439	15864	1.88
	24-Oct-25	8425	15500	1.84
	25-Oct-25	8264	19918	2.41
	26-Oct-25	7905	17382	2.20



	27-Oct-25	8013	15154	1.89
	28-Oct-25	7627	17872	2.34
	29-Oct-25	7789	21506	2.76
	30-Oct-25	8432	29314	3.48
	31-Oct-25	5721	27691	4.84
<b>October Summary/ Total / Average</b>		234087	614055	2.62
November	1-Nov-25	5754	30356	5.28
	2-Nov-25	5956	25001	4.20
	3-Nov-25	8175	20967	2.56
	4-Nov-25	8920	29348	3.29
	5-Nov-25	8612	22550	2.62
	6-Nov-25	8572	18137	2.12
	7-Nov-25	8779	16875	1.92
	8-Nov-25	8609	19415	2.26
	9-Nov-25	9175	18073	1.97
	10-Nov-25	9210	19043	2.07
	11-Nov-25	9013	16225	1.80
	12-Nov-25	8697	17479	2.01
	13-Nov-25	7178	15279	2.13
	14-Nov-25	9248	16503	1.78
	15-Nov-25	8924	16900	1.89
	16-Nov-25	9089	15651	1.72
	17-Nov-25	7447	14815	1.99
	18-Nov-25	5995	11092	1.85
	19-Nov-25	5986	16099	2.69
	20-Nov-25	8021	13514	1.68
	21-Nov-25	9173	17895	1.95
	22-Nov-25	9147	15706	1.72
	23-Nov-25	9259	16872	1.82
	24-Nov-25	8853	16741	1.89
	25-Nov-25	9027	14847	1.64
	26-Nov-25	9109	15252	1.67
	27-Nov-25	9258	15884	1.72
	28-Nov-25	9030	15649	1.73
	29-Nov-25	9256	14138	1.53
	30-Nov-25	9315	18262	1.96
<b>November Summary/ Total/ Average</b>		252787	534568	2.11
December	1-Dec-25	8262	14207	1.72
	2-Dec-25	6238	11684	1.87
	3-Dec-25	6731	11015	1.64
	4-Dec-25	8828	13538	1.53

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5-Dec-25	8857	14918	1.68
6-Dec-25	6982	13823	1.98
7-Dec-25	8541	12838	1.50
8-Dec-25	8521	14606	1.71
9-Dec-25	8792	15015	1.71
10-Dec-25	8768	15096	1.72
11-Dec-25	7885	14170	1.80
12-Dec-25	7765	14352	1.85
13-Dec-25	8779	14791	1.68
14-Dec-25	9316	14311	1.54
15-Dec-25	9045	13731	1.52
16-Dec-25	8831	15565	1.76
17-Dec-25	7489	15262	2.04
18-Dec-25	6165	11491	1.86
19-Dec-25	6078	9856	1.62
20-Dec-25	8777	14581	1.66
21-Dec-25	8763	15122	1.73
22-Dec-25	8978	12609	1.40
23-Dec-25	8924	14115	1.58
24-Dec-25	8959	14010	1.56
25-Dec-25	8887	14948	1.68
26-Dec-25	9031	14788	1.64
27-Dec-25	8937	26791	3.00
28-Dec-25	8838	26474	3.00
29-Dec-25	8925	15645	1.75
30-Dec-25	9056	17022	1.88
31-Dec-25	9194	17206	1.87
<b>December Summary/ Total/ Average</b>	259142	463580	1.79
<b>Quarterly Summary/ Total/Average</b>	746016	1612203	2.16



Mr. Mantosh Sinha  
COO-Power  
Bharat Aluminium Co. Ltd.  
PO Box Balco Nagar  
Korba – 498684

BALCO/ENV/A-12/2026/138

Date: 09.04.2026

To,  
Mr. Nazimuddin,  
Divisional Head IPC-II,  
Central Pollution Control Board,  
New Delhi.

Sub : Submission of Compliance Status by Thermal Power Plants with respect to Specific Water Consumption Limit-reg.  
Ref : Your letter bearing no: B-33014/7/2018/IPC-II/TPP dated 2<sup>nd</sup> January 2019 received via E-mail.

---


Respected Sir,

With reference to the above subject, please find enclosed herewith the updated compliance status with respect to the Specific water consumption limit of 540 MW Thermal Power Plant of BALCO for the quarter of January 2026- March 2026 (Quarter 4 of FY 2025-26) in the prescribed format.

We would also like to bring to your kind notice that our 270 MW Thermal Power Plant is currently not in operation as it is under shut down since December 2015.

Hope the above is in line with your requirements.

Thanking you,  
Yours faithfully,  
(On behalf of the Bharat Aluminium Company Limited)

  
Mr. Mantosh Sinha  
COO-Power  
Bharat Aluminium Co. Ltd.  
PO Box Balco Nagar  
Korba - 495684

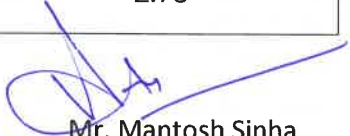
**Format for quarterly reporting of water consumption data and compliance with respect to the limit notified vide notification dated 07.12.2015 for coal/lignite based thermal power plant**

**Name of the Power Plant : CPP-2**  
**State : Chhattisgarh**  
**Capacity (total in MW) : 540 MW**  
**Unit wise Capacity : 135 MW**  
**Applicable SWC Standard : 3.5 m<sup>3</sup>/MWh**  
**Zero wastewater Discharge Condition mandatory or not: Mandatory**  
**Remark 1: Zero wastewater Discharge Status: Maintained**  
**Remark 2: If SWC limit not complied, explain if any: Complied**

Quarter	Date	Power Generation (MWh)	Water Consumption (m <sup>3</sup> )	Sp. Water Consumption (Daily Avg. in m <sup>3</sup> /MWh)
<b>January-March 2026</b>				
January	1-Jan-26	9101	15979	1.76
	2-Jan-26	9074	16929	1.87
	4-Jan-26	8573	22902	2.67
	5-Jan-26	8659	16552	1.91
	6-Jan-26	8471	13473	1.59
	7-Jan-26	8451	16273	1.93
	8-Jan-26	8644	16131	1.87
	9-Jan-26	8699	16203	1.86
	10-Jan-26	6646	14390	2.17
	11-Jan-26	6023	24054	3.99
	12-Jan-26	7956	16231	2.04
	13-Jan-26	8959	20484	2.29
	14-Jan-26	7429	27489	3.70
	15-Jan-26	6236	10875	1.74
	16-Jan-26	8265	15872	1.92
	17-Jan-26	8886	16484	1.86
	18-Jan-26	8910	17788	2.00
	19-Jan-26	8752	19594	2.24
	20-Jan-26	8892	25283	2.84
	21-Jan-26	8707	16689	1.92
	22-Jan-26	8844	19209	2.17
	23-Jan-26	8331	17738	2.13
	24-Jan-26	8732	16878	1.93
	25-Jan-26	8839	16195	1.83
	26-Jan-26	8740	17649	2.02
	27-Jan-26	8912	17035	1.91

	28-Jan-26	8707	17282	1.98
	29-Jan-26	8623	18580	2.15
	30-Jan-26	8822	21527	2.44
	31-Jan-26	8813	17761	2.02
<b>January Summary/ Total / Average</b>		261871	568034	2.17
Feb	1-Feb-26	8631	20007	2.32
	2-Feb-26	8691	18877	2.17
	3-Feb-26	8772	27471	3.13
	4-Feb-26	7270	24380	3.35
	5-Feb-26	6168	19011	3.08
	6-Feb-26	8449	20110	2.38
	7-Feb-26	8441	16707	1.98
	8-Feb-26	8659	18885	2.18
	9-Feb-26	8772	14596	1.66
	10-Feb-26	8526	18440	2.16
	11-Feb-26	6258	15761	2.52
	12-Feb-26	6052	26324	4.35
	13-Feb-26	5812	25419	4.37
	14-Feb-26	6073	13572	2.23
	15-Feb-26	6000	16698	2.78
	16-Feb-26	6175	33429	5.41
	17-Feb-26	6118	24848	4.06
	18-Feb-26	6191	18768	3.03
	19-Feb-26	6103	20499	3.36
	20-Feb-26	5910	17670	2.99
	21-Feb-26	3273	12166	3.72
	22-Feb-26	3779	9308	2.46
	23-Feb-26	5903	12056	2.04
	24-Feb-26	5962	26029	4.37
	25-Feb-26	6255	23363	3.74
	26-Feb-26	6235	14946	2.40
	27-Feb-26	6215	12220	1.97
	28-Feb-26	6182	13536	2.19
<b>February Summary/ Total/ Average</b>		186875	535096	2.86
March	1-Mar-26	6122	26550	4.34
	2-Mar-26	6032	25146	4.17
	3-Mar-26	5946	11378	1.91
	4-Mar-26	6156	19756	3.21
	5-Mar-26	6002	23536	3.92
	6-Mar-26	6013	20558	3.42
	7-Mar-26	6094	20280	3.33

8-Mar-26	5862	20361	3.47
9-Mar-26	6117	20547	3.36
10-Mar-26	6091	19526	3.21
11-Mar-26	6088	20134	3.31
12-Mar-26	6127	26398	4.31
13-Mar-26	6036	22227	3.68
14-Mar-26	6100	20259	3.32
15-Mar-26	6153	19108	3.11
16-Mar-26	6128	21618	3.53
17-Mar-26	6102	20290	3.33
18-Mar-26	6007	17335	2.89
19-Mar-26	6065	16685	2.75
20-Mar-26	5987	18842	3.15
21-Mar-26	3912	13774	3.52
22-Mar-26	5520	13340	2.42
23-Mar-26	5902	13237	2.24
24-Mar-26	5818	20413	3.51
25-Mar-26	5423	21720	4.01
26-Mar-26	5188	5835	1.12
27-Mar-26	5398	22061	4.09
28-Mar-26	4907	22549	4.60
29-Mar-26	5269	22889	4.34
30-Mar-26	4615	18626	4.04
31-Mar-26	5134	21253	4.14
<b>December Summary/ Total/ Average</b>	178314	606231	3.40
<b>Quarterly Summary/ Total/Average</b>	627060	1709361	2.73



Mr. Mantosh Sinha  
COO-Power  
Bharat Aluminium Co. Ltd.  
PO Box Balco Nagar  
Korba – 498684



## छत्तीसगढ़ पर्यावरण संरक्षण मंडल

पर्यावास भवन, नॉर्थ ब्लॉक, सेक्टर-19,

नवा रायपुर, अटल नगर, रायपुर (छ.ग.)

Email add- hpcpcb@gmail.com

क्रमांक /मु./तक./छ.ग.प.सं.म./2024

नवा रायपुर, अटल नगर, दिनांक / /2024

### कार्यालय आदेश

छत्तीसगढ़ राज्य में बड़ी संख्या में गौण/मुख्य खनिज खदानें एवं स्पंज आयरन प्लांट, पावर प्लांट, स्टील मेल्टिंग शॉप, फेरो एलाएज प्लांट, रोलिंग मिल आदि उद्योग स्थापित हैं। इन उद्योगों से उत्पादित उत्पाद, उत्पन्न अपशिष्ट एवं उद्योगों में प्रयुक्त होने वाले कच्चे माल, जिनसे परिवहन के दौरान डस्ट उत्सर्जन की संभावना रहती है, का परिवहन बड़ी मात्रा में सड़क मार्ग से किया जाता है। परिवहनकर्ता वाहनों द्वारा ओवर लोडिंग करने एवं वाहन को उपयुक्त प्रकार से कवर नहीं किये जाने के कारण परिवहन के दौरान प्रदूषण एवं दुर्घटना की संभावना बनी रहती है एवं वाहन के पीछे चलने वालों को अत्याधिक असुविधा होती है। उक्त समस्या के निराकरण हेतु वाहनों को उपयुक्त प्रकार से कवर किये जाने बाबत निम्न स्टेण्डर्ड ऑपरेटिंग प्रोसिजर के अनुसार कार्यवाही की जावे।

#### 1. उद्योगों/खदानों/संस्थानों द्वारा की जाने वाली कार्यवाही :-

- प्रत्येक खदान/उद्योग/संस्थान प्रक्रियाओं का पालन सुनिश्चित करने हेतु एक नोडल अधिकारी नियुक्त करेगा। जोकि इस प्रक्रिया के पालन हेतु उत्तरदायी रहेगा।
- प्रत्येक खदान/उद्योग/संस्थान में परिवहन हेतु वाहनों का समूह चिन्हांकित किया जायेगा। जिसकी सूची एवं पूर्ण विवरण संबंधित खदान/उद्योग/संस्थान के नोटिस बोर्ड पर उपलब्ध रहेगा।
- परिवहन करने वाले वाहन से उत्सर्जन मानकों के अनुरूप रहना चाहिए एवं परिवहन के दौरान वाहन में वैध पी.यू.सी. प्रमाण पत्र उपलब्ध रहना चाहिए।
- प्रत्येक खदान/उद्योग/संस्थान में तारपोलिन से वाहन कवर करने हेतु एक स्थाई स्थल चिन्हांकित किया जावेगा एवं इसी स्थल पर वाहन को तारपोलिन से कवर करने की कार्यवाही की जायेगी। स्थल पर आवश्यकतानुसार जल छिड़काव की व्यवस्था आदि की जावेगी।

#### 2. तारपोलिन से वाहन को ढँकने की प्रक्रिया:-

प्रत्येक खदान/उद्योग/संस्थान सुनिश्चित करेगा कि -

- वाहन की बॉडी, जिसे तारपोलिन द्वारा ढँका जाना है, में कोई छिद्र अथवा क्रेक नहीं होना चाहिये, जिससे इसमें भरे जाने वाला मटेरियल परिवहन के दौरान सड़क पर नहीं गिरे।
- वाहन में मटेरियल का भराव इस प्रकार से किया जावे, जिससे बॉडी में न्यूनतम 05 सेंटीमीटर का फ्री बोर्ड रहे। वाहन किसी भी परिस्थिति में ओवर लोड नहीं किया जाना चाहिये।

- तारपोलिन केनवास अथवा उच्च घनत्व पोलीइथलीन की उपयुक्त मोटाई की होनी चाहिये। उच्च घनत्व पोलीइथलीन की तारपोलिन आई.एस. 7903 : 2011 के प्रावधानों के अनुरूप होनी चाहिये एवं इस पर बी.आई.एस. कोड के प्रावधान अनुसार मार्किंग होना चाहिये।
- तारपोलिन वाटरपूफ, वियर रेजिस्टेंट होनी चाहिये। यह कटी-फटी अथवा क्षतिग्रस्त नहीं होनी चाहिये। तारपोलिन की मजबूती के लिये किनारे/कोने दोहरी सिलाई युक्त होना चाहिये एवं किनारे-किनारे आवश्यकतानुसार आईलेट्स लगे होम चाहिए, ताकि तारपोलिन को सुविधानुसार बांधा जा सके। कटी-फटी अथवा क्षतिग्रस्त तारपोलिन से कहर करना पाये जाने पर इस एस.ओ.पी. का उल्लंघन माना जावेगा।
- यथा संभव वाहन को कहर करने के लिये एक तारपोलिन का उपयोग किया जाना चाहिये, ताकि परिवहन के दौरान हवा के कारण तारपोलिन उड़ने की संभावना न रहे। किन्हीं परिस्थितियों में यदि एक ही तारपोलिन का उपयोग संभव न हो, तो दो तारपोलिन का उपयोग पर्याप्त ओवर लेप करते हुये किया जा सकता है। परंतु इसमें सावधानी रखी जावे कि परिवहन के दौरान हवा के कारण तारपोलिन उड़ने एवं मटेरियल से प्रदूषण की संभावना न हो।
- तारपोलिन से वाहन के बॉडी के बाहरी न्यूनतम आधे हिस्से को कहर कर बांधा जाना चाहिये।
- वाहन को तारपोलिन से कहर करने के पश्चात इस प्रकार बांधा जाकर सील किया जाना चाहिए ताकि परिवहन के दौरान वाहन से मटेरियल के बाहर गिरने/उड़ने की संभावना न रहे।
- कहर करने के पश्चात वाहन की बाडी के तीनों ओर संबंधित खदान/उद्योग/संस्थान के नोडल अधिकारी का सम्पर्क नम्बर सहजदृश्य रूप से प्रदर्शित करने वाला स्टीकर लगाया जायेगा ताकि उल्लंघन पाये जाने पर इसकी जानकारी संबंधित को दी जा सके। नोडल अधिकारी इस बाबत जानकारी प्राप्त होते ही यथाशीघ्र समस्या का निराकरण सुनिश्चित करेगा।
- प्रत्येक वाहन में परिवहन किये जा रहे मटेरियल से संबंधित वैध दस्तावेज यथा आवश्यकता अनुसार परमिट/पिटपास आदि तथा मटेरियल की मात्रा, मटेरियल पाने वाले का नाम तथा उद्योग/संस्थान आदि जानकारी संबंधी विवरण उपलब्ध रहना चाहिए।
- उपरोक्त कार्यवाही पूर्ण होने के पश्चात वाहनों को व्हील वाशिंग सिस्टम से गुजारा जाना चाहिए ताकि उपरोक्त प्रक्रिया के दौरान वाहन के पहियों पर लगी डस्ट साफ हो सके।
- प्रत्येक खदान/उद्योग/संस्थान उपरोक्त बिन्दुओं पर कार्यवाही हेतु एक चेक लिस्ट तैयार करेगा एवं कार्यवाही पूर्ण होने पर वाहन चालक चेक लिस्ट अनुसार कार्य पूर्ण किये जाने की जानकारी हस्ताक्षर कर सिक्युरिटी गेट पर जमा करेगा एवं एक प्रति वाहन के साथ रखेगा। समस्त कार्यवाही संतोषप्रद रूप से पूर्ण होने के पश्चात ही वाहन को परिसर के बाहर निकलने की अनुमति दी जावेगी।

### 3. उल्लंघन की स्थिति में कार्यवाही:-

- परिवहन के दौरान वाहन उपरोक्तानुसार तारपोलिन से उपयुक्त रूप से ढका न पाये जाने पर परिसर/परिवहन विभाग के अधिकारियों द्वारा वाहन को संबंधित नियमों के अंतर्गत कार्यवाही

- उद्योगों/खदानों/संस्थानों के निरीक्षण के दौरान परिसर में उपरोक्त प्रक्रिया का उल्लंघन पाये जाने पर उनके विरुद्ध नियमानुसार पर्यावरणीय क्षतिपूर्ति अधिरोपित करने की कार्यवाही संबंधित क्षेत्रीय कार्यालय, छत्तीसगढ़ पर्यावरण संरक्षण मंडल द्वारा की जावेगी।

उपरोक्त एस.ओ.पी. दिनांक 01/08/2024 से प्रभावशील होगा। संबंधित उद्योगों/खदानों/संस्थानों द्वारा एस.ओ.पी. के अनुसार आवश्यक व्यवस्थाएं दिनांक 01/08/2024 के पूर्व पूर्ण करना सुनिश्चित कर लिया जावे।

सदस्य सचिव

छत्तीसगढ़ पर्यावरण संरक्षण मंडल  
नवा रायपुर, अटल नगर (छ.ग.)

पृ. 2529 / मु. / तक. / छ.ग.प.सं.मं. / 2024  
प्रतिलिपि :-

नवा रायपुर, अटल नगर, दिनांक 26/6/2024

1. सचिव, आवास एवं पर्यावरण विभाग, मंत्रालय, महानदी भवन, नवा रायपुर, अटल नगर, रायपुर (छ.ग.) की ओर प्रेषित कर निवेदन है कि शासन स्तर से परिवहन विभाग को उपरोक्तानुसार कार्यवाही हेतु निर्देशित करने का कष्ट करें।
2. सर्व संबंधित अधिकारी, मुख्यालय, छत्तीसगढ़ पर्यावरण संरक्षण मण्डल, नवा रायपुर, अटल नगर, रायपुर (छ.ग.) की ओर सूचनार्थ एवं पालनार्थ प्रेषित।
3. क्षेत्रीय अधिकारी, क्षेत्रीय कार्यालय, छत्तीसगढ़ पर्यावरण संरक्षण मण्डल, रायपुर/भिलाई-दुर्ग/बिलासपुर/कोरबा/रायगढ़/अंबिकापुर/जगदलपुर की ओर प्रेषित कर निर्देशित किया जाता है कि आपके कार्यक्षेत्र में स्थापित संबंधित उद्योगों को उपरोक्तानुसार एस.ओ.पी. के पालन एवं इस हेतु आवश्यक व्यवस्था दिनांक 01/08/2024 के पूर्व पूर्ण करने हेतु निर्देशित करे एवं दिनांक 01/08/2024 से उद्योगों में निरीक्षण के दौरान उल्लंघन पाये जाने नियमानुसार पर पर्यावरणीय क्षतिपूर्ति अधिरोपित करें।
4. प्रोग्रामर, मुख्यालय, छत्तीसगढ़ पर्यावरण संरक्षण मण्डल, नवा रायपुर, अटल नगर, रायपुर (छ.ग.) की ओर सूचनार्थ एवं पालनार्थ प्रेषित। निर्देशित है कि उक्त आदेश को मण्डल की वेबसाइट में अपलोड करें।
5. नोटिस बोर्ड।

सदस्य सचिव

छत्तीसगढ़ पर्यावरण संरक्षण मंडल  
नवा रायपुर, अटल नगर (छ.ग.)