

**ADITYA BIRLA**



**HINDALCO**

Ref. HIL/TBM/MoEF&CC/ 1272/2024

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:** - Status of compliance of EC condition (Half yearly status of compliance report) in respect of Tatijharia Bauxite Mine (Lease area- 1218.762 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-11015/337/2007-IA. II (M) dated Aug. 9, 2007*

**Dear Sir,**

We do herewith submit half yearly status of EC compliance report in respect of Tatijharia Bauxite Mine, Lease area – 1218.762 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: -

<b>Lease area</b>	<b>Production Capacity</b>	<b>Lease Period</b>
1218.762 Ha.	400000 Tonnes	25.06.1998 to 24.06.2048 (50years)

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); [ecompliance-cg@gov.in](mailto:ecompliance-cg@gov.in); [cpcb.bhopal@gov.in](mailto:cpcb.bhopal@gov.in);  
[hocecb@gmail.com](mailto:hocecb@gmail.com);

**Name of the Project** : Tatijharia Bauxite Mines (1218.762Ha. Capacity-4.00LTPA),  
M/s Hindalco Industries Ltd

**Environment Clearance No  
& date** : J-11015/337/2007 – IA.(IIM) dated 09.08.2007

**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:** Noted.

**Condition-3:** Conservation plan for schedule I fauna (if found in the study area) shall be prepared in consultation with Wildlife Department for implementation.

**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 & fauna along with the approved conservation plan is attached as **Annexure –B**.

**Condition-4:** The mining operations shall be restricted to above ground water table and it shall not intersect ground water table. Prior approval of the Ministry and CGWA should be obtained for mining if any below water table.

**Reply to Condition 4:** The mining operation is restricted to well above ground water table. As per our current mining operation, ultimate depth of working is about 15-20 meters below. The ground water table is below the depth of our mining operation. Piezometer has been installed at strategic location in the Lease area for monitoring the ground water level and the average depth of which is 25-30m. Hence there is no intersection of groundwater level during course of mining operation.

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

**Reply to Condition 5:** Top soil generated during mining operation is being concurrently spread on backfilled area to restore its original forms. However, if required it will be stacked properly with proper slope and adequate safeguards.



Land preparation for reclamation

**Condition-6:** Over burden 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 mine pit area shall be reclaimed by back filling the OB in a phased manner. 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:** As such there is no any active OB dump at present. As per approved Mining Plan, OB generated during mine operation is being utilized for concurrently back filling of the mined out area for reclamation purpose. Old inactive OB dump has been stabilized by vegetation with suitable native species to prevent erosion and surface run off.



Old Inactive OB Dump with Plantation



**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. 80m long along with retaining wall of appropriate size (1m height x 0.5m width x 210m length) have been made around the active mining pits coupled with arrester to arrest silt from run-off and drains are being maintained. The drains are regularly desilted before the monsoon. The Water so collected are being used for green belt development and in sprinkling of the haul road. Sump of adequate capacity is also developed.

At present there is no active OB dump. Entire waste generated during mining operation is being simultaneously backfilled in the mined out pit. An old inactive OB dump has been stabilized by vegetation. Garland drain is provided to arrest silt and sediments flows from above mentioned OB dump.



**Condition-8:** The project proponent shall ensure that no natural water course shall be obstructed due to mining operation.

**Reply to Condition 8:** We undertake that no natural water course is obstructed during mining operation. There is only seasonal nala and the mining operation is diverted from the channel.

**Condition-9:** Blasting operations shall be carried out only during the day time. Controlled blasting shall be practiced. The drills should be operated with drill extractors. The mitigative measures for control of ground vibrations and arrest fly rocks shall be implemented. Blasting scientific based on peak particle velocity, charge per delay and blast geometry shall be evolved for maximum production. The same shall be submitted to the Ministry within six months.

**Reply to Condition 9:** Controlled blasting is being practiced in the mine. Wet drilling Machines are being used during drilling operations. Nonel & effective blast design are used to control blast vibration and fly rocks. Blasting is carried out only in day hours.



**Condition-10:** Plantation shall be raised in an area of 40.84 ha including green belt of adequate width by planting native species around the ML area, roads; OB dump sites etc. in consultation with the local DFO/Agriculture Department. The density of the trees shall be around 2500 plants per ha. Selection of plant species shall be as per CPCB guidelines. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation.

**Reply to Condition 10:** Total 96.314 ha. have been afforested with 233887 nos. of species till date. The plantation in reclaimed area has been carried out as per plan. The density is being maintained about 2500 plant per hectare with the species like Amla, mango, babul, pears, guava and Jamun. Plantation has been carried out over 7.876 ha. with 19770 saplings during Apr'24 to Sep'24. Social forestry is also being encouraged among the local villagers. Apart from that local food grain rice & Tau has been planted over the reclaimed area of 1.500 Ha. Year wise plantation is enclosed as **Annexure-C**.

**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:** Rain water harvesting structure (2 nos. of Ponds and Wells) of area at 0.79 Ha. (Betpani), 0.69 Ha. (Piprapat-1) and 5ft. x 10 ft.) has been constructed as conservation measures in mined out area for the conservation/augmentation of ground water resources. Such measures also help in increasing the water credit of the Lease area.



RWH Pond & Recharge well

**Condition-12:** Regular water sprinkling shall be carried in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading, unloading and transfer points and other vulnerable areas. It should be ensured that the ambient air quality parameters conform to the norms prescribed by the CPCB in this regard.

**Reply to Condition 12:** Regular water spraying with 12 KL water tanker in the mine lease hold area is being carried out regularly to control air pollution. The ambient air quality is within the stipulated norms.



Water Sprinkling in the Haul Road

**Condition-13:** 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 13:** The depth of our mining operation varies from 15-20m. Piezometer has been installed at strategic location within the lease area to monitor the Ground Water level and the average depth of which is 25 to 30m. The ground water table is below the depth of our mining operation. Hence there is no intersection of groundwater level during course of mining operation. Regular monitoring of ground water quality is being carried out. The analysis reports are being submitted to CECB, Raipur. Regular monitoring of ground water level is being carried out and is found below level of mining operation. The ground water Quality & GW level report is attached in *Annexure – D*.

**Condition-14:** Rainwater harvesting measures on long term basis shall be planned and implemented in consultation with Regional Director, CGWB.

**Reply to Condition 14:** Permanent type Rainwater harvesting ponds/Recharge well has been made and the water is being used for plantation and dust suppression activity.

**Condition-15:** Prior permission from the competent authority shall be obtained for drawl of ground water, if any.

**Reply to Condition 15:** Ground water NOC has been obtained from the CGWA vide letter no. CGWA/NOC/MIN/REN/2/2023/7571, dated 03.04.2023 with validity up to 27.03.2025. This water is used for domestic purpose. We are not drawing ground water for industrial use, if required: the prior permission will be taken from competent authority. The GW NOC Copy is attached as *Annexure – E*.

**Condition-16:** Existing ecological status of the project area shall be conserved and protected. The project proponent should take all possible precautionary measures during mining operation for conservation and protection of endangered fauna.

**Reply to Condition 16:** All efforts are being taken to conserve and protect existing ecological status of the project area. We are taking important measures for conservation of flora and fauna are as follows.

- a) Company have been provided solar LED torch and florescent jacket 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 programme 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 so as reduce vibration and noise. Such operation is being carried out in day time only and its use is minimized.
- f) Plantation is regular activity.
- g) Fish farming with seeds of 5500 nos. has been done in water recharge pond.

**Condition-17:** Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.

**Reply to Condition 17:** 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. Vehicle used for transportation are having valid permit. No overloading of ores for transportation is allowed to prevent spillage of material.



**Condition-18:** Occupational health and safety measures for the workers including training on modern eradication, HIV and health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health surveillance and health record of the workers shall be maintained.

**Reply to Condition 18:** Company has provided with personal protective equipment to all workers and training are also being imparted to them for safety & health, sanitation, health awareness camps including HIV are being organized for all workmen. One doctor having MBBS qualification has been appointed for facilitation of OHS. We have undergone through initial & periodical test of all workers employed in the mines by the certified team. The records related to initial and periodical medical examination of all workmen is being maintained.



Job Specific Safety Training at VTC



**Condition-19:** 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 19:** 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 39 years. However, after completion of further detailed exploration programme and geological investigation, the balance life of mine is subject to change with respect to EC Capacity and cut –off grade of mineral at that particular time. Final Mine closure mine 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:** Noted.

**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) 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:** 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 have been 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 programme related to wildlife conservation is being conducted.
- d) Eco-development activities like poultry, piggery, bee keeping etc. are being organized.
- e)

**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 is being carried out as per guideline and is being followed. For this, We have already appointed NABL accredited laboratory M/s. Anacon

Laboratories Pvt. Ltd. for conducting regular environmental monitoring. The Summary of Ambient air quality report (from April 2024 to September 2024) is enclosed as **Annexure-F**.

**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 CECB and to other regulatory authorities as per guidelines. Data of ambient air quality (RPM, SPM, SO<sub>2</sub> and NO<sub>x</sub>) from April 2024 to September 2024 is enclosed as **Annexure-F**.

**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:** Fugitive dust emission from generating sources is being controlled. The dust extractor, wet drilling, regular water spraying with 12 KL portable water tanker in the mine lease hold area is being carried out regularly. 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.



Black top Road towards the mines and Water Sprinkling in the Haul Road

**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.

**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. For the waste water generated from workshop, oil and grease separation pits are provided and the treated water is being used for dust suppression in haul road.

**Condition-9:** Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with 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 center– Samri is being continued as per guidelines.

All employees undergo Lung Function Tests during the Medical Examination. Periodical Medical Examination of employees and contractor workers are organized regularly to observe any contractions due to exposure to dust and other occupational hazards.

**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.

**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-G*.

**Condition-12:** The project authorities shall inform to the Regional Office located at Bhopal regarding 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 document 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/1204/2024, 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-H*.

**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 document 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/1204/2024, 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 Panchayat of Tatijharia on 13-08-2007 in our area. 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 of the issue of the 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 newspaper Hari Bhumi & Ambika Vani. The copy of same has been already submitted to your good office. News paper clip is attached 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:** 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 21:** 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@snly.com

फोन 0771-2552228, Fax 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 इन्वायरमेंट 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 10 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 अक्टूबर 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 प्रकल्पान्त 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 संख्या को परियोजना के कार्यान्वयन के लिए भी लागत आयती है। परियोजना के कार्यान्वयन के लिए भी लागत आयती है। परियोजना के कार्यान्वयन के लिए भी लागत आयती है। परियोजना के कार्यान्वयन के लिए भी लागत आयती है।

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 lebbek</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 antidysenterica</i>	Asclepiadaceae	Phanerophyte
148	<i>Holostemma annularia</i>	Asclepiadaceae	Phanerophyte
149	<i>Hygrophylla auriculata</i>	Acanthaceae	Hemicryptophyte
150	<i>Hyptis suaveolens</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 arborens</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 tridnatus</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 switenoides</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**

**Year wise /lease wise Afforestation details**

Year	Tatijharia lease	
	No. of Saplings	Area in Ha
1998-2017	78925	32.060
2017-18	8868	3.540
2018-19	19967	7.990
2019-20	32715	18.970
2020-21	28739	12.819
2021-22	21947	5.557
2022-23	17110	5.628
2023-24	5846	1.874
2024-25	19770	7.876
<b>Total</b>	<b>233887</b>	<b>96.314</b>

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

<b>Tatijharia Mine Lease Piezometer Reading</b>		
<b>S No</b>	<b>Month</b>	<b>Depth (meter)</b>
1	Apr-24	28.9
2	May-24	29.7
3	Jun-24	29.1
4	Jul-24	28.4
5	Aug-24	28.1
6	Sep-24	27.2



**Anacon  
Laboratories**

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Test Report

Test Report No.: ALPL/29062024/2-19

Dated 29.06.2024

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<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)	<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-1 <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-1	<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> 16.06.2024 <b>Sampling Time:</b> 11:00 AM		<b>Sampling Location</b> Piprapat Nr. Mining
<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	93.75
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	27.60
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	8.74
14	Nitrate (as NO <sub>3</sub> )	mg/l	APIA 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	7.98 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	6.74
19	Taste	-	IS 3025 (Part 8) : 1984	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16) : 2023	500	2000	192
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	84
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  
Technical Manager

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatories

Pooja Kadam  
Technician Manager

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







Test Report

Test Report No.: ALPL/29062024/2-19

Dated 29.06.2024

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<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Tatipbaria, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)	<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-1 <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-1 <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> 16.06.2024 <b>Sampling Time:</b> 11:00 AM <b>Sampling Location</b> Piprapat Nr. Mining
<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	0.13
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	0.05
<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/29062024/2-19

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-1 <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-1	<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> 16.06.2024 <b>Sampling Time:</b> 11:00 AM	<b>Sampling Location</b> Piprapat Nr. Mining
<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>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	Dibromochloroethane	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*  
Pradya Pillewan  
Dy Technical Manager

Authorized Signatory

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







Test Report

Test Report No.: ALPL/29062024/2-19

Dated 29.06.2024

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	<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>Sample Collected By</b> Anacon representative Mr. Atal Sapate <b>Sampling Date:</b> 16.06.2024 <b>Sampling Time:</b> 11:00 AM <b>Sampling Location</b> Piprapat Nr. Mining

Tests required - Pesticide Residues Organochlorine

**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	µg/l	ANtr/7.2/RES/01: 2018	0.4	No relaxation	BDL (DL - 0.03)
Alpha-Endosulphan						
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/29062024/2-19

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamra, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-1	<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-1	<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> 16.06.2024	<b>Sampling Location</b> Piprapat Nr. Mining
		<b>Sampling Time:</b> 11:00 AM	
<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)
	Malaaxon	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					
	Phorate-sulfone	µg/l	ANtr/7.2/RES/01: 2018	2	No relaxation	BDL (DL - 0.03)
	Phonate-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-Invrg/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

*Pradya*  
Pradya Pillawan  
Dy Technical Manager

Authorized Signatory

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

—END OF REPORT—





Test Report

Test Report No.: ALPL/29062024/2-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-2 <b>Inward Date</b> 21.06.2024 <b>Reference</b> 13562310264; 17.05.2024 <b>Inv. No.</b> -	<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-2	<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> 16.06.2024 <b>Sampling Time:</b> 12:15 PM	<b>Sampling Location</b> BKB 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 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	75
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	46.43
9	Calcium (as Ca)	mg/l	IS 3025 (Part 40) : 1991	75	200	21.6
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	9.23
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	8.34 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	8.64
19	Taste	-	IS 3025 (Part 8) : 1984	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16) : 2023	500	2000	176
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	92
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

*Snehal Raut*  
Snehal Raut  
Technical Manager

*Pradnya Pillewan*  
Pradnya Pillewan  
Dy Technical Manager

Authorized Signatories

*Pooja Kulkarni*  
Pooja Kulkarni  
Technical Manager

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







Test Report

Test Report No.: ALPL/29062024/2-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)	<b>Sample Inward No.</b>	ALPL/21062024/MON-EW-1/6-2	<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-2		Drinking	5 Ltr
<b>Sample Collected By</b>		<b>Sampling Date:</b>	<b>Sampling Location</b>	
Anacon representative Mr. Atul Sapate		16.06.2024	BKB Camp	
<b>Sampling Time:</b>				
12:15 PM				
<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</b>	<b>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	0.97
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	(0.1) (0.1-0.02)
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	0.14
<b>II</b>	<b>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/29062024/2-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamra, Tehsil Samri(Kusmi), District: Balrampur (C.G.)		<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-2 <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-2	<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> 16.06.2024 <b>Sampling Time:</b> 12:15 PM	<b>Sampling Location</b> BKB Camp
<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>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

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatory

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





Test Report

Test Report No.: ALPL/29062024/2-20

Dated 29.06.2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/21062024/MON-EW-1/6-2 <b>Inward Date</b> 21.06.2024 <b>Reference</b> I3562310264; 17.05.2024	<b>Analysis Start</b> 25.06.2024 <b>Analysis End</b> 29.06.2024
<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>Sample Collected By</b> Anacon representative Mr. Atul Sapate		<b>Sampling Date:</b> 16.06.2024 <b>Sampling Time:</b> 12:15 PM	<b>Sampling Location</b> BKB Camp
<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

Pradnya Pillewan  
Dy Technical Manager

Authorized Signatory

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







Test Report

Test Report No.: ALPL/29062024/2-20

Dated 29.06.2024

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Table with 4 columns: Issued To (M/s Hindalco Industries Limited), Sample Inward No. (ALPL/21062024/MON-EW-1/6-2), Analysis Start (25.06.2024), Inward Date (21.06.2024), Analysis End (29.06.2024), Reference (13562310264; 17.05.2024), Sample Category (Water), Sample Name (Water), Sample Particulars / Details (GW-2), Purpose of analysis (Drinking), Quantity Received (5 Ltr), Sample Collected By (Anacon representative Mr. Atul Sapate), Sampling Date (16.06.2024), Sampling Location (BKB Camp), Sampling Time (12:15 PM), Tests required (Pesticide Residues Organophosphorus)

TEST RESULTS

Table with 6 columns: S.N., Test Parameter, Measurement Unit, Test Method, Requirement as per IS 10500 : 2012 (Drinking Water Specifications) including Amendment No. 4 (Acceptable Limit, Permissible Limit #), Test Result. Rows include Pesticide Residues Organophosphorus, Isoproturon, Monocrotophos, Parathion methyl, Paraoxon methyl, Malathion, Malaoson, Ethion, Chlorpyrifos, and Phorate.

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, ug/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-1nsrg/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/30092024/3-20

Dated 30/09/2024

Page 1 of 5

<b>Issued To :</b> M/s Hindalco Industries Limited Tati(haria), Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-1	<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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> Piprapat Nr. Mining
<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	181.64
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	37.46
9	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	51.68
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	0.24
13	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	12.26
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	7.97 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	18.43
19	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	452
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	180
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/30092024/3-20

Dated 30/09/2024

Page 2 of 5

<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharla, Post Jamira, Tehsil Samri(Kusmi),District: Balrampur (C.G.)		<b>Sample Inward No.</b> ALPL/23092024/MUN-294- EW-3/2-1	<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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> Piprapat Nr. Mining
<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	0.26
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.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 Discipline : Chemical</b>		<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
39	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/30092024/3-20

Dated 30/09/2024

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<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)	<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-1	<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 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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> Piprapat Nr. Mining
<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 Discipline : Chemical</b>		<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
40	Polynuclear aromatic hydrocarbons			0.1	No relaxation	
	Naphthalene	µg/l	ANtr/7.2/RES/04			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)		
41	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/30092024/3-20

Dated 30/09/2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-1	<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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> Piprapat Nr. Mining
<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 #	
III	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
42	<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*  
Pradnya Pillewan  
Deputy Technical Manager

Authorized Signatory

*Chinmay Gorway*  
Chinmay Gorway  
Deputy Quality Manager





Test Report

Test Report No.: ALPL/30092024/3-20

Dated 30/09/2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijhari, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-1	<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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> Piprapat Nr. Mining

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 #	
<b>IV</b>	<b>Discipline : Chemical</b>		<b>Group : Residues contaminants in water</b>	<b>Material or Product tested: Drinking water</b>		
43	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 concern. ● 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/7.8/05).

**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 Garway  
Deputy Quality Manager

—END OF REPORT—







*Test Report*

Test Report No.: ALPL/30092024/3-21

Dated 30/09/2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-2	<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-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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> BKB 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>		<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	179.31
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	24.76
9	Calcium (as Ca)	mg/l	IS 3025 (Part 40) Clause 5	75	200	47.39
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	0.21
13	Magnesium (as Mg)	mg/l	IS 3025 (Part 46) Clause 6	30	100	13.27
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	8.14 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	12.81
19	Taste	-	IS 3025 (Part 8)	Agreeable	Agreeable	Agreeable
20	Total dissolved solids	mg/l	IS 3025 (Part 16)	500	2000	462
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	172
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

Pooja Kathane  
Technical Manager

Authorized Signatories

Chinmay Garway  
Deputy Quality Manager







Test Report

Test Report No.: ALPL/30092024/3-21

Dated 30/09/2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatiharua, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-2 <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>Quantity Received</b> 5 Ltr
<b>Sampling done by</b> Anacon representative Mr. Dharmasheel Bhiogade		<b>Sampling Date:</b> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> BKB Camp
<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.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 Discipline : Chemical</b>		<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
39	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  
  
Pradya Pillewan  
Deputy Technical Manager

Authorized Signatory  
  
Chinmay Gaway  
Deputy Quality Manager





*Test Report*

Test Report No.: ALPL/30092024/3-21

Dated 30/09/2024

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<b>Issued To :</b> <b>M/s Hindalco Industries Limited</b> Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)	<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-2	<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 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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm
		<b>Sampling Location</b> BKB Camp
<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 Discipline : Chemical</b>		<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
40	Polynuclear aromatic hydrocarbons			0.1	No relaxation	
	Naphthalene	µg/l	ANtr/7.2/RES/04			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)		
41	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

*Pradiya Pilewan*  
 Pradiya Pilewan  
 Deputy Technical Manager

Authorized Signatory

*Chinmay Garway*  
 Chinmay Garway  
 Deputy Quality Manager







*Test Report*

Test Report No.: ALPL/30092024/3-21

Dated 30/09/2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-2	<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-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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> BKB Camp
<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 #	
III	<b>Discipline : Chemical</b>	<b>Group : Residues contaminants in water</b>		<b>Material or Product tested: Drinking water</b>		
42	<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/30092024/3-21

Dated 30/09/2024

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<b>Issued To :</b> M/s Hindalco Industries Limited Tatijharia, Post Jamra, Tehsil Samri(Kusmi), District: Balrampur (C.G)		<b>Sample Inward No.</b> ALPL/23092024/MON-294- EW-3/2-2	<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-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> 21/09/2024 <b>Sampling Time:</b> 2.20 pm	<b>Sampling Location</b> BKB 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>		
43	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 samples 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. 4 is not relevant. ● ANtr/7.2/RES-01, ANtr/7.2/RES/06; Isbuse 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 Garway  
Deputy Quality Manager

—END OF REPORT—







भारत सरकार  
जल शक्ति मंत्रालय  
जल संसाधन, नदी विकास  
और गंगा संरक्षण विभाग  
केन्द्रीय भूमि जल प्राधिकरण  
Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
River Development & Ganga Rejuvenation  
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

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

Project Name:	Tatijharia Bauxite Mine Of M/s Hindalco Industries Limited		
Project Address:	Village-tatijharia		
Village:	Tatijhariya	Block:	Kusmi
District:	Balrampur	State:	Chhattisgarh
Pin Code:			
Communication Address:	Hindalco Industries Limited, Mines Division Samri, At And Po - Kusmi, 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/2/2023/7571	2. <b>Date of Issuance</b>	03/04/2023									
3. Application No.:	21-4/1434/CT/MIN/2018	4. Category: (GWRE 2020)	Safe									
5. Project Status:	Existing Ground Water	6. NOC Type:	Renewal									
7. <b>Valid from:</b>	28/03/2023	8. <b>Valid up to:</b>	27/03/2025									
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				
	5.00	1550.00										
10. Details of ground water abstraction /Dewatering structures												
	<b>Total Existing No.:5</b>						<b>Total Proposed No.:0</b>					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	1	4	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.):							1550.00					

**(Compliance Conditions given overleaf)**

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

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

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**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 CPCPE 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.)**

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**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)**

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**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.:	21-4/1434/CT/MIN/2018		
Name of Firm:	TATIJHARIA 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	1550.00
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 Five Hundred Fifty Only</b>		<b>2550.00</b>

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



**Anacon  
Laboratories**

**Anacon Laboratories Pvt. Ltd. Nagpur Lab**  
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 MIDC Butibori, Nagpur, Maharashtra, India - 441 122  
 ☎ + 91 8045685558 ✉ Email ; info@anacon.in  
 🌐 https://www.anaconlaboratories.com

Test Report

Page 1 of 1

Ambient Air Quality-April-2024

Report No.:-	ALPL/30042024/2-1	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samej(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Ref. No. :	ALPL/22042024/ENV-127/1-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	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-1	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

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/30042024/2-2	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Ref. No. :	ALPL/22042024/ENV-127/1-C-Z-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		

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>x</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	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)

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	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  
 Technical Manager

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

----End of Report----





Test Report

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/2-3	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Ref. No. :	ALPL/22042024/ENV-127/1-CZ-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-3	Virhorepat	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-3	Virhorepat	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  
Technical Manager

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

----End of Report----







*Test Report*

***Ambient Air Quality-April-2024***

Report No.:-	ALPL/30042024/2-4	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Ref. No. :	ALPL/22042024/ENV-127/1-CZ-4 , 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	Khinpat	03/04/2024	58.3	21.6	11.4	18.3	BDL (DL - 0.5)
		06/04/2024	62.9	23.8	12.6	21.8	BDL (DL - 0.5)
		10/04/2024	57.2	19.2	9.3	17.6	BDL (DL - 0.5)
		13/04/2024	61.7	21.6	11.4	23.9	BDL (DL - 0.5)
		17/04/2024	64.8	26.7	13.8	26.1	BDL (DL - 0.5)
		20/04/2024	57.2	19.3	9.2	18.7	BDL (DL - 0.5)
		24/04/2024	61.4	21.8	11.6	21.9	BDL (DL - 0.5)
		27/04/2024	63.9	23.4	12.7	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-4	Khinpat	03/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		06/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL(DL-0.03)
		10/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		13/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		17/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		20/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		24/04/2024	BDL (DL-0.01)	BDL (DL-0.0005)	BDL (DL-2.0)	BDL (DL-0.03)
		27/04/2024	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

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/30042024/2-5	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-127/1-BZ-5 , 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-5	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)

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-5	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/30042024/2-6	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-126/1-BZ-6 , 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>x</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-6	Dhandiapat/ Nr. Mining Area	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-6	Dhandiapat/ Nr. Mining Area	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  
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/30042024/2-7	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-127/1-BZ-7, W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chaharde	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-7	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	36.3	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-7	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)	—

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 • TL: Indicates detection limit of instrument/method and shall be considered as 'absent'.

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

*Nidhi Dubey*  
Nidhi Dubey  
Deputy Technical Manager

Verified by  
*Snehal Raut*  
Snehal Raut  
Technical Manager

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

----End of Report----







Test Report

**Ambient Air Quality-April-2024**

Report No.:-	ALPL/30042024/2-8	Report Date:-	30/04/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Ref. No. :	ALPL/22042024/ENV-127/1-BZ-8 , W1/A11 & A12, W2/A11 & A12, W3/A11 & A12, W4/A11 & A12.
Sample Drawn By:	Mr. Kailash Chavande	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	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-8	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)	---

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*

**Fugitive Emission Report-April-2024**

Report No.: AN/FE/2024/2-9		Date: 30/04/2024	
Name and Address of Industry:-	M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil: Samri (Kusmi), District: Balrampur (C.G)		W. O. No.
			13562310264/17.05.2024
Sample Description/Type	Fugitive Emission	Sample Ref. No.:-	ALPL/22042024/ENV-127/1- FE-1 to 2
Sample Drawn By:-	Anacon Representative	Sample Inward Date	15/04/2024 & 29/04/2024
Test Started On:-	15/04/2024 & 29/04/2024	Test Completed On:-	16/04/2024 & 30/04/2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sl No.	Location Name	Date of sampling	TSPM µg/m <sup>3</sup>	RPM µg/m <sup>3</sup>	Date of sampling	TSPM (µg/m <sup>3</sup> )	RPM µg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)		Method Reference	IS 5182 (Part 23)	
FE-1	Piprapat/Nr. Mining Area	03/04/2024	594	136	17/04/2024	627	117
		05/04/2024	628	164	20/04/2024	703	168
		09/04/2024	571	192	24/04/2024	652	153
		12/04/2024	463	176	27/04/2024	591	141
Average Value of FE-1		---	564	167	---	643	152
FE-2	Tatijharia Village/ Nr. Weigh Bridge	03/04/2024	873	194	17/04/2024	703	168
		05/04/2024	901	176	20/04/2024	804	176
		09/04/2024	864	157	24/04/2024	709	164
		12/04/2024	709	196	27/04/2024	694	147
Average Value of FE-2		---	837	181	---	728	164
FE-3	Khinpat/ Nr. Mining Area	03/04/2024	539	103	17/04/2024	646	138
		05/04/2024	472	94	20/04/2024	703	192
		09/04/2024	461	83	24/04/2024	591	163
		12/04/2024	526	101	27/04/2024	627	176
Average Value of FE-3		---	500	95	---	642	167
MoEF & CC Norms:		---	1200 µg/m <sup>3</sup>	---	---	1200 µg/m <sup>3</sup>	---

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.

Remark: - All Results are within Limit as per MoEF & CC Norms.

Verified by  
  
 Snehal Raut  
 Technical Manager

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

---End of Report---







*Test Report*

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/3-1	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-3/64-1
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			
<b>AAQ-1</b>	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
<b>AAQ-1</b>	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 (QP7.6/01).

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

Verified by

Snehal Raut  
Technical Manager

Pradnya Pillawan  
Deputy Technical Manager

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager

---End of Report---





*Test Report*

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/3-2	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Core Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-3/64-2
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) $\text{mg}/\text{m}^3$
Test Method			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	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)
NAAQMS Standards			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 $\mu\text{g}/\text{m}^3$
Test Method			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	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)
NAAQMS 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. • 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 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**

<b>Report No.:-</b>	ALPL/05082024/3-3	<b>Report Date:-</b>	05/08/2024
<b>Issued to :-</b>	<b>M/s Hindalco Industries Limited</b>	<b>Address:-</b>	Tatiharja, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
<b>Type of Work:-</b>	Ambient Air Quality (Core Zone)	<b>Sample Inward No.</b>	ALPL/22072024/MON-268-EAAQ-3/64-3
<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>	ANtr/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-3	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>			<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-3	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>			<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 (QP7.6/25).

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

Verified by

Snehal Raut  
Technical Manager

Pradyum Pillawan  
Deputy Technical Manager

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager

---End of Report---





*Test Report*

**Ambient Air Quality-July-2024**

<b>Report No.:-</b>	ALPL/05082024/3-4	<b>Report Date:-</b>	05/08/2024
<b>Issued to :-</b>	M/s Hindalco Industries Limited	<b>Address:-</b>	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
<b>Type of Work:-</b>	Ambient Air Quality (Core Zone)	<b>Sample Inward No.</b>	ALPL/22072024/MON-268-EAAQ-3/64-4
<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>			
AAQ-4	Khinpat	03/07/2024	54.6	16.1	11.6	21.4	BLQ (LOQ-0.5)
		06/07/2024	47.3	15.9	9.2	18.3	BLQ (LOQ-0.5)
		10/07/2024	51.7	21.8	12.1	23.6	BLQ (LOQ-0.5)
		13/07/2024	53.9	23.1	11.7	21.8	BLQ (LOQ-0.5)
		17/07/2024	48.3	19.2	9.6	19.3	BLQ (LOQ-0.5)
		20/07/2024	51.2	21.7	12.6	23.7	BLQ (LOQ-0.5)
		24/07/2024	47.6	17.3	8.3	16.8	BLQ (LOQ-0.5)
		27/07/2024	43.9	16.4	9.2	16.2	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-4	Khinpat	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>

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

Verified by

Snehal Raut  
Technical Manager

Pradnya Pillewan  
Deputy Technical Manager

Authorized Signatory

Chinmay Gawde  
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/05082024/3-5	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-3/64-5
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-5	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>			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-5	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>			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 (QP7.805).

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

Verified by

Snehal Raut  
Technical Manager

Pradyum Pillawan  
Deputy Technical Manager

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager

---End of Report---





*Test Report*

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/3-6	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-3/64-6
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)
I.	<b>Discipline: Chemical</b>		<b>Group: Atmospheric Pollution</b>		<b>Material or Product tested : Ambient Air</b>		
AAQ-6	Dhandiapat/ 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>			<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	Dhandiapat/ 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>

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/7.8/05).

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

Verified by

Snehal Raut  
Technical Manager

Pradnya Pillawan  
Deputy Technical Manager

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager

---End of Report---







*Test Report*

**Ambient Air Quality-July-2024**

Report No.:-	ALPL/05082024/3-7	Report Date:-	05/08/2024
Issued to :-	M/s Hindalco Industries Limited	Address:-	Tatiharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
Type of Work:-	Ambient Air Quality (Buffer Zone)	Sample Inward No.	ALPL/22072024/MON-268-EAAQ-3/64-7
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	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>			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	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>			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 (QP7.8/05).

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

Verified by

Snehal Raut  
Technical Manager

Pradnya Pillawan  
Deputy Technical Manager

Authorized Signatory

Chinmay Gurway  
Deputy Quality Manager

----End of Report----





*Test Report*

**Ambient Air Quality-July-2024**

<b>Report No.:-</b>	ALPL/05082024/3-8	<b>Report Date:-</b>	05/08/2024
<b>Issued to :-</b>	<b>M/s Hindalco Industries Limited</b>	<b>Address:-</b>	Tatijharia, Post Jamira, Tehsil Samri(Kusmi), District: Balrampur (C.G)
<b>Type of Work:-</b>	<b>Ambient Air Quality (Buffer Zone)</b>	<b>Sample Inward No.</b>	ALPL/22072024/MON-268-EAAQ-3/64-8
<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>			
AAQ-8	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-8	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 (QP/7.5/03).

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

Verified by

Snehal Raut  
Technical Manager

Pradyum Pillawan  
Deputy Technical Manager

Authorized Signatory

Chinmay Garway  
Deputy Quality Manager

---End of Report---







Test Report

**Fugitive Emission Report-July-2024**

Report No.: AN/FE/2024/3-9		Date: 31/07/2024	
Name and Address of Industry:-	M/s Hindalco Industries Limited Tatijharia, Post Jamira, Tehsil: Samri (Kusmi), District: Balrampur (C.G)		W. O. No.
			13562310264/17.05.2024
Sample Description/Type	Fugitive Emission	Sample Ref. No.:-	ALPL/22072024/MON-268- EFE-3/24-1 to 2
Sampling done by	Anacon Representative Mr. Kailash Chahande	Sample Inward Date	22/07/2024 & 29/07/2024
Test Started On:-	23/07/2024 & 30/07/2024	Test Completed On:-	24/07/2024 & 31/07/2024
Sampling Procedure	ANtd/7.2/Mon-01		

Sl. No.	Location Name	Date of sampling	TSPM µg/m <sup>3</sup>	RPM µg/m <sup>3</sup>	Date of sampling	TSPM (µg/m <sup>3</sup> )	RPM µg/m <sup>3</sup>
Method Reference			IS 5182 (Part 23)		Method Reference	IS 5182 (Part 23)	
FE-1	Piprapat/Nr. Mining Area	03/07/2024	427	116	17/07/2024	594	127
		06/07/2024	538	121	20/07/2024	609	132
		10/07/2024	494	109	24/07/2024	473	91
		13/07/2024	503	92	27/07/2024	481	76
Average Value of FE-1		---	<b>491</b>	<b>110</b>	---	<b>539</b>	<b>107</b>
FE-2	Tatijharia Village/ Nr. Weigh Bridge	03/07/2024	571	116	17/07/2024	652	128
		06/07/2024	497	103	20/07/2024	581	116
		10/07/2024	529	108	24/07/2024	617	109
		13/07/2024	638	121	27/07/2024	652	124
Average Value of FE-2		---	<b>559</b>	<b>112</b>	---	<b>626</b>	<b>119</b>
FE-3	Khinpat/ Nr. Mining Area	03/07/2024	486	116	17/07/2024	527	129
		06/07/2024	503	128	20/07/2024	493	107
		10/07/2024	581	121	24/07/2024	471	118
		13/07/2024	476	97	27/07/2024	398	82
Average Value of FE-3		---	<b>512</b>	<b>116</b>	---	<b>472</b>	<b>109</b>
MoEF & CC Norms:		---	<b>1200 µg/m<sup>3</sup></b>	---	---	<b>1200 µg/m<sup>3</sup></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.

**Remark:** - All Results are within Limit as per MoEF & CC Norms.

Verified by  
  
 Snehal Raut  
 Technical Manager

Authorized Signatory  
  
 Chinmay Gurway  
 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

Agent of Mines



**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:

Sl. No	Environment Protection Measure	Actual Cost (Lakhs) April'24 to Sept'24
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.

# डढ़ दजन जुआरया स 17 हजार बरामद

## बड़े-छोटे जुआरी एक ही दिन पकड़े गए

हरिभूमि न्यूज (अभिनवकपुर)

पुलिस के संतरोपण सक्रियता में हुए पारी के न गरीर गये डढ़ न जुआरी को डकन लगाया डूनाय रूपय मद कारने से सवता पाई है। इ सुकर जोहा मय के समरप। ऐसे लोग भी ष छोड़ते पकड़े गये गरी के अरुई हो नई सिरप विधिनी में मन पड़े है। इन को रस पकड़ आगमयल जआरयां मे केल नये हुई है। पुलिस अधीनक इयकाय सकेर निसरन में सफरती वे आर हुर नि नेदुय में मोठी एत नगर डकन डहर सिरोकी, विशेष तह के प्रभरी अधीनक, पिर, हु एका के नेपुल में निक्के हरा बल मे गपरी पढ़ते रिय कोष समीप हुका खेल रहे सकेर डकार, मनीष अथवत, हिन प्रबत, अरोक अरुमाल,

समाराएल अखबाल को री टाकर मय एकीन। इल नुआ अकड से पुलिस मे 11700 रूपय एत राज के बतले

लिय सवे 32 हो रूपय न नगर के सते बल किर गर है। पुलिस को यह मारीनई रनि 9 एत 9 बदे के बोष जो है।



पुलिस को सवेले हैं जुआ

बनकर किया है। इरके नकड पुलिस को टोन सीमडायर परुनी। यहों पर नुआ खेल रहे सुसा लकको, रजल मयपी, रकेत सिंह, यशन खान, रूपन गुल, सवय को विद्यारा में अरुअ इनके बोषी से दान लाने के

नगर पुलिस को यह अघियान अरुअ मुबन को कती एत। अरु के सतीपराट मोरडे में तिष्ठ मोहा गदतल के बोष मे वेवक हार बीत का दान लया रहे सवय प्रमाई, गनु, मसीई, तनु, गदक,

लयन कुमार लजाएय, निमिन लदय को री इरके एकड उरके बनने में लरुमन 250 रूपय एत राज के पते लकड किर गर है। सभी जुआरीय पर पुलिस ने 19 जुअ एत को अरुई न हो है।

### Annexure-I

पिछले वर्ष हुए किया गया है। इयने सारी को सिधान के लिए सलाक हो आरुमय नही है। सकलय और मरीन नही रहने के कारण अरुटीनई के प्रतिस्थापी बन नई आरुटीनई संरुध में आठ से अरुअ किर 200 किर पुन कर कर मयन सते गये थे। उरके अरुटीनई को ओ जनकती नही की गई। एये में प्रतिस्थापीनी जो अधिन अरुभे में है। उरके को कहता है कि 20 अरुअवे से अधिका परीक्ष नुक है। एरुके को पढ़ाई नही हुई है किन्तु किसी तरह से कर अरुटी को परीका ले उरुता कर लेगे किन्तु अरुटीनई का मोहा भी नान नही है। उरुकेन कतना कि प्रतिस्थापीनी के द्वारा उरुअ डेट

कायेविका परीका में कितनी अरुअ परीका होवे की प्रतिस्थापीनी सलानुसल एरुअ नकरय मि काएन। कितने सीसाएन नकडक उकती अरुअ पर अरुअ अरुअ कयय गये है। परीका को ले अरुअत धारोण अरु पर निधी को पारी है इरुअत परीका की ले परीक्षा ले कयन कयय नही है। अरुअ पर पुन कयेविक के प्र सिरपसत अरुअत, गुणीय विन अरुअत यरुअ विकामयिक, स नुिक, किन सिद्धा अरुअत प रीतिन गुन, सभित रिय, प्रडोन 1 सभय सती, एमकरीन विधय न हाकी समुअ में अरुटीनई प्रतिस्थापी उरुयिका के।

### स्वतंत्रता संग्रामियों को शहाजलि देने आज लुटेरे कार्य

अधिकाएर । सलाखा अरुअत मे निधी के अरुअत एत कालिय के मयन स 3 अरुअत को मुबन 10 मने दियेन कयोन कयोनीय कयोनीय में कयोनीय को को कयोनी। उरुअत अरुअत कयोनीय के अरुअत मरुअत, एरुअत अरुअत पर वि विरुअ पर मुअक कयोनीय अरुअत कयोनीय कयोनीय, एरुअत अरुअत पर वि कयोनी के कयोनी अरुअत कयोनीय एत अरुअत कयोनीय जने से एक कयोनीय अरुअत कयोनी को कयोनी को है।

### आवश्यकता

हरिभूमि अभिनवकपुर जिला कार्यालय के प्रसात मार्केटींग में कयोनी परने के लिए उरुआकी, कयोनी तथा अनुभवीय विा कियार मुअक व सुपरिवी की सीप अरुअत कयोनी

#### उम्मीदवारों में निम्नलिखित योग्यता होना जरूरी है-

- 12 वीं या उचाकड उतीर्ण होना चाहिए।
- आयु 30 वर्ष से अधिक नहीं होनी चाहिए।
- कयोनी द्वारा संपादित इरुअत में कयोनी एत उरुअत कयोनी संपादित करने हेतु कयोनी से आठ वीं या उरुअत।
- उचित विर्यय डोगे में सजान हो।

#### वेतनमान-

योग्यतानुसार सेना वेत होगा।

#### कार्य का समय

प्रातः 7 से 2 बजे तक कयोनीय कयोनी सार्थ 4 से 6 बजे तक कयोनीय टिंग

#### किलो का समय


सार्थ 5 बजे से कयोनीय टिंग

#### कार्यालय प्रमुख

## हरिभूमि

सरगुजा जिला कार्यालय कोहाडुन, बडे पाणी टंकी के पास अभिनवकपुर (छ.ग.) फोन: 07774-210776, मो. 98261-19698, 98261-62296, 98930-877

**B.C.A.**  
M. Sc. Microbiology  
B.Sc. Biotechnology  
Admission for management notes  
**LIMITED SEAT**  
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B.Sc - M. Sc -  
Microbiology  
B.Sc. Computer, B.C.A.,  
P.G.D.C.A.  
B.A. - B.Com with com  
Application  
गौति निकेतन महाविद्यालय  
एनएचकेवलेड वि.वि. से समरुअ  
पंथवी कोकोरी टकसके विरुअरु  
Ph. - 94233-11236

  
**हिम्मतनगर होमिंग लिमिटेड**  
(सामरी खान प्रभाग)  
**रूपय**  
सर्वसाधारण को संचित किया जाता है कि इनपर परिवारण मंडलक, नई दिल्ली से उरुअत पर क्रमांक एन.11015/353/2007-IA.1(KM) दिनांक 27.07.2007 तथा जे.31015/354/2007-IA.1(M) दिनांक 27.07.2007 के तहत हिम्मतनगर होमिंग लिमिटेड के सामरी तथा कुदाम बॉक्सराईट खादलो के क्षमता विरुअत (0.50 मिलियन टन तथा 0.06 मिलियन टन बॉक्सराईट उत्पादन प्रतिवर्ष) हेतु पर्यावरणविद्य स्वीकृति अरुअतन होकर प्राप्त हो चुकी है। उरुअत स्वीकृति पर की प्रतिस्तिपि छ.ग. पर्यावरण संरक्षण मंडल कार्यालय में उपलब्ध है एवं खन एवं परिवारण मंडलक को वेबसाईट <http://envfor.nic.in> पर देखी जा सकती है।  
भतवीय  
हिम्मतनगर होमिंग लिमिटेड  
सामरी खान प्रभाग



का। हावेल में रिगजिम फुलरो को मजबूत करने इस आंदोलन में भाग लेने कुसमुल्ल, नेवत, रानदीपोरी, एचदीपोरी, बाल्को, मिहाशिका सहित सभी क्षेत्रों के लोगों ने भाग लिया जो मंटे तक चले हुए आंदोलन में अन्य सभी लोग उपस्थित थे।

प्रदेशीय अखिल कृषक संघ के पुत्री किरण का विवाह 20 मई 1997 को सखतपुर स्थान अवर्तित क्रम अनीना निवासी शम्भुका के पुत्र राजेशप्रसाद पाठक के पुत्र के साथ हुआ था। विवाह के एक साल बाद ही किरण को दर्हम के लिए प्रोत्साहित किए जाने लगे।

परधलगाव/ अहीस्ताइ प्रदेश के बर्गोला ताल्लए एवं पूर्व मुख्यमंत्री अहीत प्रमोव जोनी के सुपुत्र अमिता जोनी का स्थानीय युवा कार्यकर्ताओं ने जन्म दिवस मनाया। परधलगाव के सामुदायिक स्वास्थ्य केन्द्र के चर्च में यह चर्कर शुवा करों की कार्यकर्ताओं ने प्रीतपाल पाटिया के सौजन्य से फल, मिष्ठान, वेद को वितरण किया तथा कार्य करी

कृत्य करता था। अहीत जोनी के जन्मदिन के अवसर पर अस्पताल परिसर में अल एवं मिस्किट नितवन के कल्ल हरमोदिन्द अचवाल मनोज अम्बरट, रवि सादव, मिहापुडीन सुवेन्द वेठवाणी, शिव अम्वाल, वेठवन विधवार, अरुणक वेठिका एवं अन्य प्राणीय कार्यकर्ता उपस्थित थे।

## गीता को कटघोरा का प्रभार

हा. अधिकारी चीरिन चंडिग को पदोन्नति मिलने वाली थी। लेकिन है। वे अभी स्थानांतरण के लिए सखत

फलेक्टर बनाए जाने के बाद से राजनादपांच अन्त कलेक्टर का पद विगत 2-3 माह से रिक्त था। श्री. वंशमुख सबा अंजोर परिशोधना के अन्त सनातक के पद पर प्रायोगिक परामर्शक के पद पर वैधान्त छत्रीय विभाज विभाग ने प्रतिनिधिक रूप से। इस बीच 2004 बीच के छत्र प्रिण्डु आइएस अफसरों को सनातक फलेक्टर के पद पर पदस्थ किया गया है। आईएसएस अन्त खरीवा का कटघोरा एवं पन्त कुमार को सारागाइ अनुविभागीय अधिकारी बनाया गया है।

## लाई निगम के आयुक्त जए लगा रहे जोर

के दबाव नहीं कल्ल रहे हैं। प्रदेश शासन द्वारा जारी आदेश के अनुसार राजको 198 बंध के अधिकारी आईके वैशामुख को राजनादपांच का अन्त फलेक्टर पदस्थ किया गया है। डीबी सिंह को जरापुर

## खाद नहीं भिलने को लेकर कृषकों ने निकाली रैली

परधलगाव/ क्षेत्र के किसानों को खाद नहीं मिल रहा है, जिसको लेकर कल्ल परधलगाव के किसान ने सारा वेठप्रकाश मित्रा ने प्राणीय किसानों को लेकर एक रैली निकालकर का दि। विचार अधिकारी श्री पन्त से खाद वितरण के सख ने जानकारी मांगी व जनकर नारेबाजी की गई। पन्त ने आश्वासन दिया कि वे एक-दो दिन में खाद पकलगाव में उपलब्ध कराई जायेगी। इस आश्वासन के परधाल से रैली में उपस्थित सख को विस्वास बामस खने को तैयार हुए।

खाद ही किसानों ने खाद की किल्लत के लिए व्यापारियों से अधिकारियों द्वारा सारगाइ तक छत्रे सार्ग की बिली पर अधिकारी अखंड मूदे सभारा देख रहे है दुगारी अने र कि सान शिर पर हाथ पर छत्रे दामों में खरीदने को सखपुर हैं। रैली में अन्त राम सुपूर, परशुराम कुपूर, मसुराव पन्ना, बुडाकाइ सन्धव, हेराम पटेल, जोरस सख, रीथी वारव, रिफेखर बावत व अन्य किसान मौजूद थे। रैली ली अनुवाद किरान गेवा द्वारा की गई।

## स जिला अध्यक्ष ने दौरा स्याओं की जानकारी ली

से अपनी प्राधान्यों से अवगत को ने यह भी सख लकी कि क, अन्त क्षेत्री शिक्षक एवं किन्दीय वेतनमान दिया जाना वेतनमान मिलने से प्रत्येक 50 से 2000 रूपए तक का था। महंगाई भत्त की घोषणा है। शिक्षक महंगाई भत्त के अनुसार क्षेत्र चाहिए तथा श्री शशि केन्द 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

दु. भोरलान लखुर, शिवांगल सिंह, मुनेश्वर सिंह, हरिहरामण साहू, प्रमूदपाल साहू, हेमनगर भाऊक रावलल्लू साहू, कृष्ण साहू, रामपाल साहू, राजेन्द्र चालिपार, पिल्ल राम सिंह, राजकुमार पन्त, बहाल सिंह, पारसपति पन्त श्रीमती मानभती भगत, श्रीमती प्यारी टोम्पो सइदेव सिंह, श्रीमती कन्तल्लारा जामसवल, श्रीमती सुनिता माण्डेय, पी. पुन, यादव मो. इसलाम अंसारी, श्याम नारायण सिंह, उबयपुर सलाक में सुधराम साधन, हरिचंकर मुधा, मोहेलाल सजवाडे, कल्लेसदुर सिंह, प्रमोद कुमार कश्यप, अलोइस टोम्पो, अमरनाथ महंत, मेघकुमार बाबव, हाकर राम, अरुक्षीतम, श्रीमती इमिलिपिस टोम्पो, रामलाल सिंह, छोटेलाल दुने, सोमारलाल सिंह, साहपर सिंह, रामूर्ण सर, श्रीमती अपयशिवशी टोम्पो, धनेश्वर सिंह, मुहन राम तथा अधिकाधिक सख में हर सलाक में शिक्षक-शिक्षिकाएं उपस्थित थी। शिक्षकों के प्रस्ताव को उचित कार्यवाही हेतु इसकी सूचना हेतु प्रदेश अध्यक्ष सुरेश तिवारी एवं उप-प्राचार्यध्वज की, एस. सिंह को दे दी गई है। मुख्यमंत्री छत्रीसंग्रह शासन स्कूल शिक्षा मंत्री एवं आदिम जाति कल्याण मंत्री को सभी मार्गों को जोड़कर गेवा है स्वीकृत करने हेतु अनुरोध पत्र लिखा गया है।



**हिण्डालको इण्डरट्रीज लिमिटेड**  
(सामरि खान प्रभाग)

**सूचना**

सर्व संपादन को स्थित किया जाता है कि पन् एवं परधलगाव में अन्त, नई दिल्ली से अन्त 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 इण्डरट्रीज लिमिटेड के सामरि तथा कुदांग बाबसाइड खदानों के क्षमता घिसार (0.50 मिलियन टन तथा 0.25 मिलियन टन बाबसाइड उपपान प्रविण्य) हेतु पर्यावरणीय स्वीकृति अनुमोदित होकर प्राप्त हो चुकी है। उपरोक्त स्वीकृति पर की प्रतिनिधि पत्र पर्यावरण संरक्षण मंडल कार्यालय में उपलब्ध है एवं तब एवं पर्यावरण संरक्षण की वेबसाइट <http://envfor.nic.in> पर भी देखी जा सकती है।

अवधि  
हिण्डालको इण्डरट्रीज लिमिटेड  
सामरि खान प्रभाग

अभिकवाणी  
3 अगस्त 2007