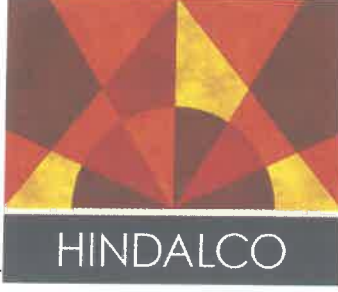


ADITYA BIRLA



Ref. HIL/SBM/MoEF&CC/ 1270/2024

Date: 26-11-2024

To,

**The Director General of Forest (C),  
Ministry of Environment & Forest and Climate Change,  
Integrated Regional Office,  
Ground Floor, Aranya Bhawan, North Block,  
Sector-19, Naya Raipur, Atal Nagar,  
Chhattisgarh-492002  
Email: [iro.raipur-mefcc@gov.in](mailto:iro.raipur-mefcc@gov.in)**

**Sub: - Sub: -** Status of compliance of EC condition (Half yearly status of compliance report) in respect of Samri Bauxite Mine (Lease area- 2146.746 Ha.) of M/s Hindalco Industries Limited of Chhattisgarh state for the period from April 2024 – September 2024.

*Ref No: - Environment Clearance Letter No-J-11015/353/2007-IA. II (M) dated July 27, 2007*

**Dear Sir,**

We do herewith submit half yearly status of EC compliance report in respect of Samri Bauxite Mine, Lease area - 2146.746 Ha, of M/s Hindalco Industries Limited P.O- Kusmi, Dist.- Balrampur- Ramanujanj, Chhattisgarh state, PIN-497224 for the period from April 2024 – September 2024. The lease details is as below:-

Lease area	Production Capacity	Lease Period
2146.746 Ha.	500000 Tonnes	24.06.1998 to 23.06.2048 (50 years)

We trust that the measures taken towards environment safeguard comply with the stipulated environmental conditions. We assure that we comply all the conditions laid down in the consent letter and also abide to follow all the Rules and Regulations.

Thanking you,

Yours's faithfully

For, Hindalco Industries Limited

(Sanjay Pardhi)  
Agent of Mines

Encl.: As Above

cc: [moef.ddn@gmail.com](mailto:moef.ddn@gmail.com); [apccfcentral-ngp-mef@gov.in](mailto:apccfcentral-ngp-mef@gov.in); [eccompliance-cg@gov.in](mailto:eccompliance-cg@gov.in); [cpcb.bhopal@gov.in](mailto:cpcb.bhopal@gov.in); [hocecb@gmail.com](mailto:hocecb@gmail.com);

**Name of the Project** : Samri Bauxite Mines (2146.746Ha. Capacity-5.00LTPA),  
M/s Hindalco Industries Ltd

**Environment Clearance No & date** : J-11015/353/2007 – IA.(IIM) dated 27.07.2007

**Period of compliance Report** : 1<sup>st</sup> April 2024 to 30<sup>th</sup> September 2024

### **A. Specific Conditions**

**Condition-1:** Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority.

**Reply to Condition 1:** The Wildlife Management plan has been prepared and approved by competent Authority vide letter no. 12-13-2967 dated 07.10.2013. The copy attached as **Annexure A**.

**Condition-2:** Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ petition (Civil) No. 460 of 2004 as may be applicable to this project.

**Reply to Condition 2:** We agreed to the condition.

**Condition-3:** Conservation plan for schedule I fauna shall be prepared in consultation with Wildlife Department and submitted to the ministry for record.

**Reply to Condition 3:** The Conservation plan for schedule I fauna have been prepared and approved by competent authority submitted to ministry. The detail list of flora and fauna along with the approved conservation plan is attached as **Annexure B**.

**Condition-4:** A comprehensive report on the details of land oustees, their socio- economic profile and action plan for their rehabilitation including formation of self-help group who can facilitate promotion of economic opportunity to local indigenous people shall be submitted to the Ministry for record.

**Reply to Condition 4:** To encourage and improve local economics company has taken several initiative programme, where local people are being trained to perform different activities viz, making of soaps, detergents, candles, making of leaf plates etc. Under CSR activities SHG groups are formed, in total there are 33 nos of SHGs and 330 Beneficiaries who are directly engaged in income generation activities. *Detailed list of SHG is enclosed as Annexure C.*

**Condition-5:** Top soil, if any shall be stacked properly with proper slope with adequate safeguards and shall be backfilled (wherever applicable) for reclamation and rehabilitation of mined out area.

**Reply to Condition 5:** The top soil generated during mining operation is being concurrently spread on backfilled area to restore its original forms immediately. However, when required it is being stacked properly with proper slope followed by parapet wall to prevent sliding.



### **Backfilling Photos**

**Condition-6:** Over burden (OB) shall be stacked at earmarked dump site (s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 30m, each stage shall preferably be of 10m and over all slope of the dump shall not exceed  $28^{\circ}$ . The OB dump shall be backfilled. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests on six monthly basis.

**Reply to Condition 6:** Presently there is no active OB dump at mines. As per approved Mining Plan OB generated during mine operation is being utilized for concurrent back filling of the mined-out area for reclamation purpose. Small old inactive OB dump of an area of 1.66Ha. has been stabilized by vegetation with suitable native species to prevent erosion and surface run off. Garland drain with check dam have been provided to arrest silt and sediments flowing from above mentioned OB dump.



Plantation in Old OB Dump

**Condition-7:** Garland drains shall be constructed to arrest silt and sediment flows from soil and mineral dump. The water so collected shall be utilized for watering the mine area, roads, greens belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.

Garland drain size, gradient and length shall be constructed for both mine pit and for waste dump and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garlands drains and desilted at regular intervals.

**Reply to Condition 7:** Garland drains approx. 200m long along with retaining wall of appropriate size (1m height x 0.5m width x 250m length) and gradient have been made around the active mining pits coupled with silt arrester to arrest silt from run-off and drains are being maintained and desilted at regular intervals before monsoon. The Water is being collected in the sump and used for plantation & in sprinkling of the Haul Road. The sump capacity Rainwater pond of adequate capacity has also been developed.



***Photographs of garland drains and parapet wall***

**Condition-8:** Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.

**Reply to Condition 8:** The slope of Mining bench is maintained approx. 45° and the height 3-4m and ultimate pit is being maintained as per provision of approved mining scheme. We also ensure that within this pit limit we can mine the deposit economically and safely.

**Condition-9:** Drilling and blasting (if any) shall be conducted by using dust extractors/wet drilling.

**Reply to Condition 9:** Cabin mounted Wet drilling machine is being used in drilling operations. To reduce the dust emission due to blasting we use X-centric ripper instead of blasting.





**Condition-10:** Plantation shall be raised in 53.87 ha of the ML area, haul roads, OB dump sites etc. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/Agriculture Department. Herbs and shrubs shall also form a part of afforestation programme beside tree plantation. The density of the trees shall be around 2500 plants per ha. The company shall involve local people with the help of self-help group for plantation.

**Reply to Condition 10:** We have already achieved the target area asked for plantation. However, we are continuing the plantation to restore the biodiversity. During Apr'24 to Sep'24, total 27344 nos. of saplings have been planted over an area of 10.27 ha. and in total till now about 171.725 ha area has been afforested with approx. 411955 nos. of saplings. The plantation in reclaimed area is carried out as per plan and being carried out as suggested by local government authority. The density is being maintained about 2500 saplings per hectare with the species like Karanj, Arjun, Gulmohar, Bamboo, bakayan, Pears, Jamun, Amla & guava, etc. Apart from this, Tea plantation project has been started in Samri with a focus on Local Economic Development. We planted 16,000 Tea saplings on 2 Ha. of reclaimed land. Social forestry is also being encouraged among the local villagers. Year wise plantation is enclosed as **Annexure D**.



**Greenbelt Area**



**Plant Sampling culture in our Nursery**

**Condition-11:** The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground Water Board.

**Reply to Condition 11:** Six nos. of rainwater harvesting Ponds of an area approx. 7.9Ha. and well of size 5Ft.X10Ft. have been constructed as conservation measures in mined out area for the conservation/augmentation of ground water resources. This further adds to Water Credit of the lease area.



**Rain Water Harvesting Pond**



**Recharge well**

**Condition-12:** Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year-pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director Central Ground Water Board.

**Reply to Condition 12:** Ground water quality monitoring is being carried out regularly on quarterly basis. The analysis reports are being submitted to CECB, Raipur. Regular monitoring of ground water level is being carried out by piezometer installed at strategic location in the lease area and is found below the level of mining operation. The ground water Quality report and the GW level data is attached in *Annexure E*.

**Condition-13:** Prior permission from the competent authority shall be obtained for drawl of ground water, if any.

**Reply to Condition 13:** Ground water NOC has been obtained from CGWA vide letter no. CGWA/NOC/MIN/REN/2/2023/7572 dated 03.04.2023 with validity up to 28.04.2025. Also digital

water meters with telemetric system have been installed in the lease area at strategic location for monitoring water consumption. The GW NOC copy attached as **Annexure-F**.

**Condition-14:** Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation ores and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles transporting ores shall be covered with a tarpaulin or other suitable enclosures so that no dust particles/ fine matters escape during the course of transportation. No overloading of ores for transportation shall be committed.

**Reply to Condition 14:** Regular and periodic maintenance of HEMM is being carried out for control of vehicular emission in mines area. The bauxite ore are transported in trucks with tarpaulin cover up to EUP/Railway siding to prevent dust emission. Vehicle used for transportation are having valid permit and PUC. No overloading of ores for transportation is allowed to prevent spillage of material.



**Condition-15:** A Final Mine Closure Plan, along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forests, 5 years in advance of final mine closure for approval.

**Reply to Condition 15:** We accept the condition. A progressive mine closure plan approved by IBM is in place. IBM is competent authority to approve the final mine closure plan. Based on the present resource estimate, and peak rated production capacity, the tentative balance life of mine is around 37 years. Final Mine closure plan along with details of Corpus fund will be submitted within prescribed timelines in accordance with law to competent authority.

## **B. General Conditions**

**Condition-1:** No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.

**Reply to Condition 1:** Presently there is no change in technology. In future, when required prior permission will taken from the approval authority.

**Condition-2:** No change in the calendar plan including excavation, quantum of mineral bauxite ore shall be made.

**Reply to Condition 2:** Calendar plan (IBM Approved Mining Plan/scheme) prepared for the mine is being followed.

**Condition-3:** Conservation measures for protection of flora and fauna in the core and buffer zone shall be drawn up in consultation with the local forest and wildlife department.

**Reply to Condition 3:** Company has already deposited Rs.1.6 crore to competent authority for the implementation of measures for the protection of flora and fauna under approved wildlife conservation plan. The suggestions of local forest department are being implemented for conservation of flora and fauna in and around lease hold area. Important measure being implemented for conservation of flora and fauna are as follows.

- a) Company has provided solar LED torch and florescent Jackets to Staff of forest department, Ambikapur for patrolling and monitoring the movement of wildlife, encroachment, cutting, poaching, fire etc.
- b) Veterinary camp is being conducted for immunization of cattle with the help of block veterinary staff.
- c) Awareness program related to wildlife conservation is being conducted.
- d) Eco-development activities like poultry, piggery, bee keeping etc. are being organized.
- e) Controlled blasting is being carried out to reduce vibration and noise. Such operation is being carried out in day time only and its use is minimized.
- f) Plantation is regular activity along with the development of greenbelt all around the Lease Area
- g) “Aditya Udyan” has been developed on 2.6 Ha. of Reclaimed land and a wide variety of fruits saplings like Mango, Guava, Litchi and pears are planted along with a centrally developed Rose garden.
- h) Integrated Fish Farming has been started at Aditya Udyan, Gopatu in Samri operational area and 25000 fish spawns has been released, with an objective to help the local communities for diversification of Income Sources. This has been done in consultation with Govt. body.



**EC Compliance for Samri Bauxite Mine (Mine Lease Area of 2146.746 Ha),  
Tehsil - Kusmi, District – Balrampur-Ramanujganj, State – Chhattisgarh  
M/s. Hindalco Industries Limited Compliance Period: April 2024 – September 2024**

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- i) With a vision on sustainability, we have also developed a BioPak that transcends the bounds of traditional parks. With 15 acres of reclaimed mined land this please is a testament to the resilience of nature and a beacon for the future. This has been developed with an objective of Economic development, Environmental education, Health and recreation and a place for community engagement and further to pave way for Mine tourism – an upcoming concept of time.
- j) We have also carried out plantation outside our lease area in various School, NGOs etc. on special occasion as an initiative to spread awareness about the importance of afforestation.



**Aditya Udyan**



**Samri Bio-Park**

**EC Compliance for Samri Bauxite Mine (Mine Lease Area of 2146.746 Ha),  
Tehsil - Kusmi, District – Balrampur-Ramanujganj, State – Chhattisgarh  
M/s. Hindalco Industries Limited Compliance Period: April 2024 – September 2024**

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**Condition-4:** Four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub>, monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.

**Reply to Condition 4:** Ambient Air quality monitoring has been established at strategic locations and the monitoring is being carried out as per guidelines. For the purpose, we have engaged NABL accredited laboratory M/s. Anacon Laboratories Pvt. Ltd. for conducting regular environmental monitoring. Analysis Report (from Apr' 24 to Sep' 24) is enclosed as **Annexure-G**.

**Condition-5:** Data on ambient air quality (RPM, SPM, SO<sub>2</sub>, and NO<sub>x</sub>) should be regularly submitted to the Ministry including its Regional office located at Bhopal and the State Pollution Control Board / Central Pollution Control Board once in six months.

**Reply to Condition 5:** Data of ambient air quality (RPM, SPM, SO<sub>2</sub>, and NO<sub>x</sub>) are being submitted to Ministry and CECB in every Six month as per guidelines. Data of ambient air quality (RPM, SPM, SO<sub>2</sub> and NO<sub>x</sub>) from Apr' 24 to Sep' 24 is enclosed as **Annexure-G**.

**Condition-6:** Fugitive dust emission from all the sources shall be controlled regularly. Water spraying arrangements on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.

**Reply to Condition 6:** Wet drilling, regular water spraying with 12 KL portable water tanker in the mine lease hold area is being carried out regularly to control the fugitive emission at source. Rainwater collected into the mine pit is being utilized for dust suppression purpose. Black top road has been constructed up to pit head to reduce dust problem.



**Water Sprinkling in haul road**



**Black top Road to the mines**

**Condition-7:** Measures shall be taken for control of noise levels below 85dBA in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs / muffs.

**Reply to Condition 7:** The noise level in working area is being maintained below the prescribed limit. As protective measures, workers engaged in operations of HEMM, etc. is being provided with ear plugs / muffs. The proper maintenance of HEMM is being carried out to control noise emission.



**Plantation for Noise Acoustic barrier**

**Condition-8:** Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19<sup>th</sup> May, 1993 and 31<sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.

**Reply to Condition 8:** There is no waste water generated from the mining operation. So, there is no liquid discharge from mine. Waste water generated from the workshop is being treated in the Oil & grease separation Pit and the water after treatment is being used in dust suppression in the haul road.

**Condition-9:** Personal working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.

**Reply to Condition 9:** Company has provided adequate personal protective equipment to all workers and it is also ensured that they use the same. Regular awareness training are also being imparted to them for safety & health in our Group vocational training Centre as per guidelines.

All employees working in our mining lease area, undergo IME/PME at regular interval to observe any contractions due to exposure to dust and other occupational hazards.





Safety Talk before execution of the Job

**Condition-10:** Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

**Reply to Condition 10:** Periodical and Initial medical examination of all workers are being carried out as per provision of Mines Act. IME carried out during the joining of the candidate and the PME is carried out in every 3 years.

**Condition-11:** A separate environmental management cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.

**Reply to Condition 11:** Environment cell is already in place at Samri Mines Division headed by Head (Mines) and comprises of suitable qualified persons. Constitution of Environment Management cell is enclosed in *Annexure-H*.

**Condition-12:** The project authorities shall inform to the Regional Office of the Ministry located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

**Reply to Condition 12:** The requisite documents have been submitted to the regional office of the Ministry, Bhopal before commencement of development & operation in 1999. However, as the current regional office has changed to Raipur region, we are again resubmitting the information to the IRO Raipur vide letter no. HIL/SBM/MoEF&CC/1202/2024, dated 20-03-2024.



**Condition-13:** The funds earmarked for environmental protection measures shall be kept in separate account and should not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bhopal.

**Reply to Condition 13:** Adequate fund provision is already earmarked for environmental protection measures and will not be diverted to other purpose. The year wise expenditure is being submitted to concern authorities as per guidelines.

The copy of environment expenditure is enclosed as *Annexure J*.

**Condition-14:** The project authorities shall inform to the Regional Office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development.

**Reply to Condition 14:** The requisite documents have been submitted to the regional office of the Ministry, Bhopal before commencement of development & operation in 1999. However, as the current regional office has changed to Raipur region, we are again resubmitting the information to the IRO Raipur vide letter no. HIL/SBM/MoEF&CC/1202/2024, dated 20-03-2024.

**Condition-15:** The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/ monitoring reports.

**Reply to Condition 15:** All cooperation is being extended to regulatory authorities.

**Condition-16:** A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.

**Reply to Condition 16:** We have forwarded the copy of clearance letter to Gram Panchayat of Samri, Gopatu, Amtahi vide letter no. HIL/CECB/37/EXP/07-08 on 13-08-2007. The copy of same has already been submitted to your good office.

**Condition-17:** State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office/Tehsildar's office for 30 days.

**Reply to Condition 17:** The copy has been displayed by CECB in Surguja Collectorate.

**Condition-18:** The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days

**EC Compliance for Samri Bauxite Mine (Mine Lease Area of 2146.746 Ha),  
Tehsil - Kusmi, District – Balrampur-Ramanujganj, State – Chhattisgarh  
M/s. Hindalco Industries Limited Compliance Period: April 2024 – September 2024**

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of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at <http://envfor.nic> and a copy of the same shall be forwarded to the Regional Office of this Ministry located Bhopal.

**Reply to Condition 18:** The information regarding environment clearance has been published in two local newspapers Hari Bhumi & Ambika Vani. The copy of same has been already submitted to your good office. News paper clip is enclosed in **Annexure I**.

**Condition-19:** The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

**Reply to Condition 19:** Noted.

**Condition-20:** Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

**Reply to Condition 20:** Noted.

**Condition-21:** The above conditions shall be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

**Reply to Condition:** Noted.

कार्यालय प्रधान मुख्य वन संरक्षक (वन्यप्राणी प्रबंधन एवं जैव विविधता  
संरक्षण सह मुख्य वन्यप्राणी अभिरक्षक), छत्तीसगढ़

अरण्य भवन, मेडिकल कॉलेज रोड, रायपुर

ईमेल - pccfwl@nic.com

टेलीफोन नं. 0771-2552228, फ़ैक्स नं. 0771-2552227

क्रमांक/व.प्रा./प्रबंध-12/13/2767

रायपुर दिनांक 07/10/2013

प्रति,

संचालक,  
इन्वायरनमेंट क्लीयरेंस सेल  
भारत सरकार, वन एवं पर्यावरण मंत्रालय,  
पर्यावरण भवन, सी.जी.ओ. काम्प्लेक्स,  
लोधी रोड, नई दिल्ली-111003

विषय :- छत्तीसगढ़ के बलरामपुर जिले (तत्कालीन सरगुजा जिला) में स्थित सामरी बॉक्साइट माईन्स, कुदाग बॉक्साइट माईन्स एवं टाटीझरिया बॉक्साइट माईन्स की क्षमता बढ़ाये हेतु इन्वायरनमेंट क्लीयरेंस।

- संदर्भ:-
1. पर्यावरण व वन मंत्रालय, भारत सरकार का पत्र क्रमांक J-11015/353/2007-IA.II(M) दिनांक 27 जुलाई 2007.
  2. पर्यावरण व वन मंत्रालय, भारत सरकार का पत्र क्रमांक J-11015/337/2007-IA.II(M) दिनांक 27 जुलाई 2007.
  3. पर्यावरण व वन मंत्रालय, भारत सरकार का पत्र क्रमांक J-11015/337/2007-IA.II(M) दिनांक 9 अगस्त 2007.

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कृपया आपके उपरोक्त संदर्भित पत्रों का अवलोकन करने का कष्ट करें। जिसके द्वारा बलरामपुर जिले (पुराने सरगुजा जिले) के सामरी बॉक्साइट खुली खदान (1 LTPA) की क्षमता बढ़ाकर (SLTPA) करने, कुदाग बॉक्साइट खदान (0.4 LTPA) की क्षमता बढ़ाकर (0.6 LTPA) करने तथा टाटीझरिया बॉक्साइट खदान (0.5 TPA) की क्षमता बढ़ाकर (4 TPA) करने के परियोजना प्रस्ताव के संबंध में वन्य प्राणी (संरक्षण) अधिनियम, 1972 के तहत अनुसूची-1 के वन्यप्राणियों हेतु "वन्य प्राणी संरक्षण व प्रबंधन योजना" तैयार की जाकर इस कार्यालय की सहमति दिये जाने का लेख किया है।

1. विषयांकित परियोजना हेतु खदान के लीज के अनुबंध दिसंबर 1996 एवं जून 1998 में हस्ताक्षरित हुये थे। सामरी क्षेत्र में भारत सरकार पर्यावरण व वन मंत्रालय के आदेश क्रमांक J-11015/353/2007-IA.II/M दिनांक 27 जुलाई, 2007 द्वारा 2146.746 हे. में, कुदाग क्षेत्र में भारत सरकार पर्यावरण व वन मंत्रालय आदेश क्रमांक J-11015/354/2007-IA.II/M दिनांक 27 जुलाई 2007 द्वारा 377.116 हे. में, तथा टाटीझरिया में भारत सरकार पर्यावरण व वन मंत्रालय के आदेश क्रमांक J-11015/337/2007-IA.II/M दिनांक 9 अगस्त 2007 द्वारा 1218.762 हे. में बॉक्साइट खनन की स्वीकृति प्राप्त कर संस्था द्वारा खनन का कार्य किया जा रहा है।



2. वर्तमान प्रस्ताव में उपरोक्त क्षेत्रों में वन्य प्राणी संरक्षण के लिए 10,000 TPA से बढ़ाकर 50,000 TPA किया जाना, कुदरत के लिए 0.1 TPA से बढ़ाकर 1 TPA किया जाना एवं ताली-प्रणियों के लिए 50,000 TPA से बढ़ाकर 4,00,000 TPA किया जाना प्रस्तावित है। भारत सरकार पर्यावरण व वन मंत्रालय के द्वारा उपरोक्त सूची में प्रस्तावित क्षेत्रों की स्वीकृति क्रमांक J-11015/353/2007-IA.II/M दिनांक 27 जुलाई 2007, J-11015/354/2007-IA.II/M दिनांक 27 जुलाई 2007 एवं J-11015/337/2007-IA.II/M दिनांक 9 अगस्त 2007 द्वारा कुछ शर्तों के साथ दी गई है, जिसमें एक महत्वपूर्ण शर्त यह भी उल्लेखित है कि संबंधित क्षेत्र में वन्य प्राणी (संरक्षण) अधिनियम के शेड्यूल 1 के पाये जाने वाले वन्य प्राणियों के संरक्षण हेतु प्रबंध योजना तैयार की जाकर राज्य के मुख्य वन्य जीव अभिरक्षक के अभिमत सहित प्रस्तुत किया जाये। जिसके पालन में संस्था द्वारा एक वन्य प्राणी संरक्षण योजना तैयार की गयी है।
3. खनन क्षमता बढ़ाने से संबंधित प्रस्तावित तीनों ही परियोजनाओं के एक दूसरे से 4 कि.मी. की परिधि में स्थित होने एवं सभी के बफर क्षेत्र ओवरलैपिंग होने के कारण सभी के लिये संयुक्त रूप से वन्य प्राणी संरक्षण व प्रबंधन योजना तैयार की जाकर महाप्रबंधक, (खादान), हिन्डालको इन्डस्ट्रीज के पत्र क्रमांक HIL/SAM/300/2013 दिनांक 2.03.2013 द्वारा प्रस्तुत किया गया है जिसका समग्र रूप से परीक्षण किया गया। प्रस्तावित परियोजनाओं के कोर क्षेत्र से 10 कि.मी. की परिधि में आने वाले ओवरलैपिंग बफर क्षेत्र में वन्य प्राणियों एवं उपलब्ध वनस्पतियों का सर्वे किया जाकर पाये गये स्पेसिज को परियोजना प्रस्ताव में अनेक्स्-4 के में उल्लेखित किया गया है।
4. उल्लेखित सूची में वन्य प्राणी (संरक्षण) अधिनियम के शेड्यूल 1 के वन्य प्राणी नहीं पाये गये हैं। परंतु इस कार्यालय द्वारा वन संरक्षक (वन्य प्राणी), सरगुजा से विगत दस वर्षों में वन्य प्राणियों द्वारा की गई क्षति की जानकारी चाही गयी। वन संरक्षक ने अपने पत्र क्रमांक 749 दिनांक 24.05.2012 से यह जानकारी उपलब्ध कराया है कि उक्त क्षेत्र में हाथियों का वर्ष 2005-में दो बार, वर्ष 2006 में आठ बार, 2007 में एक बार, 2008 में दो बार, 2009 में सात बार आना जाना हुआ है। इसी प्रकार भालुओं के द्वारा वर्ष 2007-08 में आठ, वर्ष 2008-09 में पाँच, वर्ष 2009-10 में छः एवं 2010-11 में 4 जनहानि व जनघायल के प्रकरण तथा वर्ष 2007-08 तथा 2008-09 में तेंदुआ द्वारा पशु हानि के दो प्रकरण तथा लकड़बग्घे के कारण एक प्रकरण दर्ज किये गये हैं। इस प्रकार वन्य प्राणी (संरक्षण) अधिनियम के शेड्यूल 1 के उपरोक्त उल्लेखित वन्य प्राणियों के परियोजना क्षेत्र में आने जाने के प्रमाण पाये गये हैं। प्रस्तावित क्षेत्र से 6 से 7 कि.मी.की दूरी पर झारखंड राज्य में भेड़िया अभ्यारण्य भी स्थापित है। अतः संस्था द्वारा दस वर्षों के लिये वन्य प्राणी संरक्षण व प्रबंध योजना श्री पी. के. सेन पूर्व वन्य प्राणी अभिरक्षक, झारखंड से तैयार कराया जाकर प्रस्तुत किया गया है। जिसका समग्र व विस्तृत अध्ययन किया गया। प्रबंधन योजना में प्रस्तावित प्रबंधन संबंधित मुख्य गतिविधियों का विवरण निम्नानुसार है।
5. योजना में वन्य प्राणियों के लिये जलग्रहण क्षेत्र विकास, रहवास-विकास, पेयजल व्यवस्था, विभाग के क्षेत्रीय अमले के सहयोग से क्षेत्र में पेट्रोलिंग व मॉनिटरिंग, अग्नि सुरक्षा, ईको विकास की गतिविधियों, स्थानीय ग्रामीणों के लिये आजीविका सृजन, टीकाकरण, जनजागृति कार्यक्रम जैसी गतिविधियों का



समावेश करते हुये 04 वर्षों के निम्नलिखित कार्य प्रस्तावित प्रकल्पान्तर्गत की गयी है। जिसका क्रियान्वयन वन विभाग के द्वारा किया जायेगा। प्रस्तावित पाठ्यक्रम का विवरण निम्नांकित है -

Sr. No.	Works to be done	Cost for four years (Rs. in lakhs)					Remarks
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	Total	
1	Plantation including soil and moisture Conservation works as per norms of forest department surrounding the lease hold	5.00	5.00	5.00	5.00	20.00	
2	Silvicultural Operation on degraded forest Land and cut back in rooted waste	2.00	2.00	2.00	2.00	8.00	
3	Habitat Management Eradication of unwanted species in buffer Zone area, Fire Protection work including wages for fire watchman, Creation of Fire line etc. surrounding lease hold and in buffer area.	2.50	2.50	2.50	2.50	10.00	
4	Monitoring - One Staff of forest department to monitor movement of wild life, encroachment, illicit cutting, poaching, fire etc. including Salary of 1 staff	3.00	3.00	3.00	3.00	12.00	
5	Construction of water holes, their maintenance and patrolling (One per Annum)	10.00	10.00	10.00	10.00	40.00	
6	Eco-development activities like poultry, piggery, bee keeping etc.	5.00	5.00	5.00	5.00	20.00	
7	Vocational Training to weaker section, females, old persons and minors of the surrounding villages in three centre in the buffer Zone of the mining lease @ 50000/- per centre.	3.00	3.00	3.00	3.00	12.00	
8	Veterinary camp for immunization of Cattle with the help of block veterinary staff.	2.00	2.00	2.00	2.00	8.00	
9	Awareness Programme including Signages, distribution of Pamphlets related to wild life conservation etc.	2.50	2.50	2.50	2.50	10.00	
10	Provision for conservation of Biodiversity among flora and fauna of the area & Preparation of Biodiversity register	20.00	0.00	0.00	0.00	20.00	The amount is to be deposited in the account of Biodiversity Board as this work is to be done by Biodiversity management committees (BMC's)
<b>Total</b>		<b>55.00</b>	<b>35.00</b>	<b>35.00</b>	<b>35.00</b>	<b>160.00</b>	

जमा की जायत रु. 160.00 लाख की अनुमानित है। परियोजना के कार्यान्वयन के समय जो भी लागत आयती है वह लागत के विभागीय बजट के हिस्से से वृद्धि होगी। परियोजना के कार्यान्वयन के समय जो भी लागत आयती है वह लागत के विभागीय बजट के हिस्से से वृद्धि होगी। जिससे मुख्य वृद्धि के प्रभाव को समाप्त किया जा सके। वन विभाग एकमुश्त जमा की गई राशि से वन्यप्राणी संरक्षण योजना विनियमित करेगा।

7. अनुमोदित वन्यप्राणी संरक्षण योजना की एक प्रति संलग्न प्रेषित है। कृपया वन्यप्राणी संरक्षण योजना में प्रावधानित राशि रु. 160.00 लाख एकमुश्त जमा कराने हेतु परियोजना प्रस्तावको को आदेशित करने का कष्ट करें।

संलग्न:-उपरोक्तानुसार।

*Aprakash*  
(रामप्रकाश) 01/11/13

प्रधान मुख्य वन संरक्षक (वन्यप्राणी)  
छत्तीसगढ़, रायपुर

रायपुर दिनांक 01/10/2013

पृष्ठां क्रमांक/व.प्रा./प्रबंध-12/13/2968.

प्रतिलिपि :-

1. प्रमुख सचिव, छत्तीसगढ़ शासन, वन विभाग, महानदी मंत्रालय भवन, नया रायपुर की ओर मय योजना की प्रति सहित सूचनार्थ प्रेषित।
2. श्री एम. के. नारयंक, जी. एम. माइन्स हिन्डालको इन्डस्ट्रीज लिमिटेड, सामरी बॉक्साईट माइन्स, पोस्ट-कुसमी, जिला-सरगुजा, छत्तीसगढ़ की ओर मय योजना की प्रति सहित सूचनार्थ प्रेषित।

*Aprakash*  
प्रधान मुख्य वन संरक्षक (वन्यप्राणी) 01/11/13  
छत्तीसगढ़, रायपुर

SAMRI BAUXITE MINE

Annexure - B

Annexure-6  
Details of Flora and Fauna



समावेश करते हुये 04 वर्षों के निम्नलिखित कार्य प्रस्तावित प्रबंधन की गयी है। जिसका क्रियान्वयन वन विभाग के द्वारा किया जायेगा। प्रस्तावित पाठ्यक्रम का विवरण निम्नांकित है -

Sr. No.	Works to be done	Cost for four years (Rs. in lakhs)					Remarks
		1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	Total	
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10	Provision for conservation of Biodiversity among flora and fauna of the area & Preparation of Biodiversity register	20.00	0.00	0.00	0.00	20.00	The amount is to be deposited in the account of Biodiversity Board as this work is to be done by Biodiversity management committees (BMC's)
<b>Total</b>		<b>55.00</b>	<b>35.00</b>	<b>35.00</b>	<b>35.00</b>	<b>160.00</b>	



**ANNEXURE-6  
DETAILS OF FLORA & FAUNA**

**TABLE-1  
DETAILS OF DOMINANT PLANT SPECIES IN MINE LEASE AREA (CORE ZONE)**

Name of the plant Species	Local Name	Family
<i>Butea monosperma</i>	Palas	Fabaceae
<i>Acacia Arabica</i>	Babul	Mimosaceae
<i>Leucena leucophloe</i>	Sabubal	Mimosaceae
<i>Mangifera indica</i>	Aam	Anacardiaceae
<i>Citrus lemon</i>	Nimbu	Rutaceae
<i>Emblica officinalis</i>	Amia	Euphorbiaceae
<i>Ficus hispida</i>	Jungli anjir	Moraceae
<i>Spondias cythera</i>	Kathjamun	Myrtaceae
<i>Terminalia catapa</i>	Badam	Combretaceae
<i>Apluda mutica</i>	Grass	Poaceae
<i>Chloris dolichosta</i>	Grass	Poaceae
<i>Dichanthium annulatum</i>	Grass	Poaceae
<i>Inpurta cylendrica</i>	Grass	Poaceae
<i>Themeda quadrivalvis</i>	Grass	Poaceae
<i>Aristida adscensionis</i>	Grass	Poaceae
<i>Eragrostis bifera</i>	Grass	Poaceae
<i>Eragrostis tenella</i>	Grass	Poaceae
<i>Setaria glauca</i>	Grass	Cyperaceae
<i>Thysanolaena maxima</i>	Grass	Graminae
<i>Parthenium hysterophorus</i>	Congress grass	Compositae
<i>Cassia tora</i>	-	Caesalpinaceae
<i>Delonix regia</i>	Kachnar	Caesalpinaceae
<i>Dalbergia Sissoo</i>	Sisoo	Caesalpinaceae

**TABLE-2  
FLORA/VEGETATION IN STUDY AREA (BUFFER ZONE)**

Sr. No.	Technical Name	Family	Life Form
<b>I. Agricultural Crops</b>			
1	<i>Hordium vulgare</i>	Poaceae	Hemicryptophyte
2	<i>Sorghum vulgare</i>	Poaceae	Hemicryptophyte
3	<i>Triticum vulgare</i>	Poaceae	Hemicryptophyte
4	<i>Zea mays</i>	Poaceae	Hemicryptophyte
5	<i>Oryza sativa</i>	Poaceae	Hemicryptophyte
6	<i>Pennisetum typhoideum</i>	Poaceae	Hemicryptophyte
<b>II. Commercial Crops (including Vegetables)</b>			
7	<i>Abelmoschus indicus</i>	Malvaceae	Therophyte
8	<i>Allium cepa</i>	Liliaceae	Geophyte
9	<i>Allium sativum</i>	Liliaceae	Geophyte
10	<i>Annona squamosa</i>	Annonaceae	Phanerophyte
11	<i>Arachis hypogea</i>	Fabaceae	Geophyte
12	<i>Catharanthes pusillus</i>	Compositae	Therophyte
13	<i>Cicer arietinum</i>	Fabaceae	Hemicryptophyte
14	<i>Citrus lemon</i>	Rutaceae	Therophyte
15	<i>Colocasia esculenta</i>	Araceae	Geophyte
16	<i>Coreandrum sativum</i>	Umbelliferae	Hemicryptophyte
17	<i>Daucus carota</i>	Umbelliferae	Geophyte
18	<i>Lycopersicum esculentus</i>	Solanaceae	Therophyte
19	<i>Mangifera indica</i>	Anacardiaceae	Phanerophyte
20	<i>Momordia charantia</i>	Cucurbitaceae	Therophyte
21	<i>Pisum sativum</i>	Fabaceae	Therophyte
22	<i>Psidium guava</i>	Myrtaceae	Phanerophyte
23	<i>Solanum tuberosum</i>	Solanaceae	Geophyte
24	<i>Litchi chinensis</i>	Sapindaceae	Phanerophyte
<b>III. Plantations</b>			
25	<i>Bauhinia cormbosa</i>	Caesalpinaceae	Phanerophyte
26	<i>Acacia nilotica</i>	Mimosaceae	Phanerophyte
27	<i>Albizia lebbeck</i>	Mimosaceae	Phanerophyte
28	<i>Albizia odorattissima</i>	Mimosaceae	Phanerophyte
29	<i>Albizia procera</i>	Mimosaceae	Phanerophyte



Sr. No.	Technical Name	Family	Life Form
30	<i>Azadirachta indica</i>	Meliaceae	
31	<i>Bauhinia variegata</i>	Caesalpinaceae	Phanerophyte
32	<i>Bauhinia purpuria</i>	Caesalpinaceae	Phanerophyte
33	<i>Bambusa arundanaceae</i>	Poaceae	Phanerophyte
34	<i>Butea monosperma</i>	Caesalpinaceae	Phanerophyte
35	<i>Butea frondosa</i>	Caesalpinaceae	Phanerophyte
36	<i>Eucalyptus sp</i>	Myrtaceae	Phanerophyte
37	<i>Delonix regia</i>	Caesalpinaceae	Phanerophyte
38	<i>Leucena leucophloe</i>	Caesalpinaceae	Phanerophyte
<b>IV. Natural Vegetation/Forest Type</b>			
39	<i>Abrus precatorius</i>	Fabaceae	
40	<i>Abutilon indicum</i>	Malvaceae	Therophyte
41	<i>Acacia Arabica</i>	Mimosaceae	Phanerophyte
42	<i>Acacia auriculiformis</i>	Mimosaceae	Phanerophyte
43	<i>Acacia catechu</i>	Mimosaceae	Phanerophyte
44	<i>Acacia intinsia</i>	Mimosaceae	Phanerophyte
45	<i>Acacia fernacea</i>	Mimosaceae	Phanerophyte
46	<i>Acacia leucophloe</i>	Mimosaceae	Phanerophyte
47	<i>Acalypha lanceolata</i>	Euphorbiaceae	Phanerophyte
48	<i>Acanthospermum hispidum</i>	Compositae	Therophyte
49	<i>Achyranthes aspera</i>	Amaranthaceae	Therophyte
50	<i>Adathoda vasica</i>	Acanthaceae	Therophyte
51	<i>Adina zordifolia</i>	Rubiaceae	Therophyte
52	<i>Aegle marmelos</i>	Rutaceae	Phanerophyte
53	<i>Aerva lanata</i>	Compositae	Phanerophyte
54	<i>Ageratum conyzoides</i>	Compositae	Therophyte
55	<i>Ailanthus excelsa</i>	Simaroubaceae	Phanerophyte
56	<i>Alangium salivus</i>	Alangiceae	Phanerophyte
57	<i>Albizia odoratissima</i>	Caesalpinaceae	Phanerophyte
58	<i>Albizia procera</i>	Caesalpinaceae	Phanerophyte
59	<i>Alstonia scholaris</i>	Apocyanaceae	Phanerophyte
60	<i>Alternanthera sessilis</i>	Amaranthaceae	Therophyte
61	<i>Alysicarpus hamosus</i>	Fabaceae	Therophyte
62	<i>Anogeissus latifolia</i>	Combretaceae	Phanerophyte
63	<i>Anogeissus serica</i>	Combretaceae	Phanerophyte
64	<i>Argemone mexicana</i>	Papevaraceae	Phanerophyte
65	<i>Azadirachta indica</i>	Meliaceae	Phanerophyte
66	<i>Barleria prionolites</i>	Acanthaceae	Phanerophyte
67	<i>Bidens biternata</i>	Compositae	Therophyte
68	<i>Blepharis asperima</i>	Acanthaceae	Therophyte
69	<i>Blepharis madaraspatens</i>	Acanthaceae	Phanerophyte
70	<i>Blumea lacera</i>	Compositae	Therophyte
71	<i>Boerheavia chinensis</i>	Nyctaginaceae	Therophyte
72	<i>Boerheavia diffusa</i>	Nyctaginaceae	Therophyte
73	<i>Bombax ceiba</i>	Bombacaceae	Therophyte
74	<i>Borreria hispida</i>	Rubiaceae	Phanerophyte
75	<i>Borreria stricta</i>	Rubiaceae	Therophyte
76	<i>Boswellia serrata</i>	Burseraceae	Therophyte
77	<i>Brassica campestris</i>	Cruciferae	Phanerophyte
78	<i>Bridelia retusa</i>	Euphorbiaceae	Therophyte
79	<i>Bridelia superba</i>	Euphorbiaceae	Phanerophyte
80	<i>Caesalpinia pulcherima</i>	Caesalpinaceae	Phanerophyte
81	<i>Calotropis procera</i>	Asclpiadaceae	Phanerophyte
82	<i>Canthium diddynam</i>	Rubiaceae	Phanerophyte
83	<i>Capparis aphylla</i>	Capparidaceae	Phanerophyte
84	<i>Capparis deciduas</i>	Capparidaceae	Therophyte
85	<i>Carissa carandus</i>	Apocyanaceae	Phanerophyte
86	<i>Carissa spinarium</i>	Apocyanaceae	Phanerophyte
87	<i>Casuarina graveolens</i>	Samydiaceae	Phanerophyte
88	<i>Cassia absus</i>	Caesalpinaceae	Phanerophyte
89	<i>Cassia absus</i>	Caesalpinaceae	Phanerophyte
90	<i>Cassia auriculata</i>	Caesalpinaceae	Therophyte
91	<i>Cassia occidentalis</i>	Caesalpinaceae	Therophyte
92	<i>Cassia tora</i>	Caesalpinaceae	Therophyte
93	<i>Cestrum diurnum</i>	Rubiaceae	Phanerophyte
94	<i>Cestrum nocturnum</i>	Rubiaceae	Therophyte



Sr. No.	Technical Name	Family	Life Form
95	<i>Chloris variegata</i>	Poaceae	Therophyte
96	<i>Cissus quadrangularis</i>	Vitaceae	Therophyte
97	<i>Citrus limon</i>	Rutaceae	Phanerophyte
98	<i>Cleome gynandra</i>	Capparidaceae	Therophyte
99	<i>Combretum ovalifolium</i>	Rubiaceae	Phanerophyte
100	<i>Cordia myxa</i>	Rubiaceae	Phanerophyte
101	<i>Crotalaria medicagenia</i>	Fabaceae	Therophyte
102	<i>Croton bonplandinum</i>	Amaryllidaceae	Therophyte
103	<i>Cuscuta reflexa</i>	Cuscutaceae	Epiphyte
104	<i>Datura fastulosa</i>	Solanaceae	Therophyte
105	<i>Datura metal</i>	Solanaceae	Therophyte
106	<i>Desmodium triflorum</i>	Asclepiadaceae	Therophyte
107	<i>Diospyros melanoxylon</i>	Lythraceae	Phanerophyte
108	<i>Diospyros Montana</i>	Lythraceae	Phanerophyte
109	<i>Echinops echinatus</i>	Compositae	Therophyte
110	<i>Eclipta prostrate</i>	Compositae	Hemicryptophyte
111	<i>Emblica officinale</i>	Euphorbiaceae	Phanerophyte
112	<i>Emilia lajerium</i>	Compositae	Hemicryptophyte
113	<i>Erythrina indica</i>	Papilionaceae	Phanerophyte
114	<i>Euphorbia geniculata</i>	Euphorbiaceae	Therophyte
115	<i>Euphorbia hirta</i>	Euphorbiaceae	Therophyte
116	<i>Euphorbia hypericifolia</i>	Euphorbiaceae	Therophyte
117	<i>Euphorbia neruri</i>	Euphorbiaceae	Therophyte
118	<i>Euphorbia nivula</i>	Euphorbiaceae	Therophyte
119	<i>Euphorbia piluliflora</i>	Euphorbiaceae	Hemicryptophyte
120	<i>Euphorbia tricauli</i>	Euphorbiaceae	Hemicryptophyte
121	<i>Evolvulus alsinoides</i>	Convolvulaceae	Therophyte
122	<i>Evolvulus numularis</i>	Convolvulaceae	Therophyte
123	<i>Feronia elephantum</i>	Rutaceae	Phanerophyte
124	<i>Ficus benghalensis</i>	Moraceae	Phanerophyte
125	<i>Ficus carica</i>	Moraceae	Phanerophyte
126	<i>Ficus glomerata</i>	Moraceae	Phanerophyte
127	<i>Ficus hispida</i>	Moraceae	Phanerophyte
128	<i>Ficus racemosus</i>	Moraceae	Phanerophyte
129	<i>Ficus religiosa</i>	Moraceae	Phanerophyte
130	<i>Ficus gibbosa</i>	Moraceae	Phanerophyte
131	<i>Gardenia latifolia</i>	Rubiaceae	Phanerophyte
132	<i>Gardenia lucida</i>	Rubiaceae	Phanerophyte
133	<i>Garuga pinnata</i>	Burseraceae	Phanerophyte
134	<i>Glossocardia boswellia</i>	Compositae	Hemicryptophyte
135	<i>Gmelina arborea</i>	Rubiaceae	Phanerophyte
136	<i>Gomphrena globosa</i>	Amaranthaceae	Therophyte
137	<i>Gossypium herbaceum</i>	Malvaceae	Therophyte
138	<i>Grewia abatifolia</i>	Tiliaceae	Phanerophyte
139	<i>Grewia salivifolia</i>	Tiliaceae	Phanerophyte
140	<i>Grewia subinaqualis</i>	Tiliaceae	Phanerophyte
141	<i>Gynandropis gynandra</i>	Capparidaceae	Hemicryptophyte
142	<i>Helictis isora</i>	Rubiaceae	Phanerophyte
143	<i>Heliotropium indicum</i>	Rubiaceae	Hemicryptophyte
144	<i>Heliotropium ovalifolium</i>	Rubiaceae	Hemicryptophyte
145	<i>Hemidesmus indicus</i>	Asclepiadaceae	Phanerophyte
146	<i>Hibiscus caesus</i>	Malvaceae	Hemicryptophyte
147	<i>Holarrhena antidycenterica</i>	Asclepiadaceae	Phanerophyte
148	<i>Holostemma annularia</i>	Asclepiadaceae	Phanerophyte
149	<i>Hygrophylla auriculata</i>	Acanthaceae	Hemicryptophyte
150	<i>Hyptis suavealens</i>	Labiatae	Therophyte
151	<i>Ichnocarpus frutens</i>	Poaceae	Hemicryptophyte
152	<i>Impatiens balsamania</i>	Balsaminaceae	Therophyte
153	<i>Indigofera hirsute</i>	Caesalpinaceae	Therophyte
154	<i>Indigofera limnacea</i>	Caesalpinaceae	Therophyte
155	<i>Indigofera tinctoria</i>	Caesalpinaceae	Therophyte
156	<i>Ipomea aquatica</i>	Convolvulaceae	Hydrophyte
157	<i>Ipomea coccinea</i>	Convolvulaceae	Therophyte
158	<i>Ipomea tuba</i>	Convolvulaceae	Hemicryptophyte
159	<i>Ixora arborea</i>	Rubiaceae	Phanerophyte
160	<i>Ixora parviflora</i>	Rubiaceae	Phanerophyte



Sr. No.	Technical Name	Family	Life Form
161	<i>Ixora singapuriens</i>	Rubiaceae	Phanerophyte
162	<i>Jasminum arbores</i>	Oleaceae	Phanerophyte
163	<i>Jatropha gossypifolia</i>	Euphorbiaceae	Therophyte
164	<i>Jussiaea suffruticosa</i>	Onagraceae	Hydrophyte
165	<i>Justia diffusa</i>	Acanthaceae	Therophyte
166	<i>Justicia diffusa</i>	Acanthaceae	Therophyte
167	<i>Lactuca punctata</i>	Compositae	Therophyte
168	<i>Lannea coramandalica</i>	Anacardiaceae	Phanerophyte
169	<i>Lannea grandis</i>	Anacardiaceae	Phanerophyte
170	<i>Lannea procumbens</i>	Anacardiaceae	Therophyte
171	<i>Lantana camara</i>	Verbinaceae	Phanerophyte
172	<i>Lawsonia inermis</i>	Lythraceae	Phanerophyte
173	<i>Lepidogathis cristata</i>	Acanthaceae	Therophyte
174	<i>Leptodenia reticulata</i>	Asclepiadaceae	Phanerophyte
175	<i>Leucas aspera</i>	Labiatae	Therophyte
176	<i>Leucas longifolia</i>	Labiatae	Therophyte
177	<i>Leucas longifolia</i>	Labiatae	Therophyte
178	<i>Leucena leucophloe</i>	Caesalpinaceae	Phanerophyte
179	<i>Linderbergia indica</i>	Scrophulariaceae	Therophyte
180	<i>Lindenbergia ciliate</i>	Scrophulariaceae	Therophyte
181	<i>Lophophora tridinatus</i>	Scrophulariaceae	Geophyte
182	<i>Luffa acutangularia</i>	Cucurbitaceae	Therophyte
183	<i>Lycopersicum esculentus</i>	Solanaceae	Therophyte
184	<i>Madhuca latifolia</i>	Sapotaceae	Phanerophyte
185	<i>Mallotus philippinus</i>	Euphorbiaceae	Phanerophyte
186	<i>Malvastrum coramandalicum</i>	Malvaceae	Therophyte
187	<i>Mangifera indica</i>	Anacardiaceae	Phanerophyte
188	<i>Marselia quadrifolia</i>	Marselliaceae	Phanerophyte
189	<i>Melia azadirachta</i>	Meliaceae	Phanerophyte
190	<i>Memordica diocea</i>	Cucurbitaceae	Therophyte
191	<i>Merremia emerginata</i>	Convolvulaceae	Therophyte
192	<i>Michaelia champaca</i>	Annonaceae	Phanerophyte
193	<i>Millingtonia hartenata</i>	Bignoniaceae	Phanerophyte
194	<i>Mimosa hamata</i>	Mimosaceae	Therophyte
195	<i>Mitragyna parviflora</i>	Rubiaceae	Phanerophyte
196	<i>Mollugo cerviana</i>	Aizoaceae	Therophyte
197	<i>Mollugo hirta</i>	Aizoaceae	Therophyte
198	<i>Moringa oleifera</i>	Moringaceae	Phanerophyte
199	<i>Morus alba</i>	Moraceae	Phanerophyte
200	<i>Mucuna prurita</i>	Papillionaceae	Hemicryptophyte
201	<i>Murraya exotica</i>	Rutaceae	Phanerophyte
202	<i>Murraya koenigii</i>	Rutaceae	Phanerophyte
203	<i>Musa paradisisca</i>	Musaceae	Therophyte
204	<i>Nymphia sp</i>	Magnoliaceae	Hydrophyte
205	<i>Ocimum americanum</i>	Labiatae	Therophyte
206	<i>Ocimum basilium</i>	Labiatae	Therophyte
207	<i>Ocimum canum</i>	Labiatae	Therophyte
208	<i>Ocimum sanctum</i>	Labiatae	Therophyte
209	<i>Oldenlandia umbellate</i>	Convolvulaceae	Therophyte
210	<i>Oldenlandia corymbosa</i>	Rubiaceae	Therophyte
211	<i>Oogeinia oojensis</i>	Papillionaceae	Phanerophyte
212	<i>Opuntia dillinii</i>	Opuntiaceae	Therophyte
213	<i>Opuntia elator</i>	Cacataceae	Therophyte
214	<i>Oxalis corniculata</i>	Oxalidaceae	Therophyte
215	<i>Panicum milliria</i>	Poaceae	Hemicryptophyte
216	<i>Panicum notatum</i>	Poaceae	Hemicryptophyte
217	<i>Papaver somniferum</i>	Papaveraceae	Hemicryptophyte
218	<i>Parkinsonia aculata</i>	Mimosaceae	Phanerophyte
219	<i>Parthenium hysterophorus</i>	Compositae	Therophyte
220	<i>Paspalum strobilanthus</i>	Passifloraceae	Hemicryptophyte
221	<i>Passiflora foetida</i>	Passifloraceae	Phanerophyte
222	<i>Pavonia zeylanica</i>	Malvaceae	Phanerophyte
223	<i>Peltophorum ferrusinum</i>	Caesalpinaceae	Phanerophyte
224	<i>Phoenix aculis</i>	Palmae	Phanerophyte
225	<i>Phyllanthus asperulatus</i>	Euphorbiaceae	Phanerophyte
226	<i>Phyllanthus emblica</i>	Euphorbiaceae	Phanerophyte



Sr. No.	Technical Name	Family	Life Form
227	<i>Phyllanthus niruri</i>	Euphorbiaceae	Therophyte
228	<i>Phyllanthus reticulatus</i>	Euphorbiaceae	Therophyte
229	<i>Physalis minima</i>	Solanaceae	Therophyte
230	<i>Pithecolobium dulce</i>	Mimosaceae	Phanerophyte
231	<i>Polyalthia longifolia</i>	Annonaceae	Phanerophyte
232	<i>Polygala ererptera</i>	Polygalaceae	Therophyte
233	<i>Pongamia pinnata</i>	Fabaceae	Phanerophyte
234	<i>Portulaca oleracea</i>	Portulacaceae	Therophyte
235	<i>Psidium guava</i>	Myrtaceae	Phanerophyte
236	<i>Punica granatum</i>	Puniaceae	Therophyte
237	<i>Randia dumetorum</i>	Rubiaceae	Phanerophyte
238	<i>Rosa indica</i>	Rosaceae	Therophyte
239	<i>Rosa machata</i>	Rosaceae	Therophyte
240	<i>Saccharum munja</i>	Poaceae	Hemicryptophyte
241	<i>Saccharum officinarum</i>	Poaceae	Therophyte
242	<i>Salmalia malabarica</i>	Salmaliaceae	Phanerophyte
243	<i>Sapindus emarginatus</i>	Sapindaceae	Phanerophyte
244	<i>Schleichera trijuga</i>	Combretaceae	Phanerophyte
245	<i>Scherebera swietenoides</i>	Sapindaceae	Phanerophyte
246	<i>Schleichera oleosa</i>	Sapindaceae	Phanerophyte
247	<i>Sesamum indicum</i>	Pedaliaceae	Hemicryptophyte
248	<i>Shorea robusta</i>	Dipterocarpaceae	Phanerophyte
249	<i>Sida orientalis</i>	Malvaceae	Phanerophyte
250	<i>Sida ornatifolia</i>	Malvaceae	Hemicryptophyte
251	<i>Solanum nigrum</i>	Solanaceae	Therophyte
252	<i>Solanum xanthocarpum</i>	Solanaceae	Therophyte
253	<i>Sterculia villosa</i>	Tiliaceae	Therophyte
254	<i>Stereospermum chelinoides</i>	Bignoniaceae	Phanerophyte
255	<i>Syzygium cumini</i>	Myrtaceae	Phanerophyte
256	<i>Tamarindus indica</i>	Caesalpinaceae	Phanerophyte
257	<i>Tecomella undulate</i>	Bignoniaceae	Therophyte
258	<i>Tectona grandis</i>	Verbinaceae	Phanerophyte
259	<i>Tephrosia purpuria</i>	Fabaceae	Therophyte
260	<i>Terminalia bellarica</i>	Combretaceae	Phanerophyte
261	<i>Terminalia chebula</i>	Combretaceae	Phanerophyte
262	<i>Terminalia tomentosa</i>	Combretaceae	Phanerophyte
263	<i>Thiospora cordifolia</i>	Rhamnaceae	Therophyte
264	<i>Tragus biflorus</i>	Poaceae	Hemicryptophyte
265	<i>Tribulus terrestris</i>	Zygophyllaceae	Therophyte
266	<i>Tridax procumbens</i>	Compositae	Therophyte
267	<i>Triumferta pilosa</i>	Tiliaceae	
268	<i>Vernonia cinera</i>	Compositae	Therophyte
269	<i>Vicoa indica</i>	Compositae	Phanerophyte
270	<i>Vitex Negundo</i>	Verbinaceae	Phanerophyte
271	<i>Vitex negundo</i>	Verbinaceae	Therophyte
272	<i>Vitis vermicifera</i>	Vitaceae	Therophyte
273	<i>Vivevera zizanoides</i>	Poaceae	Therophyte
274	<i>Wrightia tomentosa</i>	Apocyanaceae	Phanerophyte
275	<i>Xanthium strumariumk</i>	Compositae	Therophyte
276	<i>Yucca gloriosa</i>	Agavaceae	Therophyte
277	<i>Zizyphus jujube</i>	Rhamnaceae	Phanerophyte
278	<i>Zizyphus mauritiana</i>	Rhamanaceae	Phanerophyte
<b>V. Grasslands</b>			
279	<i>Apluda mutica</i>	Poaceae	Hemicryptophyte
280	<i>Chloris dolichosta</i>	Poaceae	Hemicryptophyte
281	<i>Cyanodactylon sp</i>	Poaceae	Geophyte
282	<i>Dichanthium annulatum</i>	Poaceae	Hemicryptophyte
283	<i>Inpurta cylendrica</i>	Poaceae	Hemicryptophyte
284	<i>Sachharum spontanseum</i>	Poaceae	Hemicryptophyte
285	<i>Themeda quadrivalvis</i>	Poaceae	Hemicryptophyte
286	<i>Aristida adscensionsis</i>	Poaceae	Hemicryptophyte
287	<i>Cenchrus ciliaris</i>	Poaceae	Therophyte
288	<i>Cenchrus setifera</i>	Poaceae	Therophyte
289	<i>Cymbopogon jwarancusa</i>	Cyperaceae	Hemicryptophyte
290	<i>Cyperus aristatus</i>	Cyperaceae	Therophyte
291	<i>Cyperus triceps</i>	Cyperaceae	Therophyte



Sr. No.	Technical Name	Family	Life Form
292	<i>Dactylectinium annualatum</i>	Poaceae	Therophyte
293	<i>Digetaria bicornis</i>	Poaceae	Hemicryptophyte
294	<i>Digetaria Segetaria</i>	Poaceae	Hemicryptophyte
295	<i>Eragrostis biferia</i>	Poaceae	Therophyte
296	<i>Eragrostis tenella</i>	Poaceae	Therophyte
297	<i>Ischaemum rugosum</i>	Poaceae	Hemicryptophyte
298	<i>Setaria glauca</i>	Cyperaceae	Hemicryptophyte
299	<i>Eulaliopsis binata</i>	Graminae	Hemicryptophyte
300	<i>Thysanolaena maxima</i>	Graminae	Hemicryptophyte
	<b>Endangered plants</b>	No endangered plant species observed during study period and also from records of Botanical Survey of India (Red data of Books of Indian Plants)	

**TABLE-3**  
**FAUNA AND THEIR CONSERVATION STATUS FROM MINE LEASE AREA (CORE ZONE)**

Technical Name	English Name/ Local Name	Wild Life Protection Act (1972) Status
<b>Aves</b>		
<i>Phalacrocorax niger</i>	Little cormorant	Sch-IV
<i>Nycticorax nycticorax</i>	Night heron	Sch-IV
<i>Ardeola grayii grayii</i>	Paddy bird	Sch-IV
<i>Bubulcus ibis coromandus</i>	Cattle egret	Sch-IV
<i>Eudynamys scolopacea</i>	Indian koel	Sch-IV
<i>Meops philippinus philippinus</i>	Bluetailed bee-eater	Sch-IV
<i>Dinopium benghalense tehminae</i>	Malabar golden backed Woodpecker	Sch-IV
<i>Acridotheres tristis tristis</i>	Common myna	Sch-IV
<i>Nectarinia minima</i>	Small sunbird	Sch-IV
<i>Passer domesticus indicus</i>	Indian house sparrow	Sch-IV
<b>Butterflies</b>		
<i>Hypolimnas bolina Lin.</i>	Great eggfly	-
<i>Euploea core Cramer</i>	Common crow	-
<i>Neptis hylas Moore</i>	Common sailor	-
<i>Eurema hecabe Lin.</i>	Common grass yellow	-
<i>Parantica aglea Stoll.</i>	Glassy tiger	-
<b>Mammals</b>		
<i>Funambulus palmarum</i>	Squirrel	Sch-IV
<i>Sus sucrofa</i>	Wild pig	Sch-III
<i>Herpestes edwardii</i>	Common mongoose	Sch-IV
<i>Vulpus benghalensis</i>	Wild fox	Sch-II
<i>Hystrix indica</i>	Porcupine	Sch-IV

**TABLE-4**  
**FAUNA AND THEIR CONSERVATION STATUS IN STUDY AREA (BUFFER ZONE)**

Technical Name	English Name/Local Name	Wild Life Protection Act (1972)
<b>Aves</b>		
<i>Phalacrocorax niger</i>	Little cormorant	Sch-IV
<i>Ardea purpurea manilensis</i>	Eastern purple heron	Sch-IV
<i>Nycticorax nycticorax</i>	Night heron	Sch-IV
<i>Ardeola grayii grayii</i>	Paddy bird	Sch-IV
<i>Dupetor flavicollis</i>	Black bittern	Sch-IV
<i>Ardea alba modesta</i>	Large egret	Sch-IV
<i>Bubulcus ibis coromandus</i>	Cattle egret	Sch-IV
<i>Milvus migrans govinda</i>	Common pariah kite	Sch-IV
<i>Haliastur indus indus</i>	Brahminy kite	Sch-IV
<i>Vanellus indicus indicus</i>	Redwattled lapwing	Sch-IV
<i>Tringa hypoleucos</i>	Common sandpiper	Sch-IV
<i>Gelochelidon nilotica nilotica</i>	Gullbilled tern	Sch-IV
<i>Eudynamys scolopacea</i>	Indian koel	Sch-IV
<i>Halcyon smyrnensis fusca</i>	Indian white breasted Kingfisher	Sch-IV
<i>Meops philippinus philippinus</i>	Bluetailed bee-eater	Sch-IV



Technical Name	English Name/Local Name	Wild Life Protection Act (1972)
<i>Coracias benghalensis indica</i>	Southern Indian Roller	Sch-IV
<i>Dinopium benghalense tehminae</i>	Malabar golden backed Woodpecker	Sch-IV
<i>Acridotheres tristis tristis</i>	Common myna	Sch-IV
<i>Corvus splendens protegatus</i>	Ceylon house crow	Sch-IV
<i>Nectarinia minima</i>	Small sunbird	Sch-IV
<i>Nectarenia. zeylonica sola</i>	Indian purple rumped sunbird	Sch-IV
<i>Arachnothera longirostris longirostris</i>	Little spinder hunter	Sch-IV
<i>Passer domesticus indicus</i>	Indian house sparrow	Sch-IV
<i>Copsychus saularis ceyonensis</i>	Southern magpie-robin	Sch-IV
<i>Orthotomus sutorius</i>	Tailor bird-guzurata	Sch-IV
<i>Pavocristatus</i>	Peacock	Part-III of Sch-I
<b>Amphibians</b>		
<i>Rana tigrana</i>	Common frog	Sch-IV
<i>Buto melanosticus</i>	Toad	Sch-IV
<b>Reptiles</b>		
<i>Calotes versicolor</i>	Lizard	Sch-IV
<i>Calotes versicolor</i>	Common garden lizard	Sch-IV
<i>Chamaleon zeylanicus</i>	Indian chamaeleon	Sch-II
<i>Lycodon spp.</i>	Wolf snake	Sch-III
<i>Boiga spp.</i>	Cat snake	Sch-III
<i>Bangarus spp.</i>	Krait	Sch-II
<i>Naja naja</i>	Indian cobra	Sch-III
<i>Vipera spp.</i>	Russels viper	Sch-III
<i>Phyton sp</i>	Python sp	Sch-I
<b>Butterflies</b>		
<i>Pachlopta hector Lin.</i>	Crimson rose	-
<i>Papilio demoleus Lin.</i>	Lime butterfly	-
<i>Graphium agamemnon Lin.</i>	Tailed jay	-
<i>Junonia almana Lin.</i>	Peacock pansy	-
<i>Hypolimnas bolina Lin.</i>	Great eggfly	-
<i>Euploea core Cramer</i>	Common crow	-
<i>Neptis hylas Moore</i>	Common-sailor	-
<i>Eurema hecabe Lin.</i>	Common grass yellow	-
<i>Catopsilia sp.</i>	Emigrant	-
<b>Mammals</b>		
<i>Rattus sp.</i>	Rat	Sch-IV
<i>Lepus nigricollis</i>	Hare	Sch-IV
<i>Canis auries</i>	Jackal	Sch-III
<i>Presbytis entellus</i>	Langur	Sch-II
<i>Presbytis phayrei</i>	Monkey	Sch-I
<i>Funambulus spp.</i>	Squirrel	Sch-IV
<i>Funambulus palmarum</i>	Squirrel	Sch-IV
<i>Sus sucrofa</i>	Wild pig	Sch-III
<i>Rattus norvegicus</i>	Field mouse	Sch-V
<i>Rattus rattus</i>	House rat	Sch-V
<i>Rhinolopus spp.</i>	Bat	Sch-V
<i>Hipposiderus spp.</i>	Bat	Sch-V
<i>Herpestes edwardii</i>	Common mongoose	Sch-IV
<i>Bandicota indica</i>	Bandicoot	Sch-V
<i>Bandicota bengalensis</i>	Bandicoot	Sch-V
<i>Vulpus benghalensis</i>	Wild fox	Sch-III
<i>Melsurus ursinus</i>	Bear	Sch-III
<i>Hystrix indica</i>	Porcupine	Sch-IV
<i>Axis axis</i>	Spotted deer	Sch-III
<i>Canis lupaspallipes</i>	Indian wolf	Part-I of Sch-I
<i>Mellivora capensis</i>	Indian Ratel	Part-I of Sch-I
<i>Elephas maximas</i>	Indian Elephant	Part-I of Sch-I
<i>Felis chaus</i>	Jungle cat	Part-II of sch-II
<i>Paradoxurus hermophroiditus</i>	Indian Small civet	Part-I of sch-I
<i>Muntiacus muntiacus</i>	Barking deer	Sch-III
<i>Macaca mulata</i>	Monkey	Part-I of Sch-I



## HINDALCO INDUSTRIES LIMITED

### Samri Mines Division

<b>Self Help Group (SHGs)</b>	
<b>No. of SHGs:</b>	<b>33</b>
<b>No of Beneficiaries:</b>	<b>330</b>
<b>No of group linked with bank:</b>	<b>17</b>
<b>Average Saving / Group – Rs.</b>	<b>Rs. 12,000/-</b>
<b>10,000/-Facility provided to groups:</b>	<b>Register, Passbook, Dari, Sewing Machine, Income Generation training and other exposure programme like linkages with bank and training with NRLM.</b>
<b>Groups engaged in income generation activities:</b>	<b>33</b>

**Unit: Hindalco Industries Limited, Samri Mines Division**

<b>SHGs Details</b>							
Sl. No	SHG Name	Village Name	District Name	No Of Members	A/C Details		Economic Activity Name
					Members Savings in Bank A/C	Bank Loan Received	
1	Gulmohar Self Help group	Amtahi	Balarampur	10	5000.00	-	Agriculture
2	Sitara Self Help Group	Amtahi	Balarampur	10	15500.00	250000.00	Stitching Centre
3	Chand Self Help Group	Amtahi	Balarampur	10	14600.00	350000.00	Stitching Centre
4	Muskan Self Help Group	Amtahi	Balarampur	10	11500.00	50000.00	Mid-day meal Program
5	Chameli Self Group	Nawatoli (Amtahi)	Balarampur	10	8900.00	-	Agriculture
6	Nirmala Self Help Group	Amtahi	Balarampur	10	9450.00	50000.00	Agriculture
7	Parwati Self Help Group	Amtahi	Balarampur	10	2500.00	-	Agriculture
8	Nigrani Self Group	Amtahi	Balarampur	10	7580.00	50000.00	Stitching Centre
9	Chandni Self Help Group	Amtahi	Balarampur	10	19850.00	-	Stitching Centre

10	Swajaldhara Self Help Group	Amtahi	Balarampur	10	11712.00	-	Agriculture
11	Savitri Self Help Group	Amtahi	Balarampur	10	12580.00	-	Agriculture
12	Indira Gandhi Self Help Group	Rajendrapur	Balarampur	10	12000.00	-	Agriculture
13	Sonam Self Help Group	Rajendrapur	Balarampur	10	1752.00	-	Agriculture
14	Basanti Self Help Group	Rajendrapur (Pakritoli)	Balarampur	12	22586.00	-	Agriculture
15	Saraswati Self Help Group	Dumerkholi	Balarampur	10	12600.00	-	Agriculture
16	Chameli Self Help Group	Kutku	Balarampur	10	8000.00	-	Agriculture
17	Champa Self Help Group	Kutku	Balarampur	10	11400.00	-	Agriculture
18	Genda Self Help Group	Tutvihar, Kutku	Balarampur	10	12470.00	-	Agriculture
19	Chandra Mukhi Self Help Group	Samri (West)	Balarampur	10	5000.00	-	Agriculture
20	Tetri Devi Self Help Group	Kutku	Balarampur	10	7500.00	-	Agriculture
21	Khusbu Self Help Group	Rajendrapur (Pakritoli)	Balarampur	10	7500.00	-	Agriculture
22	Nuri Self Help Group	Saraidih	Balarampur	10	9850.00	-	Agriculture
23	Shabnam Self Help Group	Saraidih	Balarampur	10	11000.00	-	Agriculture
24	Suhana Self Help Group	Saraidih	Balarampur	10	6000.00	-	
25	Rupa Self Self-Help Group	Saraidih	Balarampur	10	12500.00	-	Agriculture
26	Sushila Self Help Group	Banjutoli	Balarampur	10	11650.00	-	Agriculture
27	Chameli Self Help Group	Bata	Balarampur	10	20000.00	-	Agriculture
28	Chameli Self Help Group	Bata (Banjutoli)	Balarampur	10	21000.00	-	Agriculture

29	Punam Self Help Group	Balapani	Balarampur	10	19500.00	-	Agriculture
30	Gulab Self Help Group	Kudag	Balarampur	10	13134.00	-	Agriculture
31	Shubham Self Help Group	Balapani	Balarampur	10	6500.00	-	Agriculture
32	Chameli Self Help Group	Kudag	Balarampur	10	12000.00	-	Agriculture
33	Resham Self Help Group	Kudag	Balarampur	10	8000.00	-	Agriculture



**Annexure-D**

**HINDALCO INDUSTRIES LIMITED  
SAMRI MINES DIVISION**

**Year wise /lease wise Afforestation details**

<b>Year</b>	<b>Samri lease</b>	
	<b>No. of Saplings</b>	<b>Area in Ha</b>
1998-2017	167211	68.154
2017-18	11681	4.97
2018-19	19730	7.90
2019-20	34360	31.59
2020-21	36160	16.918
2021-22	47307	11.465
2022-23	36511	9.898
2023-24	31651	10.560
2024-25	27344	10.27
<b>Total</b>	<b>411955</b>	<b>171.725</b>

**HINDALCO INDUSTRIES LIMITED****Samri Mines Divison****Ground Water Level Data (April 2024 to September 2024)**

<b>Samri Mine Lease Piezometer Reading</b>		
<b>S No</b>	<b>Month</b>	<b>Depth (meter)</b>
1	Apr-24	27.4
2	May-24	28.1
3	Jun-24	27.8
4	Jul-24	26.5
5	Aug-24	25.9
6	Sep-24	26.2



**Anacon  
Laboratories**

**Anacon Laboratories Pvt. Ltd. Nagpur Lab**

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🌐 https://www.anaconlaboratories.com

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Dated 29.06.2024

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<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-3	<b>Purpose of analysis</b> Drinking
<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate	<b>Sampling Date:</b> 17.06.2024 <b>Sampling Time:</b> 10:45 AM	<b>Quantity Received</b> 5 Ltr
<b>Sample Category</b> Water		
<b>Tests required</b> Coliform, <i>Escherichia coli</i> , Alkalinity, Ammonia, Anionic surface active agents, Colour, Cyanide, Chloride, Calcium, Chloramines, Free residual chlorine, Fluoride, Magnesium, Nitrate, Odour, pH, Phenolic compounds, Sulphate, Sulphide, Taste, Total dissolved solids, Turbidity, Total hardness, Mineral Oil		

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>I</b>	<b>Biological Testing I. Water</b>					
1	Coliform	Per 100 ml	IS 15185 : 2016	Absent	Absent	Absent
2	<i>Escherichia coli</i>	Per 100 ml	IS 15185 : 2016	Absent	Absent	Absent
<b>II</b>	<b>Chemical Testing I. Water</b>					
3	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23) : 1986	200	600	87.5
4	Ammonia (as N)	mg/l	IS 3025 (Part 34) : 1988	0.5	No relaxation	BDL (DL - 0.1)
5	Anionic Detergents (as MBAS)	mg/l	IS 13428 : (Annex K) : 2005	0.2	1.0	BDL (DL - 0.01)
6	Colour	Hazen units	IS 3025 (Part 4) : 2021	5	15	NTU (DT 1)
7	Cyanide (as CN)	mg/l	IS 3025 (Part 27) : 2021	0.05	No relaxation	BDL (DL - 0.005)
8	Chloride (as Cl)	mg/l	IS 3025 (Part 32) : 1988	250	1000	15.89
9	Calcium (as Ca)	mg/l	IS 3025 (Part 40) : 1991	75	200	19.2
10	Chloramines (as Cl <sub>2</sub> )	mg/l	IS 3025 (Part 26) : 2021	4.0	No relaxation	BDL (DL - 0.1)
11	Free Residual Chlorine	mg/l	IS 3025 (Part 26) : 2021	0.2	1	BDL (DL - 0.1)
12	Fluoride (as F)	mg/l	IS 3025 (Part 60) : 2008	1.0	1.5	BDL (DL - 0.1)
13	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) : 1994	30	100	11.17
14	Nitrate (as NO <sub>3</sub> )	mg/l	APHA method 23rd edition: 2017	45	No relaxation	BDL (DL - 2)
15	Odour	-	IS 3025 (Part 5) : 2018	Agreeable	Agreeable	Agreeable
16	pH	-	IS 3025 (Part 11) : 2022	6.5 to 8.5	No relaxation	8.39 at 25°C
17	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	IS 3025 (Part 43) : 2022	0.001	0.002	BDL (DL - 0.001)
18	Sulphate (as SO <sub>4</sub> )	mg/l	IS 3025 (Part 24) : 2022	200	400	8.16
19	Taste	-	IS 3025 (Part 8) : 1984	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16) : 2023	500	2000	197
21	Turbidity	NTU	IS 3025 : (Part 10) : 2023	1	5	BDL (DL - 0.1)
22	Total hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part 21) : 2009	200	600	94
23	Sulphide (as H <sub>2</sub> S)	mg/l	IS 3025 (Part 29) : 2022	0.05	No relaxation	BDL (DL - 0.03)
24	Mineral Oil	mg/l	ANtr/7.2/RES/06	1	No relaxation	BDL (DL - 0.001)

☐ Please refer last Page for Note and Remarks.

Verified By

*Snehal Raut*

Snehal Raut  
Technical Manager

*Pradnya Pillewan*

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatories

*Pooja Kathape*

Pooja Kathape  
Technical Manager

*Dr. (Mrs.) S. D. Garway*

Dr. (Mrs.) S. D. Garway  
Quality Manager







Test Report

Test Report No.: ALPL/29062024/1-19

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	<b>Sample Category</b> Water	
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-3	<b>Purpose of analysis</b> Drinking
<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate		<b>Quantity Received</b> 5 Ltr
<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate		<b>Sampling Date:</b> 17.06.2024 <b>Sampling Time:</b> 10:45 AM
<b>Sampling Location</b> GNC Camp		
<b>Tests required</b> Arsenic, Aluminium, Barium, Boron, Copper, Cadmium, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Total Chromium, Zinc, Polychlorinated biphenyls		

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II Chemical Testing</b>						
<b>2. Residues In Water</b>						
25	Arsenic (as As)	mg/l	IS 3025 (Part 37) : 2022	0.01	No relaxation	BDL (DL - 0.01)
26	Aluminium (as Al)	mg/l	IS 3025 (Part 2) : 2019	0.03	0.2	BDL (DL-0.02)
27	Barium (as Ba)	mg/l	IS 3025 (Part 2) : 2019	0.7	No relaxation	BDL (DL-0.02)
28	Boron (as B)	mg/l	IS 3025 (Part 2) : 2019	0.5	2.4	BDL (DL-0.02)
29	Copper (as Cu)	mg/l	IS 3025 (Part 2) : 2019	0.05	1.5	BDL (DL-0.02)
30	Cadmium (as Cd)	mg/l	IS 3025 (Part 2) : 2019	0.003	No relaxation	BDL (DL - 0.002)
31	Iron (as Fe)	mg/l	IS 3025 (Part 2) : 2019	1.0	No relaxation	0.75
32	Lead (as Pb)	mg/l	IS 3025 (Part 2) : 2019	0.01	No relaxation	BDL (DL - 0.01)
33	Manganese (as Mn)	mg/l	IS 3025 (Part 2) : 2019	0.1	0.3	BDL (DL-0.02)
34	Mercury (as Hg)	mg/l	IS 3025 (Part 48) : 1994	0.001	No relaxation	BDL (DL - 0.001)
35	Molybdenum (as Mo)	mg/l	IS 3025 (Part 2) : 2019	0.07	No relaxation	BDL (DL - 0.02)
36	Nickel (as Ni)	mg/l	IS 3025 (Part 2) : 2019	0.02	No relaxation	BDL (DL - 0.01)
37	Selenium (as Se)	mg/l	IS 3025 (Part 56) : 2003	0.01	No relaxation	BDL (DL-0.01)
38	Silver (as Ag)	mg/l	IS 13428 (Annex J) : 2005	0.1	No relaxation	BDL (DL-0.01)
39	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2) : 2019	0.05	No relaxation	BDL (DL - 0.02)
40	Zinc (as Zn)	mg/l	IS 3025 (Part 2) : 2019	5	15	0.10
<b>II 2. Residues In Water</b>						
41	Polychlorinated biphenyls					
	2,2',5-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018	0.5	No relaxation	BDL (DL - 0.03)
	2,4,4'-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',5,5'-tetrachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',4,5'-pentachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',3,4,4',5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',4,4',5,5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',3,4,4',5,5'-heptachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)

☐ Please refer last Page for Note and Remarks.

Verified By

*Pradnya Pillewan*  
Pradnya Pillewan  
Dy Technical Manager

*Nidhi Dubey*  
Nidhi Dubey  
Dy Technical Manager

Authorized Signatory

*S. D. Garway*  
Dr. (Mrs.) S. D. Garway  
Quality Manager





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	<b>Sample Category</b> Water	
	<b>Sample Name</b> Water <b>Sample Particulars / Details</b> GW-3 <b>Purpose of analysis</b> Drinking <b>Quantity Received</b> 5 Ltr	<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate <b>Sampling Date:</b> 17.06.2024 <b>Sampling Time:</b> 10:45 AM <b>Sampling Location</b> GNC Camp

Tests required : Polynuclear aromatic hydrocarbons, Trihalomethanes

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II</b>	<b>2. Residues In Water</b>					
42	Polynuclear aromatic hydrocarbons					
	Naphthalene	µg/l	ANtr/7.2/RES/03: 2018	0.1	No relaxation	BDL (DL - 0.03)
	Acenaphthylene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Acenaphthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Fluorene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Anthracene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Phenanthrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Fluoranthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Pyrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(a)anthracene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Chrysene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(a)pyrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(b)fluoranthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(k)fluoranthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Indeno(1,2,3-cd)pyrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Dibenzo(a,h)anthracene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(ghi)perylene	µg/l	ANtr/7.2/RES/03: 2018	BDL (DL - 0.03)		
43	Trihalomethanes					
i	Bromoform	mg/l	ANtr/7.2/RES/05: 2018	0.1	No relaxation	BDL (DL -0.05)
ii	Dibromochloromethane	mg/l		0.1	No relaxation	BDL (DL -0.05)
iii	Bromodichloromethane	mg/l		0.06	No relaxation	BDL (DL -0.05)
iv	Chloroform	mg/l		0.2	No relaxation	BDL (DL -0.05)

Please refer last Page for Note and Remarks.

Verified By

*Pradya Pillewan*  
 Pradya Pillewan  
 Dy Technical Manager

Authorized Signatory

*S. D. Garway*  
 Dr. (Mrs.) S. D. Garway  
 Quality Manager







*Test Report*

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		<b>Inward Date</b> 21.06.2024	<b>Analysis End</b> 29.06.2024
		<b>Reference</b> 13562310264; 17.05.2024	<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-3	<b>Purpose of analysis</b> Drinking	<b>Quantity Received</b> 5 Ltr
<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate		<b>Sampling Date:</b> 17.06.2024	<b>Sampling Location</b> GNC Camp
		<b>Sampling Time:</b> 10:45 AM	
<b>Tests required - Pesticide Residues Organochlorine</b>			

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
44	Pesticide Residues Organochlorine					
1	Alpha-HCH	µg/l	ANtr/7.2/RES/01: 2018	0.01	No relaxation	BDL (DL - 0.01)
	Beta HCH	µg/l	ANtr/7.2/RES/01: 2018	0.04	No relaxation	BDL (DL - 0.03)
	Delta- HCH	µg/l	ANtr/7.2/RES/01: 2018	0.04	No relaxation	BDL (DL - 0.03)
2	Gamma - HCH (Lindane)	µg/l	ANtr/7.2/RES/01: 2018	2	No relaxation	BDL (DL - 0.03)
3	Alachlor	µg/l	ANtr/7.2/RES/01: 2018	20	No relaxation	BDL (DL - 0.03)
4	Aldrin	µg/l	ANtr/7.2/RES/01: 2018	0.03	No relaxation	BDL (DL - 0.03)
	Dieldrin	µg/l	ANtr/7.2/RES/01: 2018	0.03	No relaxation	BDL (DL - 0.03)
5	Butachlor	µg/l	ANtr/7.2/RES/01: 2018	125	No relaxation	BDL (DL - 0.03)
6	p,p'-DDE, o,p'-DDE, p,p'-DDD, o,p'-DDD, o,p'- DDT, p,p'- DDT	µg/l	ANtr/7.2/RES/01: 2018	1	No relaxation	BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
7	Atrazine	µg/l	ANtr/7.2/RES/01: 2018	2	No relaxation	BDL (DL - 0.03)
8	2,4-Dichlorophenoxyacetic acid	µg/l	ANtr/7.2/RES/02: 2018	30	No relaxation	BDL (DL - 0.03)
9	Endosulphan					
	Alpha-Endosulphan	µg/l	ANtr/7.2/RES/01: 2018	0.4	No relaxation	BDL (DL - 0.03)
	Beta-Endosulphan					
	Endosulphan sulphate					

Please refer last Page for Note and Remarks.

Verified By

*Pradya*  
Pradya Pillewan  
Dy Technical Manager

Authorized Signatory

*S. D. Garway*  
Dr. (Mrs.) S. D. Garway  
Quality Manager







Test Report

Test Report No.: ALPL/29062024/1-19

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Dist.: Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-3 <b>Inward Date</b> 21.06.2024 <b>Reference</b> 13562310264; 17.05.2024	<b>Analysis Start</b> 25.06.2024 <b>Analysis End</b> 29.06.2024	
	<b>Sample Category</b> Water		
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-3	<b>Purpose of analysis</b> Drinking	<b>Quantity Received</b> 5 Ltr
<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate		<b>Sampling Date:</b> 17.06.2024 <b>Sampling Time:</b> 10:45 AM	<b>Sampling Location</b> GNC Camp
<b>Tests required - Pesticide Residues Organophosphorus</b>			

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
45	Pesticide Residues Organophosphorus					
10	Isoproturon	µg/l	ANtr/7.2/RES/02: 2018	9	No relaxation	BDL (DL - 0.03)
11	Monocrotophos	µg/l	ANtr/7.2/RES/01: 2018	1	No relaxation	BDL (DL - 0.03)
12	Parathion methyl	µg/l	ANtr/7.2/RES/01: 2018	0.3	No relaxation	BDL (DL - 0.03)
	Paraoxon methyl	µg/l	ANtr/7.2/RES/01: 2018	-	-	BDL (DL - 0.03)
13	Malathion	µg/l	ANtr/7.2/RES/01: 2018	190	No relaxation	BDL (DL - 0.03)
	Malaoxon	µg/l	ANtr/7.2/RES/01: 2018	-	-	BDL (DL - 0.03)
14	Ethion	µg/l	ANtr/7.2/RES/01: 2018	3	No relaxation	BDL (DL - 0.03)
15	Chlorpyrifos	µg/l	ANtr/7.2/RES/01: 2018	30	No relaxation	BDL (DL - 0.03)
16	Phorate	µg/l	ANtr/7.2/RES/01: 2018	2	No relaxation	BDL (DL - 0.03)
	Phorate-sulfone					
	Phorate-sulfoxide					

**NOTE:** • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • Liability of Anacon Labs is limited to invoiced amount only. • Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. • #Permissible limit in absence of an alternate source for drinking water. • "mg/l" is equivalent to "ppm". • "µg/l" is equivalent to "ppb". • BDL- Below detection limit. • DL- DL Indicates detection limit of instrument /method and shall be considered as 'absent'. • ANtr/7.2/RES/02: 2018, ANtr/7.2/RES-Isorg/07 & ANtr/7.2/RES-06: Inhouse validated method • BDL- Below detection limit. • DL- DL Indicates detection limit of instrument /method and shall be considered as 'absent'.

**REMARKS:** As requested by the client, sample was tested for above parameters only. The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By

Pradnya Pillewan  
 Dy Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
 Quality Manager

-----END OF REPORT-----





Test Report

Test Report No.: ALPL/29062024/1-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindaleo Industries Limited Samari Bauxite Mines, P.O. Kusmi, Distt.: Balrampur (C.G.) - 497 222.		<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-4	<b>Analysis Start</b> 25.06.2024
		<b>Inward Date</b> 21.06.2024	<b>Analysis End</b> 29.06.2024
		<b>Reference</b> 13562310264; 17.05.2024	<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-4	<b>Purpose of analysis</b> Drinking	<b>Quantity Received</b> 5 Ltr
<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate		<b>Sampling Date:</b> 17.06.2024	<b>Sampling Location</b> Water ATM Outlet
		<b>Sampling Time:</b> 11:40 AM	
<b>Tests required</b> Coliform, <i>Escherichia coli</i> , Alkalinity, Ammonia, Anionic surface active agents, Colour, Cyanide, Chloride, Calcium, Chloramines, Free residual chlorine, Fluoride, Magnesium, Nitrate, Odour, pH, Phenolic compounds, Sulphate, Sulphide, Taste, Total dissolved solids, Turbidity, Total hardness, Mineral Oil.			

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>I Biological Testing I. Water</b>						
1	Coliform	Per 100 ml	IS 15185 : 2016	Absent	Absent	Absent
2	<i>Escherichia coli</i>	Per 100 ml	IS 15185 : 2016	Absent	Absent	Absent
<b>II Chemical Testing I. Water</b>						
3	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23) : 1986	200	600	56.25
4	Ammonia (as N)	mg/l	IS 3025 (Part 34) : 1988	0.5	No relaxation	BDL (DL - 0.1)
5	Anionic Detergents (as MBAS)	mg/l	IS 13428 : (Annex K) : 2005	0.2	1.0	BDL (DL - 0.01)
6	Colour	Hazen units	IS 3025 (Part 4) : 2021	5	15	BDL (DL - 1)
7	Cyanide (as CN)	mg/l	IS 3025 (Part 27) : 2021	0.05	No relaxation	BDL (DL - 0.005)
8	Chloride (as Cl)	mg/l	IS 3025 (Part 32) : 1988	250	1000	13.80
9	Calcium (as Ca)	mg/l	IS 3025 (Part 40) : 1991	75	200	12.8
10	Chloramines (as Cl <sub>2</sub> )	mg/l	IS 3025 (Part 26) : 2021	4.0	No relaxation	BDL (DL - 0.1)
11	Free Residual Chlorine	mg/l	IS 3025 (Part 26) : 2021	0.2	1	BDL (DL - 0.1)
12	Fluoride (as F)	mg/l	IS 3025 (Part 60) : 2008	1.0	1.5	BDL (DL - 0.1)
13	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) : 1994	30	100	7.77
14	Nitrate (as NO <sub>3</sub> )	mg/l	APHA method 23rd edition: 2017	45	No relaxation	BDL (DL - 2)
15	Odour	-	IS 3025 (Part 5) : 2018	Agreeable	Agreeable	Agreeable
16	pH	-	IS 3025 (Part 11) : 2022	6.5 to 8.5	No relaxation	8.48 at 25°C
17	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	IS 3025 (Part 43) : 2022	0.001	0.002	BDL (DL - 0.001)
18	Sulphate (as SO <sub>4</sub> )	mg/l	IS 3025 (Part 24) : 2022	200	400	2.56
19	Taste	-	IS 3025 (Part 8) : 1984	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16) : 2023	500	2000	153
21	Turbidity	NTU	IS 3025 : (Part 10) : 2023	1	5	11.11 (DL - 0.1)
22	Total hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part 21) : 2009	200	600	64
23	Sulphide (as H <sub>2</sub> S)	mg/l	IS 3025 (Part 29) : 2022	0.05	No relaxation	BDL (DL - 0.03)
24	Mineral Oil	mg/l	ANr/7.2/RES/06	1	No relaxation	BDL (DL - 0.001)

Please refer last Page for Note and Remarks.

Verified By

Authorized Signatories

*for Anil*  
Snehal Raut  
Technical Manager

*Pradya*  
Pradya Pillewan  
Dy Technical Manager

*Pooja*  
Pooja Kathane  
Technical Manager

*Dr. (Mrs.) S. D. Garway*  
Dr. (Mrs.) S. D. Garway  
Quality Manager







Test Report

Test Report No.: ALPL/29062024/1-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindaleo Industries Limited Samari Bauxite Mines, P.O. Kusmi, Dist.: Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-4 <b>Inward Date</b> 21.06.2024 <b>Reference</b> 13562310264; 17.05.2024	<b>Analysis Start</b> 25.06.2024 <b>Analysis End</b> 29.06.2024
	<b>Sample Category</b> Water	
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-4	<b>Purpose of analysis</b> Drinking
<b>Sample Collected By</b> Anacon representative Mr. Atul Sapate		<b>Quantity Received</b> 5 Ltr
<b>Sampling Date:</b> 17.06.2024 <b>Sampling Time:</b> 11:40 AM		<b>Sampling Location</b> Water ATM Outlet
<b>Tests required</b> Arsenic, Aluminium, Barium, Boron, Copper, Cadmium, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, Total Chromium, Zinc, Polychlorinated biphenyls		

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II Chemical Testing</b>						
<b>2. Residues In Water</b>						
25	Arsenic (as As)	mg/l	IS 3025 (Part 37) : 2022	0.01	No relaxation	BDL (DL - 0.01)
26	Aluminium (as Al)	mg/l	IS 3025 (Part 2) : 2019	0.03	0.2	BDL (DL-0.02)
27	Barium (as Ba)	mg/l	IS 3025 (Part 2) : 2019	0.7	No relaxation	BDL (DL-0.02)
28	Boron (as B)	mg/l	IS 3025 (Part 2) : 2019	0.5	2.4	BDL (DL-0.02)
29	Copper (as Cu)	mg/l	IS 3025 (Part 2) : 2019	0.05	1.5	BDL (DL-0.02)
30	Cadmium (as Cd)	mg/l	IS 3025 (Part 2) : 2019	0.003	No relaxation	BDL (DL - 0.002)
31	Iron (as Fe)	mg/l	IS 3025 (Part 2) : 2019	1.0	No relaxation	0.24
32	Lead (as Pb)	mg/l	IS 3025 (Part 2) : 2019	0.01	No relaxation	BDL (DL - 0.01)
33	Manganese (as Mn)	mg/l	IS 3025 (Part 2) : 2019	0.1	0.3	BDL (DL-0.02)
34	Mercury (as Hg)	mg/l	IS 3025 (Part 4B) : 1994	0.001	No relaxation	BDL (DL - 0.001)
35	Molybdenum (as Mo)	mg/l	IS 3025 (Part 2) : 2019	0.07	No relaxation	BDL (DL - 0.02)
36	Nickel (as Ni)	mg/l	IS 3025 (Part 2) : 2019	0.02	No relaxation	BDL (DL - 0.01)
37	Selenium (as Se)	mg/l	IS 3025 (Part 56) : 2003	0.01	No relaxation	BDL (DL-0.01)
38	Silver (as Ag)	mg/l	IS 13428 (Annex J) : 2005	0.1	No relaxation	BDL (DL-0.01)
39	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2) : 2019	0.05	No relaxation	BDL (DL - 0.02)
40	Zinc (as Zn)	mg/l	IS 3025 (Part 2) : 2019	5	15	0.10
<b>II 2. Residues In Water</b>						
41	Polychlorinated biphenyls					
	2,2',5-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018	0.5	No relaxation	BDL (DL - 0.03)
	2,4,4'-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',5,5'-tetrachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',4,5,5'-pentachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',3,4,4',5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',4,4',5,5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)
	2,2',3,4,4',5,5'-heptachlorobiphenyl	µg/l	ANtr/7.2/RES/04: 2018			BDL (DL - 0.03)

Please refer last Page for Note and Remarks.

Verified By

Pradnya Pillewan  
Dy Technical Manager

Nidhi Dubey  
Dy Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
Quality Manager





Test Report

Test Report No.: ALPL/29062024/1-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Dist.:Bairampur (C.G.) - 497 222.	<b>Sample Inward No.</b>	ALPL/21062024/MON-EW-1/6-4	<b>Analysis Start</b>	25.06.2024
	<b>Inward Date</b>	21.06.2024	<b>Analysis End</b>	29.06.2024
	<b>Reference</b>	13562310264; 17.05.2024	<b>Sample Category</b>	Water
<b>Sample Name</b>	<b>Sample Particulars / Details</b>		<b>Purpose of analysis</b>	<b>Quantity Received</b>
Water	GW-4		Drinking	5 Ltr
<b>Sample Collected By</b>		<b>Sampling Date:</b>	<b>Sampling Location</b>	
Anacon representative Mr. Atul Sapate		17.06.2024	Water ATM Outlet	
		<b>Sampling Time:</b>		
		11:40 AM		

Tests required : Polynuclear aromatic hydrocarbons, Trihalomethanes

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II</b>	<b>2. Residues In Water</b>					
42	Polynuclear aromatic hydrocarbons					
	Naphthalene	µg/l	ANtr/7.2/RES/03: 2018	0.1	No relaxation	BDL (DL - 0.03)
	Acenaphthylene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Acenaphthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Fluorene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Anthracene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Phenanthrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Fluoranthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Pyrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(a)anthracene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Chrysene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(a)pyrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(b)fluoranthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(k)fluoranthene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Indeno(1,23,cd)pyrene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Dibenzo(a,h)anthracene	µg/l	ANtr/7.2/RES/03: 2018			BDL (DL - 0.03)
	Benzo(ghi)perylene	µg/l	ANtr/7.2/RES/03: 2018	BDL (DL - 0.03)		
43	Trihalomethanes					
i	Bromoform	mg/l	ANtr/7.2/RES/05: 2018	0.1	No relaxation	BDL (DL -0.05)
ii	Dibromochloromethane	mg/l		0.1	No relaxation	BDL (DL -0.05)
iii	Bromodichloromethane	mg/l		0.06	No relaxation	BDL (DL -0.05)
iv	Chloroform	mg/l		0.2	No relaxation	BDL (DL -0.05)

Please refer last Page for Note and Remarks.

Verified By

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
Quality Manager







Test Report

Test Report No.: ALPL/29062024/1-20

Dated 29.06.2024

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<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Samari Bauxite Mines, P.O. Kusmi, Dist.: Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-4 <b>Inward Date</b> 21.06.2024 <b>Reference</b> 13562310264; 17.05.2024	<b>Analysis Start</b> 25.06.2024 <b>Analysis End</b> 29.06.2024 <b>Sample Category</b> Water
	<b>Sample Name</b> Water <b>Sample Particulars / Details</b> GW-4 <b>Purpose of analysis</b> Drinking <b>Quantity Received</b> 5 Ltr	<b>Sample Collected By</b> Anacon representative Mr. Atul Sagate <b>Sampling Date:</b> 17.06.2024 <b>Sampling Time:</b> 11:40 AM <b>Sampling Location</b> Water ATM Outlet

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
44	Pesticide Residues Organochlorine					
1	Alpha-HCH	µg/l	ANtr/7.2/RES/01: 2018	0.01	No relaxation	BDL (DL - 0.01)
	Beta HCH	µg/l	ANtr/7.2/RES/01: 2018	0.04	No relaxation	BDL (DL - 0.03)
	Delta- HCH	µg/l	ANtr/7.2/RES/01: 2018	0.04	No relaxation	BDL (DL - 0.03)
2	Gamma - HCH (Lindane)	µg/l	ANtr/7.2/RES/01: 2018	2	No relaxation	BDL (DL - 0.03)
3	Alachlor	µg/l	ANtr/7.2/RES/01: 2018	20	No relaxation	BDL (DL - 0.03)
4	Aldrin	µg/l	ANtr/7.2/RES/01: 2018	0.03	No relaxation	BDL (DL - 0.03)
	Dieldrin	µg/l	ANtr/7.2/RES/01: 2018	0.03	No relaxation	BDL (DL - 0.03)
5	Butachlor	µg/l	ANtr/7.2/RES/01: 2018	125	No relaxation	BDL (DL - 0.03)
6	p,p'-DDE, o,p'-DDE, p,p'-DDD, o,p'-DDD, o,p'- DDT, p,p'- DDT	µg/l	ANtr/7.2/RES/01: 2018	1	No relaxation	BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
		µg/l	ANtr/7.2/RES/01: 2018			BDL (DL - 0.03)
7	Atrazine	µg/l	ANtr/7.2/RES/01: 2018	2	No relaxation	BDL (DL - 0.03)
8	2,4-Dichlorophenoxyacetic acid	µg/l	ANtr/7.2/RES/02: 2018	30	No relaxation	BDL (DL - 0.03)
9	Endosulphan					
	Alpha-Endosulphan	µg/l	ANtr/7.2/RES/01: 2018	0.4	No relaxation	BDL (DL - 0.03)
	Beta-Endosulphan					
	Endosulphan sulphate					

Please refer last Page for Note and Remarks.

Verified By

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
Quality Manager





Test Report

Test Report No.: ALPL/29062024/1-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Distt:-Bilaspur (C.G.) - 497 222.	<b>Sample Inward No.</b>	ALPL/21062024/MON-EW-1/6-4	<b>Analysis Start</b>	25.06.2024
	<b>Inward Date</b>	21.06.2024	<b>Analysis End</b>	29.06.2024
	<b>Reference</b>	13562310264; 17.05.2024	<b>Sample Category</b>	Water
<b>Sample Name</b>	<b>Sample Particulars / Details</b>		<b>Purpose of analysis</b>	<b>Quantity Received</b>
Water	GW-4		Drinking	5 Ltr
<b>Sample Collected By</b>		<b>Sampling Date:</b>	<b>Sampling Location</b>	
Anacon representative Mr. Atul Sagote		17.06.2024	Water ATM Outlet	
		<b>Sampling Time:</b>		
		11:40 AM		

Tests required - Pesticide Residues Organophosphorus

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
45	Pesticide Residues Organophosphorus					
10	Isoproturon	µg/l	ANtr/7.2/RES/02: 2018	9	No relaxation	BDL (DL - 0.03)
11	Monocrotophos	µg/l	ANtr/7.2/RES/01: 2018	1	No relaxation	BDL (DL - 0.03)
12	Parathion methyl	µg/l	ANtr/7.2/RES/01: 2018	0.3	No relaxation	BDL (DL - 0.03)
	Paraoxon methyl	µg/l	ANtr/7.2/RES/01: 2018	-	-	BDL (DL - 0.03)
13	Malathion	µg/l	ANtr/7.2/RES/01: 2018	190	No relaxation	BDL (DL - 0.03)
	Malaoxon	µg/l	ANtr/7.2/RES/01: 2018	-	-	BDL (DL - 0.03)
14	Ethion	µg/l	ANtr/7.2/RES/01: 2018	3	No relaxation	BDL (DL - 0.03)
15	Chlorpyrifos	µg/l	ANtr/7.2/RES/01: 2018	30	No relaxation	BDL (DL - 0.03)
16	Phorate	µg/l	ANtr/7.2/RES/01: 2018	2	No relaxation	BDL (DL - 0.03)
	Phorate-sulfone					
	Phorate-sulfoxide					

**NOTE:** ● Please see watermark "Original Test Report" to confirm the authenticity of this report ● Results shall be referred to tested sample(s) and applicable to tested parameters only.  
 ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● Permissible limit is absence of an alternate source for drinking water. ● "mg/l" is equivalent to "ppm". ● "µg/l" is equivalent to "ppb". ● BDL- Below detection limit. ● DL- DL. Indicates detection limit of instrument /method and shall be considered as "absent". ● ANtr/7.2/RES/02: 2018, ANtr/7.2/RES-Isog/07 & ANtr/7.2/RES-06: Inhouse validated method ● BDL- Below detection limit.  
 ● DL- DL. Indicates detection limit of instrument /method and shall be considered as "absent".

**REMARKS:** As requested by the client, sample was tested for above parameters only. The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By

Pradnya Nilkewan  
Dy Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
Quality Manager

-----END OF REPORT-----







*Test Report*

Test Report No.: ALPL/30092024/1-22

Dated 30/09/2024

Page 1 of 5

<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-1	<b>Analysis Start</b> 23/09/2024
		<b>Inward Date</b> 23/09/2024	<b>Analysis End</b> 30/09/2024
		<b>Reference</b> 13562310264; 17.05.2024	<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-1	<b>Purpose of analysis</b> Drinking	<b>Quantity Received</b> 5 Lit
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Sampling Date:</b> 20/09/2024 <b>Sampling Time:</b> 2:35 am	<b>Sampling Location</b> GNC Camp
<b>Tests required</b> Coliform, <i>Escherichia coli</i> , Alkalinity, Ammonia, Anionic surface active agents, Colour, Cyanide, Chloride, Calcium, Chloramines, Free residual chlorine, Fluoride, Magnesium, Nitrate, Odour, pH, Phenolic compounds, Sulphate, Sulphide, Taste, Total dissolved solids, Turbidity, Total hardness, Mineral Oil			

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>I</b>	Discipline : Biological		Group : Water	Material or Product tested: Drinking water		
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	<i>Escherichia coli</i>	Per 100 ml	IS 15185	Absent	Absent	Absent
<b>II</b>	Discipline : Chemical		Group : Water	Material or Product tested: Drinking water		
3	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	137.6
4	Ammonia (as N)	mg/l	IS 3025 (Part 34)	0.5	No relaxation	BLQ (LOQ-0.1)
5	Anionic Detergents (as MBAS)	mg/l	IS 13428 : (Annex K)	0.2	1.0	BLQ (LOQ-0.01)
6	Colour	Hazen units	IS 3025 (Part 4) Clause 4	5	15	1
7	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	No relaxation	BLQ (LOQ-0.005)
8	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	26.43
9	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	51.92
10	Chloramines (as Cl <sub>2</sub> )	mg/l	IS 3025 (Part 26)	4.0	No relaxation	BLQ (LOQ-0.1)
11	Free Residual Chlorine	mg/l	IS 3025 (Part 26) Clause 7	0.2	1	BLQ (LOQ-0.1)
12	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause 6	1.0	1.5	0.16
13	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	12.58
14	Nitrate (as NO <sub>3</sub> )	mg/l	APHA 23 <sup>rd</sup> edition: Method 4500-NO <sub>3</sub>	45	No relaxation	BLQ (LOQ-2)
15	Odour	-	IS 3025 (Part 5)	Agreeable	Agreeable	Agreeable
16	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	7.91 at 25°C
17	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)
18	Sulphate (as SO <sub>4</sub> )	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	14.68
19	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	457
21	Turbidity	NTU	IS 3025 : (Part 10)	1	5	1
22	Total hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part 21) Clause 5	200	600	182
23	Sulphide (as H <sub>2</sub> S)	mg/l	IS 3025 (Part 29)	0.05	No relaxation	BLQ (LOQ-0.03)
24	Mineral Oil	mg/l	ANtr/7.2/RES/06	1	No relaxation	BLQ (LOQ-0.001)

☐ Please refer last Page for Note and Remarks.

Verified By

Snehal Raut  
Technical Manager

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatories

Pooja Kathane  
Technical Manager

Chinmay Garway  
Deputy Quality Manager







Test Report

Test Report No.: ALPL/30092024/1-22

Dated 30/09/2024

Page 2 of 5

<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-1	<b>Analysis Start</b> 23/09/2024
	<b>Inward Date</b> 23/09/2024	<b>Analysis End</b> 30/09/2024
<b>Reference</b> 13562310264; 17.05.2024		<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-1	<b>Purpose of analysis</b> Drinking
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Quantity Received</b> 5 Ltr
<b>Sampling Date:</b> 20/09/2024		<b>Sampling Location</b> GNC Camp
<b>Sampling Time:</b> 2:35 am		
<b>Tests required</b> Arsenic, Aluminium, Barium, Boron, Copper, Cadmium, Iron, Lead, Manganese, Mercury, Selenium, Total Chromium, Zinc, Polynuclear aromatic hydrocarbon (PAH), Polychlorinated biphenyls		

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II Discipline : Chemical</b>		<b>Group : Residues and contaminants in water</b>			<b>Material or Product tested: Drinking water</b>	
25	Arsenic (as As)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
26	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
27	Barium (as Ba)	mg/l	IS 3025 (Part 2)	0.7	No relaxation	BLQ (LOQ-0.02)
28	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
29	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
30	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.003	No relaxation	BLQ (LOQ-0.002)
31	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.17
32	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
33	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
34	Mercury (as Hg)	mg/l	ANtr/7.2/Res.horg/01	0.001	No relaxation	BLQ (LOQ-0.001)
35	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.01	No relaxation	BLQ (LOQ-0.01)
36	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)
37	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
38	Polynuclear aromatic hydrocarbon (PAH)	µg/l	ANtr/7.2/RES/03	0.1	No relaxation	BLQ (LOQ-0.03)
<b>II Discipline : Chemical</b>		<b>Group : Residues contaminants in water</b>			<b>Material or Product tested: Drinking water</b>	
41	Polychlorinated biphenyls					
	2,2',5-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04	0.5	No relaxation	BLQ (LOQ-0.03)
	2,4,4'-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',5,5'-tetrachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',4,5,5'-pentachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',3,4,4',5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',4,4',5,5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',3,4,4',5,5'-heptachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)

☐ Please refer last Page for Note and Remarks.

Verified By  
  
 Pradnya Pillewan  
 Deputy Technical Manager

Authorized Signatory  
  
 Chinmay Garway  
 Deputy Quality Manager





Test Report

Test Report No.: ALPL/30092024/1-22

Dated 30/09/2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-1	<b>Analysis Start</b> 23/09/2024
		<b>Inward Date</b> 23/09/2024	<b>Analysis End</b> 30/09/2024
		<b>Reference</b> 13562310264; 17.05.2024	<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-1	<b>Purpose of analysis</b> Drinking	<b>Quantity Received</b> 5 Ltr
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Sampling Date:</b> 20/09/2024	<b>Sampling Location</b> GNC Camp
		<b>Sampling Time:</b> 2:35 am	
<b>Tests required</b> , Polynuclear aromatic hydrocarbons, Trihalomethanes			

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II</b>	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>	<b>Material or Product tested: Drinking water</b>			
42	Polynuclear aromatic hydrocarbons					
	Naphthalene	µg/l	ANtr/7.2/RES/04	0.1	No relaxation	BLQ (LOQ-0.03)
	Acenaphthylene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Acenaphthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Fluorene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Anthracene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Phenanthrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Fluoranthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Pyrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(a)anthracene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Chrysene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(a)pyrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(b)fluoranthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(k)fluoranthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Indeno(123,cd)pyrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Dibenzo(a,h)anthracene	µg/l	ANtr/7.2/RES/04	BLQ (LOQ-0.03)		
	Benzo(ghi)perylene	µg/l	ANtr/7.2/RES/04	BLQ (LOQ-0.03)		
43	Trihalomethanes					
i	Bromoform	mg/l	ANtr/7.2/RES/04	0.1	No relaxation	BLQ (LOQ-0.05)
ii	Dibromochloromethane	mg/l		0.1	No relaxation	BLQ (LOQ-0.05)
iii	Bromodichloromethane	mg/l		0.06	No relaxation	BLQ (LOQ-0.05)
iv	Chloroform	mg/l		0.2	No relaxation	BLQ (LOQ-0.05)

☐ Please refer last Page for Note and Remarks.

Verified By

Pradnya Pillewan  
Deputy Technical Manager

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager







*Test Report*

Test Report No.: ALPL/30092024/1-22

Dated 30/09/2024

Page 4 of 5

<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-1	<b>Analysis Start</b> 23/09/2024
		<b>Inward Date</b> 23/09/2024	<b>Analysis End</b> 30/09/2024
		<b>Reference</b> 13562310264; 17.05.2024	<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-1	<b>Purpose of analysis</b> Drinking	<b>Quantity Received</b> 5 Ltr
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Sampling Date:</b> 20/09/2024	<b>Sampling Location</b> GNC Camp
		<b>Sampling Time:</b> 2:35 am	
<b>Tests required - Pesticide Residues Organochlorine</b>			

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>III</b>	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
44	Pesticide Residues Organochlorine					
1	Alpha-HCH	µg/l	ANtr/7.2/RES/01	0.01	No relaxation	BLQ (LOQ-0.01)
	Beta HCH	µg/l	ANtr/7.2/RES/01	0.04	No relaxation	BLQ (LOQ-0.03)
	Delta- HCH	µg/l	ANtr/7.2/RES/01	0.04	No relaxation	BLQ (LOQ-0.03)
2	Gamma - HCH (Lindane)	µg/l	ANtr/7.2/RES/01	2	No relaxation	BLQ (LOQ-0.03)
3	Alachlor	µg/l	ANtr/7.2/RES/01	20	No relaxation	BLQ (LOQ-0.03)
4	Aldrin	µg/l	ANtr/7.2/RES/01	0.03	No relaxation	BLQ (LOQ-0.03)
	Dieldrin	µg/l	ANtr/7.2/RES/01	0.03	No relaxation	BLQ (LOQ-0.03)
5	Butachlor	µg/l	ANtr/7.2/RES/01	125	No relaxation	BLQ (LOQ-0.03)
6	p,p'-DDE, o,p'-DDE, p,p'-DDD, o,p'-DDD, o,p'- DDT, p,p'- DDT	µg/l	ANtr/7.2/RES/01	1	No relaxation	BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
7	Atrazine	µg/l	ANtr/7.2/RES/01	2	No relaxation	BLQ (LOQ-0.03)
8	2,4-Dichlorophenoxyacetic acid	µg/l	ANtr/7.2/RES/01	30	No relaxation	BLQ (LOQ-0.03)
9	Endosulphan					
	Alpha-Endosulphan	µg/l	ANtr/7.2/RES/01	0.4	No relaxation	BLQ (LOQ-0.03)
	Beta-Endosulphan					
	Endosulphan sulphate					

☐ Please refer last Page for Note and Remarks.

Verified By  
  
Pradnya Pillewala  
Deputy Technical Manager

Authorized Signatory  
  
Chinmay Garway  
Deputy Quality Manager







*Test Report*

Test Report No.: ALPL/30092024/1-22

Dated 30/09/2024

Page 5 of 5

<b>Issued To :</b> M/s Hindalco Industries Limited Sarnari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-1 <b>Inward Date</b> 23/09/2024 <b>Reference</b> 13562310264; 17.05.2024	<b>Analysis Start</b> 23/09/2024 <b>Analysis End</b> 30/09/2024 <b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-1	<b>Purpose of analysis</b> Drinking
<b>Sampling done by</b> Anacon representative Mr. Dhannasheel Bhiogade		<b>Quantity Received</b> 5 Ltr
<b>Sampling Date:</b> 20/09/2024 <b>Sampling Time:</b> 2-35 am		<b>Sampling Location</b> GNC Camp
<b>Tests required - Pesticide Residues Organophosphorus</b>		

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>IV</b>	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
45	Pesticide Residues Organophosphorus					
10	Isoproturon	µg/l	ANtr/7.2/RES/02	9	No relaxation	BLQ (LOQ-0.03)
11	Monocrotophos	µg/l	ANtr/7.2/RES/01	1	No relaxation	BLQ (LOQ-0.03)
12	Parathion methyl	µg/l	ANtr/7.2/RES/01	0.3	No relaxation	BLQ (LOQ-0.03)
	Paraoxon methyl	µg/l	ANtr/7.2/RES/01	-	-	BLQ (LOQ-0.03)
13	Malathion	µg/l	ANtr/7.2/RES/01	190	No relaxation	BLQ (LOQ-0.03)
	Malaaxon	µg/l	ANtr/7.2/RES/01	-	-	BLQ (LOQ-0.03)
14	Ethion	µg/l	ANtr/7.2/RES/01	3	No relaxation	BLQ (LOQ-0.03)
15	Chlorpyrifos	µg/l	ANtr/7.2/RES/01	30	No relaxation	BLQ (LOQ-0.03)
16	Phorate	µg/l	ANtr/7.2/RES/01	2	No relaxation	BLQ (LOQ-0.03)
	Phorate-sulfone		ANtr/7.2/RES/01			
	Phorate-sulfoxide		ANtr/7.2/RES/01			

**NOTE:** ● Please see watermark "Original Test Report" to confirm the authenticity of this report ● Results shall be referred to tested sample(s) and applicable to tested parameters only.  
● Test report shall not be reproduced except in full without prior written approval of Anacon Labs. ● Liability of Anacon Labs is limited to invoiced amount only. ● Non-perishable and perishable sample(s) shall be disposed off after 30 days and 15 days respectively from the date of issue of Test Report, unless specified otherwise. ● Permissible limit in absence of an alternate source for drinking water. ● 'mg/l' is equivalent to 'ppm'. ● 'µg/l' is equivalent to 'ppb'. ● BLQ= below limit of quantification, LOQ= limit of quantification.  
● Result for test no. 8 is not relevant. ● ANtr/7.2/RES -01, ANtr/7.2/RES/06: Inhouse validated method. ● NT indicates not Tested as sample failed to establish safety concerns. ● Sampling Method-ANtr/7.2/MON-01 ● Environmental condition - Satisfactory. ● Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.805).

**REMARKS:** As requested by the client, sample was tested for above parameters only. The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By

Pradnya Pillewan  
Deputy Technical Manager

Authorized Signatory

Chinmay Gadekar  
Deputy Quality Manager

—END OF REPORT—





*Test Report*

Test Report No.: ALPL/30092024/1-23

Dated 30/09/2024

Page 1 of 5

<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Distt:-Balrampur (C.G.) - 497 222.		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-2	<b>Analysis Start</b> 23/09/2024
		<b>Inward Date</b> 23/09/2024	<b>Analysis End</b> 30/09/2024
		<b>Reference</b> 13562310264; 17.05.2024	<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-2	<b>Purpose of analysis</b> Drinking	<b>Quantity Received</b> 5 Ltr
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Sampling Date:</b> 20/09/2024	<b>Sampling Location</b> Water ATM Outlet
		<b>Sampling Time:</b> 4:10 pm	
<b>Tests required</b> Coliform, <i>Escherichia coli</i> , Alkalinity, Ammonia, Anionic surface active agents, Colour, Cyanide, Chloride, Calcium, Chloramines, Free residual chlorine, Fluoride, Magnesium, Nitrate, Odour, pH, Phenolic compounds, Sulphate, Sulphide, Taste, Total dissolved solids, Turbidity, Total hardness, Mineral Oil			

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>I</b>	<b>Discipline : Biological</b>		<b>Group : Water</b>		<b>Material or Product tested: Drinking water</b>	
1	Coliform	Per 100 ml	IS 15185	Absent	Absent	Absent
2	<i>Escherichia coli</i>	Per 100 ml	IS 15185	Absent	Absent	Absent
<b>II</b>	<b>Discipline : Chemical</b>		<b>Group : Water</b>		<b>Material or Product tested: Drinking water</b>	
3	Total Alkalinity (as Calcium Carbonate)	mg/l	IS 3025 (Part 23)	200	600	103.82
4	Ammonia (as N)	mg/l	IS 3025 (Part 34)	0.5	No relaxation	BLQ (LOQ-0.1)
5	Anionic Detergents (as MBAS)	mg/l	IS 13428 : (Annex K)	0.2	1.0	BLQ (LOQ-0.01)
6	Colour	Hazen units	IS 3025 (Part 4) Clause 4	5	15	1
7	Cyanide (as CN)	mg/l	IS 3025 (Part 27/Sec 1) Clause 5	0.05	No relaxation	BLQ (LOQ-0.005)
8	Chloride (as Cl)	mg/l	IS 3025 (Part 32) Clause 2	250	1000	18.24
9	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	28.59
10	Chloramines (as Cl <sub>2</sub> )	mg/l	IS 3025 (Part 26)	4.0	No relaxation	BLQ (LOQ-0.1)
11	Free Residual Chlorine	mg/l	IS 3025 (Part 26) Clause 7	0.2	1	BLQ (LOQ-0.1)
12	Fluoride (as F)	mg/l	IS 3025 (Part 60) Clause 6	1.0	1.5	0.13
13	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	9.71
14	Nitrate (as NO <sub>3</sub> )	mg/l	APHA 23 <sup>rd</sup> edition: Method 4500-NO <sub>3</sub>	45	No relaxation	BLQ (LOQ-2)
15	Odour	-	IS 3025 (Part 5)	Agreeable	Agreeable	Agreeable
16	pH	-	IS 3025 (Part 11)	6.5 to 8.5	No relaxation	6.84 at 25°C
17	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	IS 3025 (Part 43/Sec 1) Clause 6	0.001	0.002	BLQ (LOQ-0.001)
18	Sulphate (as SO <sub>4</sub> )	mg/l	IS 3025 (Part 24/ Sec1) Clause 5	200	400	12.57
19	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	194
21	Turbidity	NTU	IS 3025 : (Part 10)	1	5	BLQ (LOQ-0.1)
22	Total hardness (as CaCO <sub>3</sub> )	mg/l	IS 3025 (Part 21) Clause 5	200	600	112
23	Sulphide (as H <sub>2</sub> S)	mg/l	IS 3025 (Part 29)	0.05	No relaxation	BLQ (LOQ-0.03)
24	Mineral Oil	mg/l	ANr/7.2/RES/06	1	No relaxation	BLQ (LOQ-0.001)

☐ Please refer last Page for Note and Remarks.

Verified By

Snehal Raut  
Technical Manager

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatories

Pooja Kathane  
Technical Manager

Chintmay Garway  
Deputy Quality Manager







*Test Report*

Test Report No.: ALPL/30092024/1-23

Dated 30/09/2024

Page 2 of 5

<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Samari Bauxite Mines, P.O. Kusmi, Dist.: Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-2	<b>Analysis Start</b> 23/09/2024 <b>Analysis End</b> 30/09/2024
	<b>Inward Date</b> 23/09/2024 <b>Reference</b> 13562310264; 17.05.2024	<b>Sample Category</b> Water
<b>Sample Name</b> Water	<b>Sample Particulars / Details</b> GW-2	<b>Purpose of analysis</b> Drinking
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Sampling Date:</b> 20/09/2024 <b>Sampling Time:</b> 4:10 pm
<b>Quantity Received</b> 5 Ltr		
<b>Sampling Location</b> Water ATM Outlet		
<b>Tests required</b> Arsenic, Aluminium, Barium, Boron, Copper, Cadmium, Iron, Lead, Manganese, Mercury, Selenium, Total Chromium, Zinc, Polynuclear aromatic hydrocarbon (PAH), Polychlorinated biphenyls		

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II</b>	<b>Discipline : Chemical</b>	<b>Group : Residues and contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
25	Arsenic (as As)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
26	Aluminium (as Al)	mg/l	IS 3025 (Part 2)	0.03	0.2	BLQ (LOQ-0.02)
27	Barium (as Ba)	mg/l	IS 3025 (Part 2)	0.7	No relaxation	BLQ (LOQ-0.02)
28	Boron (as B)	mg/l	IS 3025 (Part 2)	0.5	2.4	BLQ (LOQ-0.02)
29	Copper (as Cu)	mg/l	IS 3025 (Part 2)	0.05	1.5	BLQ (LOQ-0.02)
30	Cadmium (as Cd)	mg/l	IS 3025 (Part 2)	0.003	No relaxation	BLQ (LOQ-0.002)
31	Iron (as Fe)	mg/l	IS 3025 (Part 2)	1.0	No relaxation	0.07
32	Lead (as Pb)	mg/l	IS 3025 (Part 2)	0.01	No relaxation	BLQ (LOQ-0.01)
33	Manganese (as Mn)	mg/l	IS 3025 (Part 2)	0.1	0.3	BLQ (LOQ-0.02)
34	Mercury (as Hg)	mg/l	Ant/7.2/Res.Inorg/01	0.001	No relaxation	BLQ (LOQ-0.001)
35	Selenium (as Se)	mg/l	IS 3025 (Part 56)	0.01	No relaxation	BLQ (LOQ-0.01)
36	Total Chromium (as Cr)	mg/l	IS 3025 (Part 2)	0.05	No relaxation	BLQ (LOQ-0.02)
37	Zinc (as Zn)	mg/l	IS 3025 (Part 2)	5	15	BLQ (LOQ-0.02)
38	Polynuclear aromatic hydrocarbon (PAH)	µg/l	ANtr/7.2/RES/03	0.1	No relaxation	BLQ (LOQ-0.03)
<b>II</b>	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
41	Polychlorinated biphenyls			0.5	No relaxation	
	2,2',5-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,4,4'-trichlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',5,5'-tetrachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',4,5,5'-pentachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',3,4,4',5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',4,4',5,5'-hexachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	2,2',3,4,4',5,5'-heptachlorobiphenyl	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)

☐ Please refer last Page for Note and Remarks.

Verified By  
  
 Pradny Pillewan  
 Deputy Technical Manager

Authorized Signatory  
  
 Chinmay Gaware  
 Deputy Quality Manager







*Test Report*

Test Report No.: ALPL/30092024/1-23

Dated 30/09/2024

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<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Samsari Bauxite Mines, P.O. Kusmi, Distt.: Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-1/2-2	<b>Analysis Start</b> 23/09/2024
	<b>Inward Date</b> 23/09/2024 <b>Reference</b> 13562310264; 17.05.2024	<b>Analysis End</b> 30/09/2024
<b>Sample Name</b> Water		<b>Sample Particulars / Details</b> GW-2
<b>Purpose of analysis</b> Drinking		<b>Quantity Received</b> 5 Ltr
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Sampling Date:</b> 20/09/2024 <b>Sampling Time:</b> 4:10 pm
<b>Sampling Location</b> Water ATM Outlet		
<b>Tests required</b> , Polynuclear aromatic hydrocarbons, Trihalomethanes		

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>II</b>	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>	<b>Material or Product tested: Drinking water</b>			
<b>42</b>	Polynuclear aromatic hydrocarbons					
	Naphthalene	µg/l	ANtr/7.2/RES/04	0.1	No relaxation	BLQ (LOQ-0.03)
	Acenaphthylene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Acenaphthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Fluorene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Anthracene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Phenanthrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Fluoranthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Pyrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(a)anthracene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Chrysene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(a)pyrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(b)fluoranthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(k)fluoranthene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Indeno(1,2,3-cd)pyrene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Dibenzo(a,h)anthracene	µg/l	ANtr/7.2/RES/04			BLQ (LOQ-0.03)
	Benzo(ghi)perylene	µg/l	ANtr/7.2/RES/04	BLQ (LOQ-0.03)		
<b>43</b>	Trihalomethanes					
i	Bromoform	mg/l	ANtr/7.2/RES/04	0.1	No relaxation	BLQ (LOQ-0.05)
ii	Dibromochloromethane	mg/l		0.1	No relaxation	BLQ (LOQ-0.05)
iii	Bromodichloromethane	mg/l		0.06	No relaxation	BLQ (LOQ-0.05)
iv	Chloroform	mg/l		0.2	No relaxation	BLQ (LOQ-0.05)

ⓘ Please refer last Page for Note and Remarks.

Verified By

*Pradya Pillewan*  
Pradya Pillewan  
Deputy Technical Manager

Authorized Signatory

*Chinmay Gurway*  
Chinmay Gurway  
Deputy Quality Manager





Test Report

Test Report No.: ALPL/30092024/1-23

Dated 30/09/2024

Page 4 of 5

<b>Issued To :</b> M/s Hindalco Industries Limited Samari Bauxite Mines, P.O. Kusmi, Distt.:Balrampur (C.G.) - 497 222.	<b>Sample Inward No.</b>	ALPL/23092024/MON-294- EW-1/2-2	<b>Analysis Start</b>	23/09/2024
	<b>Inward Date</b>	23/09/2024	<b>Analysis End</b>	30/09/2024
	<b>Reference</b>	13562310264; 17.05.2024	<b>Sample Category</b>	Water
<b>Sample Name</b>	<b>Sample Particulars / Details</b>		<b>Purpose of analysis</b>	<b>Quantity Received</b>
Water	GW-2		Drinking	5 Ltr
<b>Sampling done by</b>		<b>Sampling Date:</b>	<b>Sampling Location</b>	
Anacon representative Mr. Dharmasheel Bhiogade		20/09/2024	Water ATM Outlet	
		<b>Sampling Time:</b>		
		4:10 pm		
<b>Tests required - Pesticide Residues Organochlorine</b>				

**TEST RESULTS**

S.N.	Test Parameter	Measurement Unit	Test Method	Requirement as per IS 10500 : 2012 (Drinking Water Specifications) Including Amendment No. 4		Test Result
				Acceptable Limit	Permissible Limit #	
<b>III</b>	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
<b>44</b>	<b>Pesticide Residues Organochlorine</b>					
1	Alpha-HCH	µg/l	ANtr/7.2/RES/01	0.01	No relaxation	BLQ (LOQ-0.01)
	Beta HCH	µg/l	ANtr/7.2/RES/01	0.04	No relaxation	BLQ (LOQ-0.03)
	Delta- HCH	µg/l	ANtr/7.2/RES/01	0.04	No relaxation	BLQ (LOQ-0.03)
2	Gamma - HCH (Lindane)	µg/l	ANtr/7.2/RES/01	2	No relaxation	BLQ (LOQ-0.03)
3	Alachlor	µg/l	ANtr/7.2/RES/01	20	No relaxation	BLQ (LOQ-0.03)
4	Aldrin	µg/l	ANtr/7.2/RES/01	0.03	No relaxation	BLQ (LOQ-0.03)
	Dieldrin	µg/l	ANtr/7.2/RES/01	0.03	No relaxation	BLQ (LOQ-0.03)
5	Butachlor	µg/l	ANtr/7.2/RES/01	125	No relaxation	BLQ (LOQ-0.03)
6	p,p'-DDE, o,p'-DDE, p,p'-DDD, o,p'-DDD, o,p'- DDT, p,p'- DDT	µg/l	ANtr/7.2/RES/01	1	No relaxation	BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
		µg/l	ANtr/7.2/RES/01			BLQ (LOQ-0.03)
7	Atrazine	µg/l	ANtr/7.2/RES/01	2	No relaxation	BLQ (LOQ-0.03)
8	2,4-Dichlorophenoxyacetic acid	µg/l	ANtr/7.2/RES/01	30	No relaxation	BLQ (LOQ-0.03)
9	Endosulphan					
	Alpha-Endosulphan	µg/l	ANtr/7.2/RES/01	0.4	No relaxation	BLQ (LOQ-0.03)
	Beta-Endosulphan					
	Endosulphan sulphate					

☐ Please refer last Page for Note and Remarks.

Verified By  
  
 Pradnya Pillewan  
 Deputy Technical Manager

Authorized Signatory  
  
 Chinmay Garway  
 Deputy Quality Manager







Test Report

Test Report No.: ALPL/30092024/1-23

Dated 30/09/2024

Page 5 of 5

Table with 3 columns: Issued To (M/s Hindalco Industries Limited), Sample Inward No. (ALPL/23092024/MON-294-EW-1/2-2), Analysis Start (23/09/2024), Inward Date (23/09/2024), Analysis End (30/09/2024), Reference (13562310264; 17.05.2024), Sample Category (Water)

Table with 4 columns: Sample Name (Water), Sample Particulars / Details (GW-2), Purpose of analysis (Drinking), Quantity Received (5 Ltr), Sampling done by (Anacon representative Mr. Dharmasheel Bhiogade), Sampling Date (20/09/2024), Sampling Location (Water ATM Outlet), Sampling Time (4:10 pm)

Tests required - Pesticide Residues Organophosphorus

TEST RESULTS

Main test results table with columns: S.N., Test Parameter, Measurement Unit, Test Method, Requirement as per IS 10500:2012 (Acceptable Limit, Permissible Limit #), Test Result. Includes rows for various pesticides like Isoproturon, Monocrotophos, Parathion methyl, etc.

NOTE: Please see watermark 'Original Test Report' to confirm the authenticity of this report. Results shall be referred to tested sample(s) and applicable to tested parameters only. Test report shall not be reproduced except in full without prior written approval of Anacon Labs. Liability of Anacon Labs is limited to invoiced amount only.

REMARKS: As requested by the client, sample was tested for above parameters only. The submitted sample complies with requirement as per IS: 10500:2012, for tests conducted only.

Verified By Pradnya Pillewan Deputy Technical Manager

Authorized Signatory Chinmay Gaway Deputy Quality Manager

END OF REPORT







(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

**NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION**

Project Name:	Samri Bauxite Mine Of M/s Hindalco Industries Limited		
Project Address:	Village Samri Block Kusmi		
Village:	Samari	Block:	Kusmi
District:	Balrampur	State:	Chhattisgarh
Pin Code:			
Communication Address:	Hindalco Industries Limited, Samri Mines Division, Baba Chowk,, At And Post - Kusmi, , Balrampur, Chhattisgarh - 497224		
Address of CGWB Regional Office :	Central Ground Water Board North Central Chhattisgarh, 2nd Floor, Lk Corporate And Logistic Park, Dhamtari Road, Nh-30, Dumartarai, Raipur, Chhattisgarh - 492015		

1. <b>NOC No.:</b>	CGWA/NOC/MIN/REN/2/2023/7572	2. <b>Date of Issuance</b>	03/04/2023										
3. Application No.:	21-4/1435/CT/MIN/2018	4. Category: (GWRE 2020)	Safe										
5. Project Status:	Existing Ground Water	6. NOC Type:	Renewal										
7. <b>Valid from:</b>	29/04/2023	8. <b>Valid up to:</b>	28/04/2025										
9. Ground Water Abstraction Permitted:													
Fresh Water		Saline Water		Dewatering		Total							
m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year						
5.40	1674.00												
10. Details of ground water abstraction /Dewatering structures													
<b>Total Existing No.:7</b>							<b>Total Proposed No.:0</b>						
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu	
Abstraction Structure*	1	0	1	5	0	0	0	0	0	0	0	0	
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps													
11. Ground Water Abstraction/Restoration Charges paid (Rs.):							1674.00						

**(Compliance Conditions given overleaf)**

This is an auto generated document & need not to be signed.

**Validity of this NOC shall be subject to compliance of the following conditions:**

**Mandatory conditions:**

- 1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and intimation regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-II of the guidelines.
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells/ tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
- 6) In case of mining project the firm shall submit water quality report of mine discharge/ seepage from Govt. approved/ NABL accredited lab.
- 7) The firm shall report compliance of the NOC conditions online in the website ([www.cgwa-noc.gov.in](http://www.cgwa-noc.gov.in)) within one year from the date of issue of this NOC.
- 8) Industries abstracting ground water in excess of 100 m<sup>3</sup>/d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- 9) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.
- 10) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

**General conditions:**

- 11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- 12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 13) Proponents shall install roof top rain water harvesting in the premise as per the existing building bye laws in the premise.
- 14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
- 15) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- 16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- 17) Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
- 18) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
- 24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCE list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.
- 26) In case of new infrastructure projects having ground water abstraction of more than 20 m<sup>3</sup>/day, the firm/entity shall ensure implementation of dual water supply system in the projects.
- 27) In case of infrastructure projects, paved/parking area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 failing which penalty/EC/cancellation of NOC shall be imposed as the case may be.
- 30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).

**(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)**

---

**18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011**

**Phone: (011) 23383561 Fax: 23382051, 23386743**

**Website: [cgwa-noc.gov.in](http://cgwa-noc.gov.in)**

**पानी बचाये - जीवन बचाये**  
**SAVE WATER - SAVE LIFE**



**CENTRAL GROUND WATER AUTHORITY**  
Department of Water Resources, River Development and Ganga Rejuvenation  
Ministry of Jal Shakti, Govt. of India

***Receipt***

(As per the guideline Gazette Notification S.O. 3281(E) regarding the New Guidelines dated 24.09.2020 of CGWA, MoJS, Govt. of India)  
<https://cgwa-noc.gov.in>

Application No.:	21-4/1435/CT/MIN/2018		
Name of Firm:	SAMRI BAUXITE MINE OF M/S HINDALCO INDUSTRIES LIMITED		
AppType Category:	Base Metal Ores		
Application Type:	Mining		
PAN/GSTIN No. of Firm/Individual:	/		

S N	Description	Amount (Rs.)
1.	Application Processing Fee	1000.00
2.	Ground Water Abstraction /Restoration charges	1674.00
3.	Environmental Compensation Charges (ECRGW) (Date From to ) Days-	
4.	Penalty for non-Compliance of NOC conditions <i>Condition to be mentioned</i>	
<b>Rs. Rupees Two Thousand Six Hundred Seventy Four Only</b>		<b>2674.00</b>

This is an system generated invoice, hence, does not require ink signed.



**Anacon  
Laboratories**

**Anacon Laboratories Pvt. Ltd. Nagpur Lab**

Q FP-34, 35, Food Park, Five Star Industrial Estate,

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Test Report

Page 1 of 1

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-1	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Core-Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1-CZ-1 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)	USEPA-40 (Part 50)	IS 5182 (Part-2)	IS 5182 (Part-6)	IS 5182 (Part-10)
AAQ-1	Samri-Gopatu/ Near Weigh bridge	01/04/2024	72.9	32.8	14.7	21.6	BDL (DL - 0.5)
		04/04/2024	68.3	24.9	12.6	18.3	BDL (DL - 0.5)
		08/04/2024	71.1	31.6	13.4	23.7	BDL (DL - 0.5)
		11/04/2024	76.3	32.7	12.9	26.8	BDL (DL - 0.5)
		15/04/2024	64.9	28.4	9.3	21.4	BDL (DL - 0.5)
		18/04/2024	57.3	18.3	8.7	16.9	BDL (DL - 0.5)
		22/04/2024	68.2	24.9	12.8	24.7	BDL (DL - 0.5)
		25/04/2024	71.6	28.1	14.3	26.8	BDL (DL - 0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

Sr. No.	LOCATION	Date of sampling	Pb (µg/m <sup>3</sup> )	Hg (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg/m <sup>3</sup> )
Method Reference			IS 5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-1	Samri-Gopatu/ Near Weigh bridge	01/04/2024	0.017	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		04/04/2024	0.021	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		08/04/2024	0.018	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		11/04/2024	0.024	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		15/04/2024	0.016	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		18/04/2024	0.017	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		22/04/2024	0.016	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		25/04/2024	0.014	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
CPCB Standards			1.0 (24 hrs)	---	6.0 (annual)	---

NOTES: ● Please see watermark "Original Test Report" to confirm the authenticity of this report. ● Results shall be referred to tested sample(s) and applicable to tested parameters only. ● Test report shall not be reproduced except in full without prior written approval of Anacon Labs ● BDL- Below detection limit ● DL- Indicates detection limit of instrument/method and shall be considered as 'absent'.

**Remark:** - All Results are within Limit as per CPCB Standards.

Verified by  
  
Nidhi Dubey  
Deputy Technical Manager

For  
  
Snehal Raut  
Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
Quality Manager

----End of Report----





*Test Report*

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-2	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Core-Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1- CZ -1 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)	USEPA-40 (Part 50)	IS-5182 (Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
AAQ-2	Dhandiapat	01/04/2024	74.9	32.8	13.1	27.6	BDL (DL - 0.5)
		04/04/2024	68.3	24.9	11.6	21.8	BDL (DL - 0.5)
		08/04/2024	64.2	19.3	9.7	16.4	BDL (DL - 0.5)
		11/04/2024	57.1	21.6	11.8	24.7	BDL (DL - 0.5)
		15/04/2024	67.3	23.9	12.1	26.8	BDL (DL - 0.5)
		18/04/2024	73.4	28.1	14.7	32.1	BDL (DL - 0.5)
		22/04/2024	68.3	24.3	9.2	21.7	BDL (DL - 0.5)
		25/04/2024	64.1	19.8	11.6	24.3	BDL (DL - 0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

Sr. No.	LOCATION	Date of sampling	Pb (µg/m <sup>3</sup> )	Hg (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg/m <sup>3</sup> )
Method Reference			IS-5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-2	Dhandiapat	01/04/2024	0.014	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		04/04/2024	0.016	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		08/04/2024	0.018	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		11/04/2024	0.021	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		15/04/2024	0.018	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		18/04/2024	0.016	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		22/04/2024	0.014	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		25/04/2024	0.016	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
CPCB Standards			1.0 (24 hrs)	---	6.0 (annual)	---

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**Remark:** - All Results are within Limit as per CPCB Standards.

Nidhi Dubey  
Deputy Technical Manager

Verified by  
  
Snehal Raut  
Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
Quality Manager



---End of Report---

Thank you for instilling your trust and faith in our services. We cherish our relationship with you, and we put in a lot of hard work in making sure that you get a seamless experience at every stage of your interaction with us. In our constant endeavor towards ensuring that your next experience will be significantly better than the current one, we welcome your feedback on [feedback@anacon.in](mailto:feedback@anacon.in).





Test Report

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-3	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt:-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Core-Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1- CZ -1 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)	USEPA-40 (Part 50)	IS-5182 (Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
AAQ-3	Kutku Village/Nr. V.T. Center	01/04/2024	72.8	26.4	13.9	26.8	BDL (DL - 0.5)
		04/04/2024	68.3	24.7	12.8	21.6	BDL (DL - 0.5)
		08/04/2024	71.9	27.3	9.2	18.2	BDL (DL - 0.5)
		11/04/2024	64.7	18.1	8.7	16.4	BDL (DL - 0.5)
		15/04/2024	54.2	17.9	12.8	23.6	BDL (DL - 0.5)
		18/04/2024	56.3	23.6	11.4	21.7	BDL (DL - 0.5)
		22/04/2024	63.8	32.9	12.6	24.1	BDL (DL - 0.5)
		25/04/2024	67.3	31.6	11.4	21.8	BDL (DL - 0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

Sr. No.	LOCATION	Date of sampling	Pb (µg/m <sup>3</sup> )	Hg (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg/m <sup>3</sup> )
Method Reference			IS-5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-3	Kutku Village/Nr. V.T. Center	01/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		04/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		08/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		11/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		15/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		18/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		22/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		25/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
CPCB Standards			1.0 (24 hrs)	—	6.0 (annual)	—

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**Remark:** - All Results are within Limit as per CPCB Standards.

Verified by  
  
 Nidhi Dubey  
 Deputy Technical Manager

For  
  
 Snehal Raut  
 Technical Manager

Authorized Signatory  
 Dr. (Mrs.) S. D. Garway  
 Quality Manager

---End of Report---





Test Report

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-4	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Core-Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1- CZ -1 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)	USEPA-40 (Part 50)	IS 5182 (Part-2)	IS 5182 (Part-6)	IS 5182 (Part-10)
AAQ-4	Dumerkholi/Nr. Mining Area	01/04/2024	72.6	27.9	12.8	28.4	BDL (DL-0.5)
		04/04/2024	74.8	31.6	13.4	31.6	BDL (DL-0.5)
		08/04/2024	64.3	24.3	9.2	19.3	BDL (DL-0.5)
		11/04/2024	73.1	32.8	14.6	29.1	BDL (DL-0.5)
		15/04/2024	68.2	26.4	11.3	23.9	BDL (DL-0.5)
		18/04/2024	67.2	21.9	11.6	23.8	BDL (DL-0.5)
		22/04/2024	72.8	26.7	12.9	24.6	BDL (DL-0.5)
		25/04/2024	68.3	19.2	9.4	16.7	BDL (DL-0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

Sr. No.	LOCATION	Date of sampling	Pb (µg/m <sup>3</sup> )	Hg (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg/m <sup>3</sup> )
Method Reference			IS-5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-4	Dumerkholi/Nr. Mining Area	01/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		04/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		08/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		11/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		15/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		18/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		22/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		25/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
CPCB Standards			1.0 (24 hrs)	---	6.0 (annual)	---

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**Remark:** - All Results are within Limit as per CPCB Standards.

Nidhi Dubey  
Deputy Technical Manager

Verified by  
  
Snehal Raut  
Technical Manager

Authorized Signatory  
  
Dr. (Mrs.) S. D. Garway  
Quality Manager

----End of Report----







*Test Report*

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-5	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1-BZ-1 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)	USEPA-40 (Part 50)	IS-5182 (Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
AAQ-5	Sairaidh Campus	02/04/2024	68.2	31.6	12.7	21.9	BDL (DL - 0.5)
		05/04/2024	72.6	34.7	13.6	24.3	BDL (DL - 0.5)
		09/04/2024	64.9	28.1	11.4	19.2	BDL (DL - 0.5)
		12/04/2024	67.3	32.8	14.3	26.1	BDL (DL - 0.5)
		16/04/2024	59.2	27.6	12.4	21.8	BDL (DL - 0.5)
		19/04/2024	62.7	26.9	11.3	18.2	BDL (DL - 0.5)
		23/04/2024	58.3	19.8	9.7	16.4	BDL (DL - 0.5)
		26/04/2024	61.7	21.6	11.4	17.9	BDL (DL - 0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

Sr. No.	LOCATION	Date of sampling	Pb (µg /m <sup>3</sup> )	Hg (µg /m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg /m <sup>3</sup> )
Method Reference			IS-5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-5	Sairaidh Campus	02/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL(DL-0.03)
		05/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL(DL-0.03)
		09/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL(DL-0.03)
		12/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL(DL-0.03)
		16/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL(DL-0.03)
		19/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL (DL - 0.5)
		23/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL (DL - 0.5)
		26/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-0.1)	BDL(DL-0.03)
CPCB Standards			1.0 (24 hrs)	---	6.0 (annual)	---

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**Remark:** - All Results are within Limit as per CPCB Standards.

Verified by

*Nidhi Dubey*

Nidhi Dubey  
Deputy Technical Manager

*Snehal Rauf*

Snehal Rauf  
Technical Manager

Authorized Signatory

*S D Garway*

Dr. (Mrs.) S. D. Garway  
Quality Manager

----End of Report----







Test Report

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-6	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt:-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1- BZ -1 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kallash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANId/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 3182 (Part 23)	USEPA-40 (Part 50)	IS-5182 (Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
AAQ-6	Tatijharia Village/Nr.Weigh Bridge	03/04/2024	68.2	26.1	12.9	23.7	BDL (DL - 0.5)
		06/04/2024	71.6	31.6	13.4	24.9	BDL (DL - 0.5)
		10/04/2024	64.8	24.3	9.3	18.6	BDL (DL - 0.5)
		13/04/2024	67.2	26.8	11.9	21.8	BDL (DL - 0.5)
		17/04/2024	71.3	31.9	12.8	26.1	BDL (DL - 0.5)
		20/04/2024	64.7	28.1	9.3	18.7	BDL (DL - 0.5)
		24/04/2024	57.3	24.9	8.7	17.3	BDL (DL - 0.5)
		27/04/2024	62.8	23.6	11.3	21.9	BDL (DL - 0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

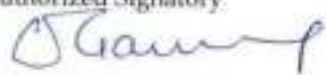
Sr. No.	LOCATION	Date of sampling	Pb (µg/m <sup>3</sup> )	Hg (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg/m <sup>3</sup> )
Method Reference			IS-5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-6	Tatijharia Village/Nr.Weigh Bridge	03/04/2024	0.028	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		06/04/2024	0.031	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		10/04/2024	0.034	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		13/04/2024	0.026	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		17/04/2024	0.021	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		20/04/2024	0.031	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		24/04/2024	0.028	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		27/04/2024	0.024	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
CPCB Standards			1.0 (24 hrs)	---	6.0 (annual)	---

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BDL - Below detection limit • DL - Indicates detection limit of instrument/method and shall be considered as 'absent'.

**Remark:** - All Results are within Limit as per CPCB Standards.

Verified by  
  
 Nidhi Dubey  
 Deputy Technical Manager

For  
  
 Snehal Kaut  
 Deputy Technical Manager

Authorized Signatory  
  
 Dr. (Mrs.) S. D. Garway  
 Quality Manager

---End of Report---





Test Report

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-7	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1- BZ -2 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANtd/7.2/Mon-01		

Sl. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)	USEPA-40 (Part 50)	IS-5182 (Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
AAQ-7	Piprapat/Nr. Mining Area	03/04/2024	57.2	16.9	8.4	23.6	BDL (DL -0.5)
		06/04/2024	63.9	21.8	12.6	24.1	BDL (DL -0.5)
		10/04/2024	64.1	23.6	11.4	17.9	BDL (DL -0.5)
		13/04/2024	56.3	18.3	9.2	26.4	BDL (DL -0.5)
		17/04/2024	54.9	16.2	8.7	23.7	BDL (DL -0.5)
		20/04/2024	62.8	21.6	12.6	21.9	BDL (DL -0.5)
		24/04/2024	64.2	23.1	13.7	24.6	BDL (DL -0.5)
		27/04/2024	58.3	19.3	9.6	19.7	BDL (DL -0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

Sl. No.	LOCATION	Date of sampling	Pb (µg/m <sup>3</sup> )	Hg (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg/m <sup>3</sup> )
Method Reference			IS-5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-7	Piprapat/Nr. Mining Area	03/04/2024	0.036	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		06/04/2024	0.024	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		10/04/2024	0.021	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		13/04/2024	0.029	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		17/04/2024	0.018	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		20/04/2024	0.024	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		24/04/2024	0.026	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		27/04/2024	0.021	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
CPCB Standards			1.0 (24 hrs)	---	6.0 (annual)	---

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**Remark:** - All Results are within Limit as per CPCB Standards.

Verified by  
  
 Nidhi Dubey  
 Deputy Technical Manager

for  
  
 Snehal Raut  
 Deputy Technical Manager

Authorized Signatory

Dr. (Mrs.) S. D. Garway  
 Quality Manager



---End of Report---

Thank you for instilling your trust and faith in our services. We cherish our relationship with you, and we put in a lot of hard work in making sure that you get a seamless experience at every stage of your interaction with us. In our constant endeavor towards ensuring that your next experience will be significantly better than the current one, we welcome your feedback on [feedback@anacon.in](mailto:feedback@anacon.in).





Test Report

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/1-8	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-125/1- BZ -3 . W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chahande	Sample Recd. Date	8,15,22,29 April-2024
Date of Analysis:-	9,16,23,30 April-2024	Sampling time	24 hrs
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>2</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)	USEPA-40 (Part 50)	IS-5182 (Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
AAQ-8	Virhorepat Village	03/04/2024	68.3	24.7	13.9	26.7	BDL (DL - 0.5)
		06/04/2024	72.8	26.4	12.1	21.6	BDL (DL - 0.5)
		10/04/2024	61.9	19.3	11.6	23.4	BDL (DL - 0.5)
		13/04/2024	64.1	21.6	9.3	17.3	BDL (DL - 0.5)
		17/04/2024	57.3	19.2	11.4	18.6	BDL (DL - 0.5)
		20/04/2024	64.9	23.8	8.7	21.8	BDL (DL - 0.5)
		24/04/2024	67.2	24.1	11.6	23.4	BDL (DL - 0.5)
		27/04/2024	56.7	21.9	9.7	18.3	BDL (DL - 0.5)
CPCB Standards			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2 (8hrs)

Sr. No.	LOCATION	Date of sampling	Pb (µg/m <sup>3</sup> )	Hg (µg/m <sup>3</sup> )	As (ng/m <sup>3</sup> )	Cr (µg/m <sup>3</sup> )
Method Reference			IS-5182 (Part 22)	Lab SOP	Lab SOP	Lab SOP
AAQ-8	Virhorepat Village	03/04/2024	0.026	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		06/04/2024	0.024	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		10/04/2024	0.021	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		13/04/2024	0.019	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		17/04/2024	0.024	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		20/04/2024	0.026	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		24/04/2024	0.018	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		27/04/2024	0.024	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
CPCB Standards			1.0 (24 hrs)	—	6.0 (annual)	—

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs • BDL- Below detection limit • DL- Indicates detection limit of instrument/method and shall be considered as 'absent'.

**Remark:** - All Results are within Limit as per CPCB Standards.

Nidhi Dubey  
Deputy Technical Manager

Verified by   
Snehal Raut  
Deputy Technical Manager

Authorized Signatory   
Dr. (Mrs.) S. D. Garway  
Quality Manager

---End of Report---

Thank you for instilling your trust and faith in our services. We cherish our relationship with you, and we put in a lot of hard work in making sure that you get a seamless experience at every stage of your interaction with us. In our constant endeavor towards ensuring that your next experience will be significantly better than the current one, we welcome your feedback on [feedback@anacon.in](mailto:feedback@anacon.in).







Test Report

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/1-1	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-1/64-1
Sampling done by	Anacon Representative Mr. Kailash Chahande	Sample Inward Date	8,15,22,29 July-2024 & 2-Aug-2024
Test Started On:-	8,15,22,29 July-2024 & 2-Aug-2024	Test Completed On	9,16,23,30 July-2024 & 2-Aug-2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS-5182(Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
<b>I.</b>	<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution		<b>Material or Product tested :</b> Ambient Air			
AAQ-1	Samri-Gopatu/ Near Weigh bridge	01/07/2024	58.2	26.1	11.4	19.7	BLQ (LOQ-0.5)
		04/07/2024	52.9	21.6	11.7	18.3	BLQ (LOQ-0.5)
		08/07/2024	62.7	23.8	11.9	24.7	BLQ (LOQ-0.5)
		11/07/2024	62.7	23.8	12.6	24.7	BLQ (LOQ-0.5)
		15/07/2024	56.1	16.9	8.7	16.7	BLQ (LOQ-0.5)
		18/07/2024	52.9	19.2	11.4	19.2	BLQ (LOQ-0.5)
		22/07/2024	51.8	21.6	11.9	21.8	BLQ (LOQ-0.5)
		25/07/2024	47.3	19.1	9.3	18.7	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			<b>100 (24 hrs)</b>	<b>60 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>2.0 (8 hrs)</b>

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANte/7.2/RES-INORG/04	ANte/7.2/RES-INORG/04	ANte/7.2/RES-INORG/04	ANte/7.2/RES-INORG/04
AAQ-1	Samri-Gopatu/ Near Weigh bridge	01/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		04/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		08/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		11/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		15/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		18/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		22/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		25/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			<b>1.0 (24 hrs)</b>	<b>---</b>	<b>6.0 (annual)</b>	<b>---</b>

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BLQ- below limit of quantification, LOQ- limit of quantification. • Environmental condition - Satisfactory. • Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.5/05).

**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

Snehal Raut  
Technical Manager

Pradnya Pillawan  
Deputy Technical Manager

---End of Report---

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager





*Test Report*

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/1-2	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.:Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-1/64-2
Sampling done by	Anacon Representative Mr. Kailash Chahande	Sample Inward Date	8,15,22,29 July-2024 & 2-Aug-2024
Test Started On:-	8,15,22,29 July-2024 & 2-Aug-2024	Test Completed On	9,16,23,30 July-2024 & 2-Aug-2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS:5182(Part-2)	IS:5182 (Part-6)	IS:5182 (Part-10)
I.	Discipline: Chemical	Group: Atmospheric Pollution		Material or Product tested : Ambient Air			
AAQ-2	Dhandapat/ Nr. Mining Area	01/07/2024	56.1	26.1	11.6	23.9	BLQ (LOQ-0.5)
		04/07/2024	47.3	24.9	9.7	18.3	BLQ (LOQ-0.5)
		08/07/2024	51.8	18.3	8.4	16.4	BLQ (LOQ-0.5)
		11/07/2024	56.2	23.7	11.9	21.8	BLQ (LOQ-0.5)
		15/07/2024	49.3	19.1	9.7	18.3	BLQ (LOQ-0.5)
		18/07/2024	46.7	18.3	8.4	17.6	BLQ (LOQ-0.5)
		22/07/2024	53.6	23.8	11.3	23.9	BLQ (LOQ-0.5)
		25/07/2024	48.2	17.1	9.6	21.8	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2.0 (8 hrs)

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04
AAQ-2	Dhandapat/ Nr. Mining Area	01/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		04/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		08/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		11/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		15/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		18/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		22/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		25/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			1.0 (24 hrs)	---	6.0 (annual)	---

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BLQ= below limit of quantification, LOQ= limit of quantification. • Environmental condition - Satisfactory. • Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.8/03).

**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

  
Snehal Kastur  
Technical Manager

  
Pradeep Pillewan  
Deputy Technical Manager

----End of Report----

Authorized Signatory

  
Chinmay Gaway  
Deputy Quality Manager







Test Report

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/1-3	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-1/64-3
Sampling done by	Anacon Representative Mr. Kailash Chahande	Sample Inward Date	8,15,22,29 July-2024 & 2-Aug-2024
Test Started On:-	8,15,22,29 July-2024 & 2-Aug-2024	Test Completed On	9,16,23,30 July-2024 & 2-Aug-2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS-5182(Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
<b>I.</b>	<b>Discipline:</b> Chemical		<b>Group:</b> Atmospheric Pollution		<b>Material or Product tested :</b> Ambient Air		
AAQ-3	Kutku Village/ Nr. V.T. Center	01/07/2024	56.2	24.9	12.6	18.3	BLQ (LOQ-0.5)
		04/07/2024	58.3	21.4	11.6	19.3	BLQ (LOQ-0.5)
		08/07/2024	57.3	21.8	11.9	21.4	BLQ (LOQ-0.5)
		11/07/2024	54.1	16.4	8.1	16.2	BLQ (LOQ-0.5)
		15/07/2024	53.6	23.8	11.4	21.9	BLQ (LOQ-0.5)
		18/07/2024	54.7	19.1	9.3	18.7	BLQ (LOQ-0.5)
		22/07/2024	48.2	23.6	12.8	24.1	BLQ (LOQ-0.5)
		25/07/2024	63.1	23.8	11.6	21.7	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			<b>100 (24 hrs)</b>	<b>60 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>2.0 (8 hrs)</b>

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANtd/7.2/RES-INORG/04	ANtd/7.2/RES-INORG/04	ANtd/7.2/RES-INORG/04	ANtd/7.2/RES-INORG/04
AAQ-3	Kutku Village/ Nr. V.T. Center	01/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		04/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		08/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		11/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		15/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		18/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		22/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		25/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			<b>1.0 (24 hrs)</b>	<b>---</b>	<b>6.0 (annual)</b>	<b>---</b>

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BLQ= below limit of quantification, LOQ= limit of quantification. • Environmental condition – Satisfactory. • Statement of conformity issued on the basis of decision rule as per quality procedure IQP/7.8/09.

**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

Snehal Raut  
Technical Manager

Pradnya Pillawan  
Deputy Technical Manager

---End of Report---

Authorized Signatory

Chinnmay Parway  
Deputy Quality Manager







Test Report

**Ambient Air Quality-July-2024**

<b>Report No.:-</b>	ALPL/05082024/1-4	<b>Report Date:-</b>	05/08/2024
<b>Issued to :-</b>	<b>M/s Hindalco Industries Limited</b>	<b>Address:-</b>	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.) - 497 222.
<b>Type of Work:-</b>	Ambient Air Quality (Core Zone)	<b>Sample Inward No.</b>	ALPL/22072024/MON-268-EAAQ-1/64-4
<b>Sampling done by</b>	Anacon Representative Mr. Kailash Chahande	<b>Sample Inward Date</b>	8,15,22,29 July-2024 & 2-Aug-2024
<b>Test Started On:-</b>	8,15,22,29 July-2024 & 2-Aug-2024	<b>Test Completed On</b>	9,16,23,30 July-2024 & 2-Aug-2024
<b>Sampling Procedure</b>	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS-5182(Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
<b>I.</b>	<b>Discipline: Chemical</b>		<b>Group: Atmospheric Pollution</b>		<b>Material or Product tested : Ambient Air</b>		
<b>AAQ-4</b>	Dumerkholi/ Nr. Mining Area	01/07/2024	62.9	28.6	12.4	21.6	BLQ (LOQ-0.5)
		04/07/2024	58.3	24.9	9.3	18.7	BLQ (LOQ-0.5)
		08/07/2024	61.7	23.8	11.6	19.3	BLQ (LOQ-0.5)
		11/07/2024	56.2	19.3	8.7	16.4	BLQ (LOQ-0.5)
		15/07/2024	63.9	16.2	7.6	15.9	BLQ (LOQ-0.5)
		18/07/2024	58.2	23.6	11.3	18.2	BLQ (LOQ-0.5)
		22/07/2024	57.2	21.4	12.4	21.8	BLQ (LOQ-0.5)
		25/07/2024	49.1	18.3	9.3	17.3	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			<b>100 (24 hrs)</b>	<b>60 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>2.0 (8 hrs)</b>

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04
<b>AAQ-4</b>	Dumerkholi/ Nr. Mining Area	01/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		04/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		08/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		11/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		15/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		18/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		22/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		25/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			<b>1.0 (24 hrs)</b>	<b>---</b>	<b>6.0 (annual)</b>	<b>---</b>

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**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

Satehal Raut  
Technical Manager

Pradnya Pillawan  
Deputy Technical Manager

---End of Report---

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager





*Test Report*

**Ambient Air Quality-July-2024**

<b>Report No.:-</b>	ALPL/05082024/1-5	<b>Report Date:-</b>	05/08/2024
<b>Issued to :-</b>	M/s Hindalco Industries Limited	<b>Address:-</b>	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.)- 497 222.
<b>Type of Work:-</b>	Ambient Air Quality (Buffer Zone)	<b>Sample Inward No.</b>	ALPL/22072024/MON-268-EAAQ-1/64-5
<b>Sampling done by</b>	Anacon Representative Mr. Kailash Chahande	<b>Sample Inward Date</b>	8,15,22,29 July-2024 & 2-Aug-2024
<b>Test Started On:-</b>	8,15,22,29 July-2024 & 2-Aug-2024	<b>Test Completed On</b>	9,16,23,30 July-2024 & 2-Aug-2024
<b>Sampling Procedure</b>	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS-5182(Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
<b>L</b>	<b>Discipline: Chemical</b>	<b>Group: Atmospheric Pollution</b>		<b>Material or Product tested : Ambient Air</b>			
AAQ-5	Sairaidh Campus	02/07/2024	58.3	24.9	11.6	18.3	BLQ (LOQ-0.5)
		05/07/2024	61.9	23.8	11.4	18.1	BLQ (LOQ-0.5)
		09/07/2024	54.7	21.6	9.3	16.8	BLQ (LOQ-0.5)
		12/07/2024	49.3	18.3	9.3	18.6	BLQ (LOQ-0.5)
		16/07/2024	51.6	19.3	11.4	21.1	BLQ (LOQ-0.5)
		19/07/2024	54.1	21.3	11.4	19.2	BLQ (LOQ-0.5)
		23/07/2024	58.3	21.6	9.3	18.3	BLQ (LOQ-0.5)
		26/07/2024	52.8	16.9	11.3	23.8	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			<b>100 (24 hrs)</b>	<b>60 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>2.0 (8 hrs)</b>

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04
AAQ-5	Sairaidh Campus	02/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		05/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		09/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		12/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		16/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		19/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		23/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		26/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			<b>1.0 (24 hrs)</b>	<b>---</b>	<b>6.0 (annual)</b>	<b>---</b>

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BLQ= below limit of quantification, LOQ= limit of quantification. • Environmental condition - Satisfactory. • Statement of conformity issued on the basis of decision rule as per quality procedure (QP7.8/05).

**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

Snehal Kait  
Technical Manager

Pradeep Pillawan  
Deputy Technical Manager

Authorized Signatory

Chinmay Parway  
Deputy Quality Manager

---End of Report---







*Test Report*

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/1-6	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.:-Balrampur (C.G.)- 497 222.
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-1/64-6
Sampling done by	Anacon Representative Mr. Kailash Chahande	Sample Inward Date	8,15,22,29 July-2024 & 2-Aug-2024
Test Started On:-	8,15,22,29 July-2024 & 2-Aug-2024	Test Completed On	9,16,23,30 July-2024 & 2-Aug-2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS:5182(Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
<b>I.</b>	<b>Discipline:</b> Chemical	<b>Group:</b> Atmospheric Pollution		<b>Material or Product tested :</b> Ambient Air			
AAQ-6	Tatijharia Village/ Nr.Weigh Bridge	03/07/2024	57.2	21.6	12.1	23.6	BLQ (LOQ-0.5)
		06/07/2024	61.9	24.7	13.6	24.9	BLQ (LOQ-0.5)
		10/07/2024	56.1	18.3	9.2	17.2	BLQ (LOQ-0.5)
		13/07/2024	53.6	16.4	8.4	16.7	BLQ (LOQ-0.5)
		17/07/2024	48.2	15.9	7.6	16.1	BLQ (LOQ-0.5)
		20/07/2024	53.9	21.6	11.3	23.8	BLQ (LOQ-0.5)
		24/07/2024	49.7	18.2	9.1	18.4	BLQ (LOQ-0.5)
		27/07/2024	51.3	21.7	11.4	24.6	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			<b>100 (24 hrs)</b>	<b>60 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>80 (24 hrs)</b>	<b>2.0 (8 hrs)</b>

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04
AAQ-6	Tatijharia Village/ Nr.Weigh Bridge	03/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		06/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		10/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		13/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		17/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		20/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		24/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		27/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			<b>1.0 (24 hrs)</b>	<b>---</b>	<b>6.0 (annual)</b>	<b>---</b>

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BLQ= below limit of quantification, LOQ= limit of quantification. • Environmental condition - Satisfactory. • Statement of conformity issued on the basis of decision rule as per quality procedure (QP7.805).

**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

Snehal Raut  
Technical Manager

Pradnya Pillewan  
Deputy Technical Manager

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager



---End of Report---



Test Report

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/1-7	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.)- 497 222.
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-1/64-7
Sampling done by	Anacon Representative Mr. Kailash Chahande	Sample Inward Date	8,15,22,29 July-2024 & 2-Aug-2024
Test Started On:-	8,15,22,29 July-2024 & 2-Aug-2024	Test Completed On	9,16,23,30 July-2024 & 2-Aug-2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS-5182(Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
I.	Discipline: Chemical	Group: Atmospheric Pollution		Material or Product tested : Ambient Air			
AAQ-7	Piprapat/ Nr. Mining Area	03/07/2024	54.3	15.9	7.6	16.8	BLQ (LOQ-0.5)
		06/07/2024	56.1	16.4	8.4	17.3	BLQ (LOQ-0.5)
		10/07/2024	61.4	21.9	12.6	23.4	BLQ (LOQ-0.5)
		13/07/2024	58.3	18.1	9.2	18.7	BLQ (LOQ-0.5)
		17/07/2024	54.1	16.7	8.4	17.9	BLQ (LOQ-0.5)
		20/07/2024	61.9	23.4	11.6	21.4	BLQ (LOQ-0.5)
		24/07/2024	58.3	21.9	9.3	18.2	BLQ (LOQ-0.5)
		27/07/2024	54.7	19.3	8.4	17.6	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2.0 (8 hrs)

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04
AAQ-7	Piprapat/ Nr. Mining Area	03/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		06/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		10/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		13/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		17/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		20/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		24/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		27/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			1.0 (24 hrs)	---	6.0 (annual)	---

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BLQ= below limit of quantification, LOQ= limit of quantification. • Environmental condition - Satisfactory. • Statement of conformity issued on the basis of decision rule as per quality procedure (QP/7.805).

**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

Authorized Signatory

  
Snehal Rast  
Technical Manager

  
Pradnya Pillewan  
Deputy Technical Manager

  
Dimmay Gaware  
Deputy Quality Manager



---End of Report---

Thank you for instilling your trust and faith in our services. We cherish our relationship with you, and we put in a lot of hard work in making sure that you get a seamless experience at every stage of your interaction with us. In our constant endeavor towards ensuring that your next experience will be significantly better than the current one, we welcome your feedback on [feedback@anacon.in](mailto:feedback@anacon.in).





*Test Report*

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/1-8	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Samari Bauxite Mines, P.O. Kusmi, Distt.-Balrampur (C.G.)-497 222.
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-1/64-8
Sampling done by	Anacon Representative Mr. Kailash Chahande	Sample Inward Date	8,15,22,29 July-2024 & 2-Aug-2024
Test Started On:-	8,15,22,29 July-2024 & 2-Aug-2024	Test Completed On	9,16,23,30 July-2024 & 2-Aug-2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sr. No.	LOCATION	Date of sampling	Particulate Matter (PM10) $\mu\text{g}/\text{m}^3$	Particulate Matter (PM2.5) $\mu\text{g}/\text{m}^3$	Sulphur dioxide $\mu\text{g}/\text{m}^3$	Oxides of Nitrogen $\mu\text{g}/\text{m}^3$	Carbon Monoxide (as CO) $\text{mg}/\text{m}^3$
<b>Test Method</b>			IS 5182 (Part 23)	USEPA-40(Part 50)	IS-5182(Part-2)	IS-5182 (Part-6)	IS-5182 (Part-10)
I.	Discipline: Chemical	Group: Atmospheric Pollution		Material or Product tested : Ambient Air			
AAQ-8	Virhorepat	03/07/2024	61.7	23.7	11.9	21.8	BLQ (LOQ-0.5)
		06/07/2024	58.3	19.2	9.4	18.3	BLQ (LOQ-0.5)
		10/07/2024	54.6	18.6	8.1	17.6	BLQ (LOQ-0.5)
		13/07/2024	61.8	21.7	11.3	23.7	BLQ (LOQ-0.5)
		17/07/2024	56.2	19.3	9.1	18.2	BLQ (LOQ-0.5)
		20/07/2024	48.7	16.4	8.7	17.3	BLQ (LOQ-0.5)
		24/07/2024	51.6	18.1	6.8	16.1	BLQ (LOQ-0.5)
		27/07/2024	47.2	16.3	8.1	17.9	BLQ (LOQ-0.5)
<b>NAAQMS Standards</b>			100 (24 hrs)	60 (24 hrs)	80 (24 hrs)	80 (24 hrs)	2.0 (8 hrs)

Sr. No.	LOCATION	Date of sampling	Lead as Pb $\mu\text{g}/\text{m}^3$	Mercury as Hg $\mu\text{g}/\text{m}^3$	Arsenic as As $\text{ng}/\text{m}^3$	Chromium as Cr $\mu\text{g}/\text{m}^3$
<b>Test Method</b>			ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04	ANtr/7.2/RES-INORG/04
AAQ-8	Virhorepat	03/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		06/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		10/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		13/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		17/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		20/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		24/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
		27/07/2024	BLQ (LOQ-0.2)	BLQ (LOQ-0.0005)	BLQ (LOQ-2.0)	BLQ (LOQ-0.03)
<b>NAAQMS Standards</b>			1.0 (24 hrs)	—	6.0 (annual)	—

NOTES: • Please see watermark "Original Test Report" to confirm the authenticity of this report. • Results shall be referred to tested sample(s) and applicable to tested parameters only. • Test report shall not be reproduced except in full without prior written approval of Anacon Labs. • BLQ- below limit of quantification, LOQ- limit of quantification. • Environmental condition - Satisfactory. • Statement of conformity issued on the basis of decision rule as per quality procedure IQP/7.8/05.

**Remark:** - All Results are within Limit as per NAAQMS Standards.

Verified by

Authorized Signatory

Snehal Raut  
Technical Manager

Pradip Pillawan  
Deputy Technical Manager

Chintan Garway  
Deputy Quality Manager



---End of Report---



## Hindalco Industries Limited

Mines Division, Samri

Date: 22-01-2024

### Environment Management Cell

An Environment Management Cell is reconstituted by the following members which is compliance of the EC Conditions for the Samri, Tatijharia and Kudag Bauxite Mines.

Sl. No.	Name	Designation	Position
01	Mr. Sanjay Pardhi	Head & Agent of Mines	Chairman
02	Mr. Amit Tiwari	Manager-Mines	Secretary
03	Mr. Praween Pradhan	Manager-Geology	Member
04	Mrs. Madhusmita Parida	Asst. Manager-Env	Member
05	Mr. Ashutosh Saha	Asst. Manager-Sustainability	Member
06	Dr. Ajay Kumar	Medical Officer	Member
07	Mr. K K Singh	Dy. Manager	Member

*(Signature)*

Agent of Mines



# 56 दजन जुआरया स 17 हजार बरामद

## बड़े-छोटे जुआरी एक ही दिन पकड़े गए

हरिभूमि न्यूज (अभिनवपुर)।

समवायक अखबार को दे टाकर घर (बनौला)। इस जुआर (फंड) से पुलिस ने 11700 रूपय एवं तंबा के बत्ती

लिय सखे 52 गो रूपय ब. तार के बत्ती बरामद किये गए हैं। पुलिस को यह बरामद 20 दि 9 बजे के बीच की है।

पुलिस ने अंतर्गत सक्रियता को हुए पारी के न पारि-पारो उर न जुआरियों को डकन समायक इजाजत रूपय मद कराने के लया पाई है। इ सुकर जोहा सख के समायक ऐसे लोग भी स छोड़ने पकड़े जा गये के अरु, इ नई विधि विधि में मन रहे है। इन के स पकड़ आसपास जुआरियों के कंप नये हुई है। पुलिस अधीक्षक, हरिभूमि सखीर निरीक्षण में संपन्नो के जोर हुए नि वेद्यन में मोदी एत नगर उरुका नगर, सिरोनी, विशेप तक के प्रभारी जलेश्वर सिंह, हुन एका के नेतृत्व में निरले इस बल ने पथरी पकड़े रिम बांध समीप हुआ खेन रहे सखे इजाज, मनीष अध्यापक, रिम प्रवाल, इतरेक अरुमाल,



पुलिस ने अंतर्गत सक्रियता को हुए पारी के न पारि-पारो उर न जुआरियों को डकन समायक इजाजत रूपय मद कराने के लया पाई है।

पुलिस को दे टाकर घर (बनौला)। इस जुआर (फंड) से पुलिस ने 11700 रूपय एवं तंबा के बत्ती लिय सखे 52 गो रूपय ब. तार के बत्ती बरामद किये गए हैं। पुलिस को यह बरामद 20 दि 9 बजे के बीच की है।

पुलिस को यह अखियान अरुड सुबह भी कारी पाया। एकर के सलीपाटा मोहरे में रिमर मोहा नगर के पंथ में वेरुकर हार जीत का रीम लगा रहे सख प्रमाद, गन्, मसोई, तन्, पादक, लयन कुमर लयाप्य, निरजन लयाप्य को री इयो पकड़ उरने कम्मे में लगान 250 रूपय एवं तंबा के पते लक किये गए हैं। सभी जुआरियों पर पुलिस ने 15 जुज एकर को कारीर की है।

### Annexure-I

पिछले वर्ष हुए किया गया है। इयमे सखी को सिधान के लिए सहायक हो उपलब्ध नहीं है। सहायक और मनीष नहीं रहने के कारण अर्द्धशाय के प्रतिस्पर्धी बनें पूरे अर्द्धशाय संस्थ में आते से एकर बिना 200 किए पूत कर कर मारना बनें जाते से। उरने विपटकल भी की जनकरी नहीं की गई। ऐसे में प्रतिस्पर्धीवीं को अधिया अंधे में है। उरने को कहना है कि 20 अरुस से अधिका परीक्ष-मुक्त है। ध्योरी को पकड़ नहीं हुए है किन्तु किसी तरह से कर ध्योरी को परीक्षा ले उराने कर लेगे किन्तु प्रपटकल का मोहा भी जाम नहीं है। उरने के लया कि प्रतिस्पर्धीवीं के द्वारा उरर देर

कार्यक्रम परीक्षा में किसी प्रकार परीक्षा होवे को प्रतिस्पर्धीवीं सहायक एवं सहायक, नि कारी। किन्तु सहायक उपलब्ध उरको अरुत पर अरुतकन करमा पाये है। परीक्षा को न अरुत धारतीय उरर पर निधी को पाई है इजाजत परीक्षा को न परीक्षा ले करमा कथ्य नहीं है। अरुत पर पूत करीक के प्र सिपसत अरुती, सुधीर रिम अरुतीक चरक विकसामिक, स निकुन, रिम सिद्धा, अरुतीक प रीतिप गुण, अरुतीक रिम, अरुतीक सहायक लोनी, एकररि विधा त हाकी सखी, में अरुतीक प्रतिस्पर्धीवीं इरुतीक से।

स्वतंत्रता सेनानियों को श्रद्धांजलि देने आज जुटेगे कार्यकर्ता। सहायक एवं सहायक के सखर एवं बरामद कर मारना बनें जाते से। उरने विपटकल भी की जनकरी नहीं की गई। ऐसे में प्रतिस्पर्धीवीं को अधिया अंधे में है। उरने को कहना है कि 20 अरुस से अधिका परीक्ष-मुक्त है। ध्योरी को पकड़ नहीं हुए है किन्तु किसी तरह से कर ध्योरी को परीक्षा ले उराने कर लेगे किन्तु प्रपटकल का मोहा भी जाम नहीं है। उरने के लया कि प्रतिस्पर्धीवीं के द्वारा उरर देर

## आवश्यकता

हरिभूमि अभिनवपुर जिला कार्यालय के प्रयास मार्केटिंग में कार्य करने के लिए उरुका, योग्य तथा अनुभवी का निहार मुक्त व सुवर्तियों की रीम उपलब्धता में

- उम्मीदवारों में निम्नलिखित योग्यता होना जरूरी है।
- 12 वीं या उरुतक उत्तीर्ण होना चाहिए।
- आयु 30 वर्ष से अधिक नहीं होनी चाहिए।
- कंपनी द्वारा संपादित इन्वेट में कार्य कर लया तथा संपादित करने हेतु नगर से बाहर भी जा सकते।
- उचित विर्यता होमे में स्वाम हो।

वेतनमान-  
योग्यतानुसार रीम वेत होगा।

कार्य का समय  
प्रातः 7 से 2 बजे तक रीम कर सार्व 4 से 6 बजे तक रिमाटिंग

जिले का कार्यालय  
सय 5 वीं, सहायक

कार्यालय प्रमुख  
**हरिभूमि**

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(सामरी खान प्रभाग)  
**रूपय**  
सर्वसाधारण को संचित किया जाता है कि सखर प्रचारण मंडालय, नई दिल्ली से उरके पत्र क्रमांक जे.11015/353/2007-IA.1(KM) दिनांक 27.07.2007 तथा जे.11015/354/2007-IA.1(M) दिनांक 27.07.2007 के तहत हिण्डालको इण्डस्ट्रीज लिमिटेड के सामरी तथा कुदाम बाक्सरिट खादलों के क्षमता विस्तार (0.50 मिलियन टन तथा 0.06 मिलियन टन बाक्सरिट उत्पादन प्रतिवर्ष) हेतु पर्यावरणय स्वोक्ति अर्जापदन होकर प्राप्त हो चुकी है। उरको स्वोक्ति पत्र की प्रतिरूपि उ. ग. पर्यावरण संरक्षण मंडल कार्यालय में उपलब्ध है एवं खन एवं पर्यावरण मंत्रालय को वेबसाईट <http://envfor.nic.in> पर देखी जा सकती है।  
धरवीय  
हिण्डालको इण्डस्ट्रीज लिमिटेड  
सामरी खान प्रभाग



का। हावेल में रिगजिम फुलरो को मजदूरी बढ़ाने का आंदोलन में भाग लेने कुसमुल्ल, नेवरा, रानदीपोरी, एचटीपीपी, बाल्को, मिहाशिका सहित सभी क्षेत्रों के लोगों ने भाग लिया जो मंटे तक चले हुए आंदोलन में अन्य सभी लोग उपस्थित थे।

प्रदेशीय अर्थव्यवस्था में सुदृढ़ता के लिए प्रयास किए जाने लगे।

प्रत्यक्ष/प्रतीतनाह प्रदेश के बर्लिनग तालुका एवं पूर्व मुख्यमंत्री अजीत प्रमोद जोशी के सुभद्र अगिरी जीपी का स्थानीय युवा कार्यकर्ताओं ने जन्म दिवस मनाया। परबलनाथ के सामुदायिक स्वास्थ्य केन्द्र के चर्चे में यह चर्कर शुभ कर्तव्य की कार्यकर्ताओं ने प्रीतपाल पाटिया के सौजन्य से फल, मिष्ठान, वेद का वितरण किया तथा कार्यशी

कृत्यकर्ताओं ने अतिथि अगिरी के अध्यक्षों के अतिथि पर अस्पताल परिसर में अल एव मिडिकल निगरन के क्लब हेमोडियल अचवाल मनोज अम्बरट, रवि सादर, मिहाशुडीन सुबेन्द्र वेठवानी, शिव अचवाल, वेदपाल सिंधार, अजीत वेडिका एवं अन्य प्रायोगिक कार्यकर्ता उपस्थित थे।

# गीता को कटघोरा का प्रभार

हा. अधिकारी चीफिन चंडिका को पदोन्नति मिलने वाली थी। लेकिन है। वे अभी स्थानांतरण के लिए तैयार

फलेक्टर बनाए जाने के बाद से राजनाथपांच अन्त कलेक्टर का पद विगत 2-3 माह से रिक्त था। श्री. वंशमुख सबा अंजोर परिशोधना के अन्त सनायक के पद पर प्रायोगिक परबलनाथ के पद पर प्रत्यास्था उम्मीद विभागा ने प्रतिनिधित्व किया है। इस बीच 2004 बैच के उच्च प्रतिष्ठित आइएएस अफसरों को सनायक फलेक्टर के पद पर पदस्था किया गया है। आइएएस अन्त अजीतनाथ को कटघोरा एवं पञ्जात कुमार को सारागाह अनुविभागीय अधिकारी बनाया गया है।

## लाई निगम के आयुक्त जए लगा रहे जोर

के दबाव नहीं करते रहे हैं। प्रदेश शासन द्वारा जारी आदेश के अनुसार राजको 25 बैच के अधिकारी आइएके वैशामुख को राजनाथपांच का अन्त फलेक्टर पदस्था किया गया है। श्री. वंश मुख को जरापुर

# खाद नहीं मिलने को लेकर कृषकों ने निकाली रैली

प्रत्यक्ष/लेख के किसानों को खाद नहीं मिल रहा है, जिसको लेकर कल परबलनाथ के किसान ने सारागाह निगम ने प्रायोगिक किसानों को लेकर एक रैली निकालकर का दि। विचार अधिकारी श्री पन्ना से खाद वितरण के राह में जलकारी मोर्चा ब जनकर नारेबाजी की नहीं। पन्ना ने आश्वासन दिया कि वे एक-दो दिन में खाद परबलगांव में उपलब्ध कराई जायेगी। इस आश्वासन के परबल गाँव रैली में उपस्थित किसानों विस्तार वामस चलने को तैयार हुए।

खाद ही किसानों ने खाद की किल्लत के लिए व्यापारियों से अधिकारियों द्वारा सारगाह तक उन्हें चार्ज की मिली पर अधिकारी अतिथि मूले तमना देख रहे है दुर्गाई अने र कि सान शिर पर हाथ पर अने दामों में खरीदने को मजबूर हैं। रैली में अचन राम कुपूर, परशुराम कुपूर, मन्तराम पन्ना, बुझाकांड सन्ध, हेमचम पटेल, जोराम सबा, रीथी वारव, रिफेकर शारव व अन्य किसान मौजूद थे। रैली ली अनुवाद किराना गेता द्वारा की गई।

# स जिला अध्यक्ष ने दौरा स्याओं की जानकारी ली

से अपनी भावनाओं से अवगत को ने यह भी साथ रखी कि, ऊच्च क्षेत्री शिक्षक एवं किन्द्रीय वेतनमान दिया जाना वेतनमान मिलने से प्रत्येक 50 से 2000 रूपए तक का था। महंगाई भत्त की घोषणा है। शिक्षक महंगाई भत्त के अनुसार लेन चाहिए तथा श्री शशि केन्द्र को घोषणा के होना चाहिए। जिस तरह से पी. त्रिपठी को शिक्षा विभाग में अग्रिम जाती है उसी प्रकार एम. श्रीलक्ष्मी की अग्रिम वेतन वृद्धि मिलनी

दुर्गे, भोरेलाल ठाकुर, शिवपाल सिंह, मुनेश्वर सिंह, हरिनारायण साहू, प्रमोदपाल साहू, हेमनगर भाऊ रामलाल साहू, कृष्ण साहू, रामपाल साहू, राजेन्द्र चालिसे, पिलू राम सिंह, राजकुमार पन्ना, बहाल सिंह, पारसपति पन्ना श्रीमती मानमती भगत, श्रीमती प्यारी टोम्पो सइदेव सिंह, श्रीमती कल्पलला जामसवंत, श्रीमती सुनिता माण्डेय, पी. पुन, यादव मो. इसलाम अंसारी, रवान नारायण सिंह, उदयपुर लाल में सुधराम साधन, हरिनकर मुष्ठा, मोहेलाल सजवाड़े, कलेशपुर सिंह, प्रमोद कुमार कश्यप, अलोडर टोम्पो, अमरनाथ महंत, देवकुमार वाचन, हाकर राम, अरुक्षीतम, श्रीमती प्रीतिपति टोम्पो, रामलाल सिंह, छोटेलाल दुर्गे, सोमराम सिंह, साहपर सिंह, रामूरां सर, श्रीमती अमयाशिशोरी टोम्पो, धनेश्वर सिंह, मुहन राम तथा अधिकाधिक संख्या में हर स्तर के शिक्षक-शिक्षिकाएं उपस्थित थी। शिक्षकों के प्रस्ताव को उचित कार्यवाही हेतु इसकी सूचना हेतु प्रदेश अध्यक्ष सुरेश तिवारी एवं उप-प्रांत अध्यक्ष बी. एस. सिंह को दे दी गई है। मुख्यमंत्री छत्तीसगढ़ शासन स्कूल शिक्षा मंत्री एवं आदिम जाति कल्याण मंत्री को सभी मार्गों को जोड़कर दे है स्वीकृत करने हेतु अनुरोध पत्र लिखा गया है।

प्रदेश में मुख्य रूप से विशाखापुर तम असाधेश्वर, पी. दुर्गे, एच. ई. जो. सिंह, ए. के. जेन, के. वर्मा, श्वेतना शीवास्वत, रंजना मुनरकाळ में प्रेमचंद शोणी, डी. सर. डी. भगत, रत्नाकरराज शन, मुलाम मोहम्मद खान, के. एस. जलुवर, आर. पी. सिंह, श्रीसाई लाल ने श्रीनारायण साहू, शत्रुघन प्रसाद, नारायण कुंवर, चण्डिका



**हिण्डालको इण्डस्ट्रीज लिमिटेड**  
(सामर्थी खान प्रभाग)

**सूचना**

सर्व पर्याप्तता को सुनिश्चित किया जाता है कि पत्र एवं पर्याप्तता पर्याप्तता, नई दिल्ली से अंक पर क्रमांक नं. 11015/353/2007-IA II(M) दिनांक 27.07.2007 तथा नं. 11015/354/2007-IA II(M) दिनांक 27.07.2007 के तहत हिण्डालको इण्डस्ट्रीज लिमिटेड के सामर्थी तथा कुदांग बाबसाईर खदानों के क्षमता घिसार (0.50 मिलियन टन तथा 0.25 मिलियन टन बाबसाईर उपखान प्रविषण) हेतु पर्याप्तता की स्वीकृति अनुमोदित होकर प्राप्त हो चुकी है। उपरोक्त स्वीकृति पर की प्रतिनिधि प्र. पर्याप्तता संरक्षण मंडल का संकल्प में उपलब्ध है एवं तब एवं पर्याप्तता संकल्प को बाबसाईर <http://envfor.nic.in> पर भी देखें जा सकते हैं।

अनुवाद  
हिण्डालको इण्डस्ट्रीज लिमिटेड  
सामर्थी खान प्रभाग

अभिकवानी  
3 अगस्त 2007



**HINDALCO INDUSTRIES LIMITED****Samri Mines Division****Actual Expenditure incurred in Environment Management Plan**

Total cost incurred for protection of Environment in Samri, Tatijharia and Kudag Bauxite mines of Hindalco Industries Limited, Chhattisgarh during the period from April 2024 to September 2024 is mentioned below:

<b>Sl. No</b>	<b>Environment Protection Measure</b>	<b>Actual Cost (Lakhs) April'24 to Sept'24</b>
1.	Environment Monitoring	5.63
2.	Greenbelt development	13.74
3.	Reclamation/ rehabilitation of mined out area (Samri 1.708Ha., Kudag-0 Ha., Tatijharia-2.989 Ha.) <b>Total- 4.697 Ha.</b>	14.09
	<b>Total</b>	<b>31.37</b>

- Environment Monitoring Job has been outsourced to Anacon Laboratory, recognized by MoEF & NABL.
- One centralized nursery has been established at Samri mines for Samri, Tatijharia & Kudag lease.
- Reclamation of mined out land has been out sourced along with production. Average cost of reclamation considered @ 3.00 lakh per ha.