



Letter No: AAP/E&S/EC/2025/1364

Date: 10/11/2025

To,
The Director
Ministry of Environment, Forest & Climate Change
Integrated Regional Office
A/3, Chandrashekharapur
Bhubaneswar – 750 023 (Odisha)

Sub: Submission of Six-Monthly Compliance from April' 25 to September' 25.

Ref: Environmental Clearance Letter No: J-11011/136/2009-IA. I (I), dated 29/11/2012, J-11011/136/2009-IA. II (I), dated 14/06/2013, J-11011/136/2009-IA. II (I), dated 14/08/2018 & J-11011/136/2009-IA. I (I) dated 20/07/2020 & 12/08/2022 and amendment dated 07/06/2025.

Dear Sir,

As a part of the compliance to the Environmental Clearance accorded by MoEF&CC to Aditya Aluminium for 0.74 MTPA Smelter and 1650 MW CPP at Lapanga in Sambalpur district, please find enclosed herewith the six-monthly compliance report of aluminium smelter and captive power plant for the period April' 25 to September' 25.

Kindly acknowledge receipt of the reports.

Thanking You

Yours faithfully
For Aditya Aluminium

A handwritten signature in blue ink, appearing to read "Jagannath Prasad Nayak".

Jagannath Prasad Nayak
President & Unit Head

Copy for kind information to:

1. The Member Secretary, SPCB, Bhubaneswar
2. The Regional Director, Zonal office of CPCB, Kolkata
3. The Regional Officer, SPCB, Sambalpur

Hindalco Industries Limited

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Corporate ID No.: L27020MH1958PLC011238

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

Name of the Project	:	Aditya Aluminium (A Unit of Hindalco Industries Ltd.) at village: Lapanga, Tehsil: Rengali, District: Sambalpur (Odisha).
Environment Clearance Letter No and date	:	J-11011/136/2009-IA-I(I), dated 29 th November 2012, letter no. J-11011/136/2009-IA II (I), dated 14 th June 2013 and EC amendment letter no. J-11011/136/2009-IA.II (I), 14 th August 2018, 20 th July 2020, 12 th August 2022 & 7 th June 2025 For 7,40,000 TPA Aluminium Smelter & 1650 MW Captive Power Plant
Period of Compliance Report	:	April 2025 to September 2025

Sr. No.	Specific Conditions	Compliance Status
i)	The streams passing through the project site shall not be disturbed w.r.t their quantity and quality of flow.	The streams passing through the project site is not being disturbed.
ii)	Alumina shall be obtained from those refineries, which have been accorded environmental clearance by the Ministry of Environment and Forests.	Alumina is being obtained from refineries which have been accorded environmental clearance. At Present, the Alumina is being obtained from Utkal Alumina International Limited (UAIL), Rayagada Distt. and it has been accorded environmental clearance from MoEFCC. We have kept an option of importing Alumina in case of any shortage in supply from the above source.
iii)	The gaseous emissions (PM, SO₂, NO_x, PAH, HC, VOCs and Fluoride) from various process units shall confirm to the standards prescribed by the concerned authorities from time to time. The SPCB may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time the emissions level should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency. The particulate emissions from the bake oven plant shall not exceed 50 mg/Nm³.	Online Monitoring equipment's have been installed at the outlet of the following stacks for monitoring of particulate matter and gaseous emissions. The online data has been connected to the Servers of OSPCB and CPCB. a) Smelter GTC 1 & 2- 2 Nos. b) Smelter FTC 1 & 2 - 2 Nos. c) CPP Unit 1 to 6 - 6 Nos. Particulate matter emission from the bake oven does not exceed the prescribed limit of 50 mg/Nm³. Monitoring report for the period of Apr-25 to Sep-25 enclosed as Annexure-1.

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

iv)	Particulate fluoride emissions should not be more than 0.65 mg/Nm³ and fugitive particulate fluoride emissions from pot room should not be more than 1.85 mg/Nm³.	Online monitoring equipment at Gas Treatment Centre (GTC) and Fume Treatment Centre (FTC) installed for monitoring Hydrogen Fluoride (HF), Particulate Matter (PM). The particulate fluoride emission from the gas treatment Centre is within the prescribed standard. The average fugitive particulate fluoride emission from pot rooms during Apr-25 to Sep-25 is 0.054 kg/ton of metal produced. Monitoring report for the period of Apr-25 to Sep-25 enclosed as Annexure-2.
v)	The poly aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) should not exceed 2 mg/Nm³. The data on PAH should be monitored quarterly and report submitted regularly to the Ministry/Regional Office at Bhubaneswar and SPCB.	The poly aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) are monitored on monthly basis and found within the standard. (Ref: Annexure 1).
vi)	In plant, control measures like fume extraction and dust extraction system for controlling fugitive emissions from all the materials handling/transfer points shall be provided to control dust emissions. Fugitive Fluoride emissions from the pot room and in the forage around the smelter complex and the data submitted regularly to the Ministry Regional Office at Bhubaneswar and SPCB. Further dry scrubbing system to control the emissions from the pot lines should be provided.	Fume Extraction Centre (FTC) in Anode Baking furnace, Gas Treatment Plant (GTC) in potlines and bag filters in raw material handling, GAP, Anode Baking, Roding areas, bath recycling, carbon recycling area, butts recycling area, cathode sealing shop etc in smelter area and coal handling, ash handling plant in captive power plant is installed to control fugitive dust emissions. Online Roof Top Monitoring analyzer installed for Fugitive fluoride (HF) monitoring in pot rooms, the concentration of hydrogen fluoride (HF) varies between 0.122 mg/m³ to 0.231 mg/m³ and average is 0.177 mg/m³ during Apr-25 to Sep-25. The daily average emission report during these periods is attached as Annexure-3. Forage fluoride analysis around the smelter is being carried out on quarterly basis and forage fluoride monitoring report enclosed as Annexure-4. Dry scrubbing system is being provided as gas treatment centre (GTC) to each of the pots in the pot room to control fugitive emission.

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

vii)	Electrostatic Precipitators (ESP) will be provided to Captive Power Plant (CPP) to control particulate emissions below 50 mg/Nm³. The company shall provide bag filters, dry scrubbing system and dust suppression system to control all the emissions including fluoride emissions from all melting and casting units. Tar, Dust and fluoride in the fumes shall be controlled in baking furnace by providing dry scrubber. The emissions shall conform to the standards prescribed by the Ministry CPCB/SPCB whichever is more stringent.	Electrostatic Precipitators (ESP) of adequate efficiency is installed in Captive Power Plant (CPP) to restrict particulate emissions within 50 mg/Nm³. Two nos. of Gas Treatment Centre (GTC) provided and connected to each 180 pots. Besides, Bag filters are installed in all the material handling & transfer points in Smelter. Fume treatment centre (FTC) provided to each Anode Baking Furnaces to treat the tar fumes, dust, gaseous and particulate fluorides generated during Anode Baking. The standards prescribed by the Ministry/ CPCB/ SPCB is being adhered. The results of the stack emission from the CPP units for the period of Apr-25 to Sep-25 is enclosed as Annexure-5.
viii)	Provision for installation of FGD shall be provided for future use.	Installation & commissioning of Semi-dry flue gas desulphurization system has been completed in CPP Unit-6. Provision has been kept for the installation of FGD in other CPP units.
ix)	Three tri-flue and one bi-flue stack of 275 m height with flue gas velocity not less than 22 m/s shall be installed and provided with continuous online monitoring equipment's for SO₂, NO_x, and PM₁₀.	Two (02) numbers of tri-flue stacks of 275 m height is installed in phase-I. Continuous emission monitoring system (CEMS) installed for monitoring of SO₂, NO_x, and PM in all the stacks of CPP and the velocity of the exit flue gas is being maintained above 22 m/s. The results of the stack emission from the CPP units for the period of Apr-25 to Sep-25 . Refer Annexure-5.
x)	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.	Dust extraction systems (DE), Dry fog dust suppression (DFDS) & Rain gun water sprinkling systems are installed in coal handling plant and ash handling system of Captive Power Plant. Details of bag filter given below- • 12 nos. of Bag filters installed in Coal Handling Plant HP & Ash Handling Plant of CPP. • 52 nos. of De-dusting system installed at Alumina handling, Coke Handling, GAP, Rodding, BRS, CRS, ABF and other areas of Smelter. • Dust suppression & dry Fog System installed in coal handling/conveying circuit, & ash silos etc. In addition to the above 2 nos. of mechanized sweeping machines are deployed for cleaning of roads & 4 nos of sweeping machine for shop floor areas to control the fugitive emission.
xi)	Utilization of 100% fly ash generated shall be	The ash generated from the captive power plant is

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

	made from 4 th year of operation. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	primarily supplied to cement plants and Road construction. Bottom ash is being utilized for filling low-lying areas inside the plant premises & Road construction. The low-lying area filling and development activity is being carried out with prior approval of the State Pollution Control Board (SPCB), Odisha following the guidelines. The ash generation and utilization status for the period of Apr-25 to Sep-25 is enclosed as Annexure-6.
xii)	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. PP shall comply with the CPCB guidelines for handling, utilization and disposal of fly ash, including unutilized ash. Mercury and other heavy metals (As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. Low Lying area filling with Fly ash shall be done accordance to the guidelines prepared by the Central Pollution Control Board (CPCB) for the disposal of fly ash in reclamation of low-lying areas and stowing/backfilling of abandoned mines/ quarries.	Fly ash & bottom ash are collected in dry form and 3x2500 MT Fly ash silo and 1x3000 MT bottom ash silo have been installed. We are exploring maximum utilization of Ash and unutilized ash is being discharged to the Ash Pond through High Concentration Slurry Disposal (HCSD) system, which is the most environment friendly conveying system at present. Monitoring of Mercury and other heavy metals (Ag, Hg, Cr, Pb etc.) is being done for the fly ash and bottom ash. The analysis report is enclosed as Annexure-7. The ash generated from the captive power plant is primarily supplied to cement plants and Road construction. Bottom ash is being utilized for filling low-lying areas inside the plant premises & Road construction. The low-lying area filling and development activity is being carried out with prior approval of the State Pollution Control Board (SPCB), Odisha following the guidelines. The fly ash filling in low-lying areas within the plant premises is being conducted in accordance with the CPCB guidelines for fly ash disposal, as outlined in their March 2019 publication, and with prior approvals from SPCB, Odisha (including Consent to Establish (CTE) and Consent to Operate (CTO)).
xiii)	Fluoride (as F) consumption shall be less than 10 kg/ton of Aluminium produced as specified by the CREP.	The specific fluoride (as F) consumption for the period of Apr-25 to Sep-25 is 7.62 kg/ton of Aluminium produced.
xiv)	Anode butts generated from the pots shall be cleaned and recycled to the Anode Plant. The spent pot lining generated from the smelter shall be properly treated in spent pot lining treatment plant to remove fluoride and cyanide and dispose of in secured landfill / Shall be disposed off through actual users authorized by SPCBs/ Coprocessing in Cement kilns authorized by SPCBs /Disposal in CHW-TSDF, in line with the provisions of HOWM Rules, 2016 (as	Anode butts generated from the pots is being cleaned and recycled completely for making green anode in the green anode plant. Spent Pot Lining (SPL) contains Carbon Part, Refractory Part and Silicon Carbide bricks. The Standard Operating Procedure (SOP) developed by Central Pollution Control Board (CPCB) for SPL requires detoxification before its end use applications. In accordance with the SOPs, the SPL Carbon part generated from Smelter is

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

amended) and CPCB Guidelines. The location and design of the land fill site shall be approved by the SPCB as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. Leachate collection facilities shall be provided to the secured land fill facilities (SLF). The dross shall be recycled in the cast house. STP sludge shall be utilized as manure for greenbelt development. All the used oil and batteries shall be sold to the authorized recyclers/ re-processors. As proposed, spent pot lining waste shall also be provided to cement and steel industries for further utilization. The project proponent shall develop in- house facilities for treatment of Spent Pot Lining (SPL) generated in the Aluminium smelter. Meanwhile, Refractory part may be sent to CHWTSDf as per the provisions of Hazardous and Other Waste Amendment Rules, 2016.	being sent to authorized recyclers, namely M/s Regrow Tanso Pvt Ltd, Jharsuguda, for detoxification and used for manufacturing of mineral fuel as a resource/energy recovery in cement plants, Steel and Ferrous alloy industries etc. SPL Silicon carbide bricks is being sent to authorized recyclers M/s Tekno Processors LLP, Sambalpur for processing and sold to authorized users for manufacturing of refractory brick in line with CPCB SOP for Preprocessor of Waste Silicon Carbide refractory bricks generated from pot lining wastes from Primary Aluminium Smelter.
The project proponent shall develop inhouse facilities for the treatment of SPL in 2 to 3 years.	The disposal of SPL's refractory part to the CHW-TSDF facility of M/s Re-Sustainability Ltd, Jajpur district, Odisha, has commenced following a successful trial run, which was conducted in the presence of CPCB, SPCB, and other relevant authorities. A protocol was issued to M/s Re-Sustainability Ltd to ensure the safe disposal of SPL in the Secure Landfill area. M/s Re-Sustainability Ltd is handling the disposal of the refractory part in compliance with the terms and conditions specified in the protocol.
	The carbon part of spent pot lining is disposed to actual users i.e. M/s Regrow Tanso Pvt. Ltd. Jharsuguda, the refractory part to M/s. Re-Sustainability Ltd (CHW-TSDF, Jajpur). In this way 100% SPL is being detoxified and recycled/disposed with 71.42 MT of SPL remaining in stock at the end of Sep-25.
	The location and design of the land fill site has been prepared as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and approved from SPCB.
	The Aluminium dross generated in the process is re-processed in the inhouse dross processing unit /partly supplied to authorized recyclers and the residue generated from dross processing unit is being sent to OSPCB authorized recyclers for Alum/synthetic slag making.
	STP is in operation at township & Plant area separately, the sludge generated is being used for gardening/greenbelt development.
	The used oil and batteries are being sold/ supplied to

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

		authorized recyclers/reprocessors only.
xv)	Anode butts generated from the pots shall be cleaned and recycled to the Anode Plant. The spent pot lining generated from the smelter shall be properly treated in spent pot lining treatment plant to remove fluoride and cyanide and dispose of in secured landfill / Shall be disposed off through actual users authorized by SPCBs/Coprocessing in Cement kilns authorized by SPCBs /Disposal in CHW-TSDF, in line with the provisions of HOWM Rules, 2016 (as amended) and CPCB Guidelines. The location and design of the land fill site shall be approved by the SPCB as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. Leachate collection facilities shall be provided to the secured land fill facilities (SLF). The dross shall be recycled in the cast house. STP sludge shall be utilized as manure for greenbelt development. All the used oil and batteries shall be sold to the authorized recyclers/ re-processors. As proposed, spent pot lining waste shall also be provided to cement and steel industries for further utilization. The project proponent shall develop in- house facilities for treatment of Spent Pot Lining (SPL) generated in the Aluminium smelter. Meanwhile, Refractory part may be sent to CHWTSDF as per the provisions of Hazardous and Other Waste Amendment Rules, 2016. The project proponent shall develop in-house facilities for the treatment of SPL in 2 to 3 years.	Anode butts generated from the pots is being cleaned and recycled completely for making green anode in the green anode plant. Spent Pot Lining (SPL) contains Carbon Part, Refractory Part and Silicon Carbide bricks. The Standard Operating Procedure (SOP) developed by Central Pollution Control Board (CPCB) for SPL requires detoxification before its end use applications. In accordance with the SOPs, the SPL Carbon part generated from Smelter is being sent to authorized recyclers, namely M/s Regrow Tanso Pvt Ltd, Jharsuguda, for detoxification and used for manufacturing of mineral fuel as a resource/energy recovery in cement plants, Steel and Ferrous alloy industries etc. SPL Silicon carbide bricks is being sent to authorized recyclers M/s Tekno Processors LLP, Sambalpur for processing and sold to authorized users for manufacturing of refractory brick in line with CPCB SOP for Preprocessor of Waste Silicon Carbide refractory bricks generated from pot lining wastes from Primary Aluminium Smelter. The disposal of SPL's refractory part to the CHW-TSDF facility of M/s Re-Sustainability Ltd, Jajpur district, Odisha, has commenced following a successful trial run, which was conducted in the presence of CPCB, SPCB, and other relevant authorities. A protocol was issued to M/s Re-Sustainability Ltd to ensure the safe disposal of SPL in the Secure Landfill area. M/s Re-Sustainability Ltd is handling the disposal of the refractory part in compliance with the terms and conditions specified in the protocol. The carbon part of spent pot lining is disposed to actual users i.e. M/s Regrow Tanso Pvt. Ltd. Jharsuguda, the refractory part to M/s. Re-Sustainability Ltd (CHW-TSDF, Jajpur). In this way 100% SPL is being detoxified and recycled/disposed with 71.42 MT of SPL remaining in stock at the end of Sep-25. The location and design of the land fill site has been prepared as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and approved from SPCB. The Aluminium dross generated in the process is re-

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

		processed in the inhouse dross processing unit /partly supplied to authorized recyclers and the residue generated from dross processing unit is being sent to OSPCB authorized recyclers for Alum/synthetic slag making. STP is in operation at township & Plant area separately, the sludge generated is being used for gardening/greenbelt development. The used oil and batteries are being sold/ supplied to authorized recyclers/reprocessors only.
xvi)	Ash pond shall be lined with HDP/LDPE lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached. Ash pond water shall be recirculated and reused.	The ash pond has been lined with HDPE liner and adequate safety measures have been taken to minimize the risk to the ash dyke. The ash disposal through HCSD system has been implemented. The decanted water from the ash pond is being completely recycled and reused for ash disposal. The existing ash pond over an area of 37 acres having fly ash quantity 9.44 lakh MT has been reclaimed. Certificate of closure and reclamation has been received from SPCB vide letter no. 14036/IND-I-CON-6120 dated 04-09- 2023. An emergency ash pond has been developed over an area of 30 acres adjacent to existing pond as per the design & drawings provided by NIT-Rourkela and is in operation.
xvii)	Cycle of concentration (CoC) of 5.0 shall be adopted.	We are maintaining the average CoC of cooling tower above 6.
xviii)	Regular monitoring of ground water shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the regional office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Regular monitoring of ground water is being carried out through establishing a network of existing wells and constructing two nos. new piezometer wells near ash pond areas and the analysis report is enclosed as Annexure-8. Monitoring of heavy metals (Hg, Cr, As, Pb) around the Ash Pond area is being carried and record maintained. Please refer Annexure-7 for the analysis report.
xix)	Regular ground water monitoring shall be carried out by installing Piezometers all around the secured landfill site, if any, in consultation with SPCB and data be submitted to the Ministry's Regional Office and SPCB.	Secured landfill (SLF) has not yet been established inside the plant. Therefore, ground water quality monitoring shall be carried out after the establishment of the SLF.
xx)	Total water requirement for the expansion from Hirakud Reservoir shall not exceed 5,200 m ³ /hr	No additional fresh water will be sourced from Hirakud Reservoir for the proposed expansion. The water

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

	and prior permission for the existing and proposed expansion shall be obtained from the concerned department before commissioning of the plant. All the effluent including from the cooling tower and de-mineralization plant shall be treated in the effluent treatment plant and treated effluent shall be recycled/reutilized in the process in smelter and CPP and also for fire protection, dust suppression, greenbelt development etc. Domestic effluent shall be treated in sewage treatment plant (STP) and treated domestic waste water will be used for greenbelt development.	requirement estimated for the expansion is within 52.73 cusec, as approved. The Effluent from the cooling towers and de-mineralization plant is being treated in Double Stage RO based effluent treatment plant and is being reused/reutilized in the process of CPP. Separate Sewage Treatment Plant (STP) is installed capacity 25 m³/hr for Smelter & Captive Power Plant, STP of 300 KLD capacity is installed at Township area and the treated water being used for greenbelt development.
xxi)	No effluent shall be discharged outside the premises of smelter during non-monsoon period and shall be discharged during the monsoon period only after treatment and meeting the norms of the OSPCB/CPCB.	We are operating a Double Stage Reverse Osmosis based effluent treatment plant (ETP) of 300 m ³ /hr capacity & 200 KLD MVR system and therefore no effluent water is being discharged to outside without treatment from Smelter.
xxii)	Greenbelt of adequate width and density around the project site shall be developed in 33% area in consultation with the DFO as per the CPCB guidelines having density of 2,000 trees/Ha.	Aditya Aluminium has developed >33% Greenbelt over an area of 446 Hectares inside the plant, ash pond area and township areas. Around 9,68,230 number of saplings planted till Sep-25.
xxiii)	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Occupational Health Surveillance of the workers is being done as per the Odisha Factories Act. Periodical medical examinations for all employees are undertaken regularly. For the period of Apr-25 to Sep-25 the health surveillance statistics are as follows: - Periodic Medical Health surveillance for permanent employees- 1261 People. Periodic Medical Health surveillance for contractual employees-9011 People.
xxiv)	The company shall develop rainwater structures to harvest the runoff water for recharge of ground water in consultation with the Central Ground Water Authority/ Board or a reputed government institute specializing in rainwater harvesting.	We have conducted the Rainwater Harvesting Study for the project area through Andhra University, Visakhapatnam in December 2011. The rainwater harvesting scheme suggested in the report has been implemented in the township buildings, all the run off water comes to the rainwater harvesting pond (70,000 cum capacity) has been developed for ground water recharge purpose inside the township area. The rainwater harvesting scheme has been submitted to CGWA for approval vide our letter no. AA/E&F/EC/2016/131, dated 09/04/2016 and

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

		AA/E&F/CGWA/2025/1212 dated 20/02/2025.											
xxv)	Rehabilitation and Resettlement Action Plan as prepared and submitted to the State Govt. shall be implemented as per the R & R Policy of the State Government. All the recommendations mentioned in the R&R Plan shall be strictly followed, including suitable employment and other facilities to all the oustees.	Rehabilitation and Resettlement Action Plan is being implemented as per the R & R policy, 2006 of the State Govt. All the recommendations mentioned in the R&R plan are being followed/complied.											
xxvi)	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium Sector shall be strictly implemented.	All the conditions of CREP guideline for Aluminium sector is being followed. The point wise compliance to the CREP guideline is attached as Annexure-9 .											
xxvii)	The company shall adopt well laid down corporate policy and identified and designate responsible officers at all levels of its hierarchy for ensuring adherence to the policy and compliance with environmental clearance, environmental laws and regulations.	The company has adopted a well-laid-down Corporate Environment Policy. The Environment policy has been revised and approved by the Board on 13 th February 2024. The copy of the revised environment policy is attached as Annexure-10 .											
xxviii)	All the commitments made to the public during public hearing /public consultation meeting held on 2 nd march 2012 should be satisfactorily implemented and a separate budget for implementing the same should be allocated and information submitted to the Ministry's Regional Office at Bhubaneswar.	All the commitments made to the public during public hearing/public consultation meeting held on 2nd March 2012 is being complied. (The Status of implementation is enclosed as Annexure-11).											
xxix)	At least 5% of the total cost of the project shall be earmarked for towards the Enterprise Social Commitment and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner.	The 5% ESC of the total cost of the project (Phase-1) is around Rs.580 Crores is planned to be spent over the plant life span of 39 years period. Action Plan along with budgetary provisions and implementation schedule for the expenditure is given below- <table><tr><td>First 9 years (FY 2016 -17 to 2024-25)</td><td>Next 10 yrs (FY 2025-26 to 2034-35)</td><td>Next 10 yrs (FY 2035-36 to 2044-45)</td><td>Last 10 yrs (FY 2045-46 to 2054-55)</td></tr><tr><td>Rs 5 Cr/ year</td><td>Rs 9 Cr/ year</td><td>Rs 16 Cr/ year</td><td>Rs 28 Cr/year</td></tr></table> The expenses under Enterprise Social Commitment (ESC) till Sep-25 is Rs 81.15 Crores. The details of the expenditure made under Enterprise Social Commitment (ESC) till Sep-2025 is attached as Annexure-12.				First 9 years (FY 2016 -17 to 2024-25)	Next 10 yrs (FY 2025-26 to 2034-35)	Next 10 yrs (FY 2035-36 to 2044-45)	Last 10 yrs (FY 2045-46 to 2054-55)	Rs 5 Cr/ year	Rs 9 Cr/ year	Rs 16 Cr/ year	Rs 28 Cr/year
First 9 years (FY 2016 -17 to 2024-25)	Next 10 yrs (FY 2025-26 to 2034-35)	Next 10 yrs (FY 2035-36 to 2044-45)	Last 10 yrs (FY 2045-46 to 2054-55)										
Rs 5 Cr/ year	Rs 9 Cr/ year	Rs 16 Cr/ year	Rs 28 Cr/year										
xxx)	The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary	The construction activities are completed after the plant is installed & commissioned. However, in case of any construction & maintenance activities from time to time we are providing all necessary infrastructure and facilities to the workers as per rules & guidelines.											

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

	structures to be ensured accordingly in a time bound manner.	
xxxi)	The company shall submit within three months their policy towards Corporate Environment Responsibility which should inter-alia address (i) standard operating process/procedure to being into focus any infringement/deviation/violation of environmental or forests norms/ conditions (ii) Hierarchical system or administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance and (iii) system of reporting of non-compliance/violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.	The Corporate Environment Policy prepared and approved by the company Board of Directors, Organizational Structure for Hindalco Corporate Environment, Deployment of Corporate Policy in manufacturing Plants & communication of Policy as regards Corporate Environment is already submitted to MoEF&CC vide our letter no. AAP/E&F/849, dated 26/02/2013.
	GENERAL CONDITIONS	
i)	The project authorities must strictly adhere to the stipulations made by the OSPCB and the State Government.	We have been following the stipulations made by OSPCB and the State Government. The compliance to CTO conditions is being submitted to OSPCB as per requirement.
ii)	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	We have received the following approvals- As per the MoEFCC Gazette notification no S.O. 980(E), dated 2nd March 2021 and subsequent amendments, we have received No increase in pollution load certificate from OSPCB. 1. For addition of sheets, coils & Foil (product mix change): NIPL Letter No. 20489/IND-II-NOC-NIPL/20 dated 20.12.2021 and CTE for 340 KTPA FRP (170 KTPA in two phases): Letter No. 455/IND-II-CTE-6594 dated 06.01.2022. 2. CTO for FRP Phase-1 170 KTPA has been received from OSPCB vide letter no. 2850/IND-I-CON-6120 dated 13.02.2025. 3. For enhancement from 3.8 LTPA to 4.8 LTPA (addition of 1.0 LTPA purchased recycled metal) and addition of 0.9 LTPA White Fused Alumina: Letter No. 4108/IND-II-NOC-MISC-NIPL/74 dated 22.03.2024 and CTE for the same received from OSPCB vide letter no. 11493/IND-II-CTE, dated 25.07.2024. 4. CTO received for 3.8 to 4.8 LTPA (1.0 LTPA recycled molten metal from M/s CMR Aluminium Pvt Ltd): vide letter No. 4469/IND-I-CON-6120 dated 06.03.2025. 5. EC letter no :J-11011/136/2009-IA-I(I) dated

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

		07.06.2025 and EC amendment dated 14.08.2025. for Aluminium Smelter from 3.8 LTPA to 6.8 LTPA [by addition of 1 LTPA (Recycled metal) & installation of 2 LTPA (Renewable Energy Based 180 Pots)] and Captive Power Plant from 900 MW to 1230 MW [by addition of 180 MW Combined Cycle Power Plant (Gas/ Oil fired) & 150 MW CPP (Coal fired) for Emergency Backup] within the existing plant premises.
iii)	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19 th May, 1993 and standards prescribed from time to time. The SPCB may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	We have noted and accepted the stipulated condition.
iv)	At least four number of ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO ₂ and NO _x are anticipated in consultation with the OSPCB. Data on ambient air quality and stack emission should be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and Orissa State Pollution Control Board once in Six months.	Installation of four (04) CAAQM Stations completed and commissioned. Data connectivity established with the servers of OSPCB and CPCB. Installation of the continuous stack emission monitoring system in all the major stacks completed. All the CAAQMS & CEMS synchronized with the webserver of the SPCB & CPCB. Six-monthly compliance along with the monitoring data is being submitted to the concerned authorities regularly.
v)	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz 75 dBA (daytime) and 70 dBA (nighttime).	The overall noise levels in and around the plant area is within the prescribed standards and it is being made possible by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. Ambient Noise monitoring report attached as Annexure-13. The overall noise level is within the standard, regular monitoring is being done. All necessary PPEs are provided to the workers and engineers working in the factory. All the Mandatory PPEs including earmuffs and masks in PPE kits are being provided to workers. Year wise details of the PPEs i.e. earmuffs and masks supplied to workers for the period of Apr-25 to Sep-25 are as given below- 1. Earmuff & Ear Plug- 6560 Nos. 2. Dust mask & Respirator-15382 Nos
vi)	Occupational Health Surveillance of the workers	Occupational Health Surveillance of the workers is

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

	should be done on a regular basis and records maintained as per the Factories Act.	being done as per the Odisha Factories Act. Periodical medical examinations for all employees are undertaken regularly. For the period of Apr-25 to Sep-25 the health surveillance statistics are as follows: - Periodic Medical Health surveillance for permanent employees- 1261 People. Periodic Medical Health surveillance for contractual employees-9011 People.
vii)	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table.	The company has developed surface water harvesting structures to the tune of 22 lakhs cum to store water in the lean season and it will harvest the rainwater during rainy season in the same reservoirs.
viii)	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA report. Further the company must undertake socio-economic development activities in the surrounding villages like community development programmes, drinking water supply and health care etc.	We have noted and accepted all the conditions and will comply in a time-bound manner. The economic development activities are going on regularly as a part of our corporate social responsibility. A team of personnel working dedicatedly for peripheral development work like conducting health camps, community developed programmes, formation SHG groups, supply of drinking water and other common infrastructural development works. Details of the CSR, R&R activities undertaken is attached as Annexure-14 .
ix)	Requisite fund shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment & Forests as well the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose.	Capital investment proposed for environment protection measures is Rs. 1984.22 Crores for the project (Phase-1 & Phase-2). Phase-1 implementation has been completed & Phase-2 not implemented. The details of the expenditure made on environmental management for Phase-1 Facility i.e. Smelter 0.38 MTPA & CPP-900 MW is around Rs. 1164.08 Crores. Total- 69.26 Crores expended for environmental protection measures till FY 2025-26.
x)	A copy of the clearance letter shall be send by the proponent to concerned Panchayat, Zillaparishad/Municipality corporation, urban local body and the local NGO, if any from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter also be put on the web site of the company by the proponent.	A copy of the clearance letter has already been communicated to all concerned as mentioned in the condition. A scanned copy of the letter is also displayed on our official website.
xi)	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their website and shall	The status of compliance to the EC conditions is being submitted to the Regional office of the MOEF regularly on 1 st June and 1 st Dec respectively with a copy to CPCB & OSPCB and the same is being uploaded into the

Aditya Aluminium: Six Monthly EC Compliance from April 2025- September 2025

	update the same periodically. It shall simultaneously be sent to the Regional Office of the MoEF at Bhubaneswar. The respective zonal office of CPCB and SPCB. The criteria pollutant levels namely' PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Company website. (http://www.hindalco.com/sustainability/regulatory-compliances). All the stack emission and ambient air monitoring stations are synchronized with the webserver of the SPCB & CPCB. The online monitoring data w.r.t. stack emission, ambient air quality and effluent water quality is being digitally displayed at the main entrance gate for information to the public.
xii)	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitoring data (both in hard & soft copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Offices of CPCB and the SPCB. The Regional office of this Ministry at Bhubaneswar. CPCB/SPCB shall monitor the stipulated conditions.	We are submitting the six-monthly compliance reports of the stipulated environmental conditions (both in hard & soft copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Offices of CPCB and SPCB. Before 1st June and 1st December every year. Further, we are also submitting the EC compliance reports through Parivesh Portal accordance to MoEFCC office memorandum dated-14th June 2022. The monitoring data carried out through NABL Accredited Laboratory in respect of AAQ, water, soil, noise etc is enclosed as Annexure-15.
xiii)	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office at Bhubaneswar by e-mail.	The environmental statement for each financial year ending 31 st March in Form-V is being submitted to the concerned authorities of SPCB and MoEF&CC. The last environmental statement report has been submitted vide our letter no. AA/E&S/2024/1328, dated 13.09.2025.
xiv)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at website of the Ministry of Environment & Forest at http://www.envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the	Information to Public has been made through advertisement of the environmental clearance in two widely circulated daily newspapers i.e. "The New Indian Express" on 04-12-2012 & "The Samaja" on 05-12-2012, within seven days of receiving the clearance letter. The copy of the advertisement was submitted to the Ministry's Regional Office at Bhubaneswar vide our office letter no. AAP/E&F/786, dated 07-12-2012.

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

	Regional office at Bhubaneswar.	
xv)	The authorities shall inform the regional office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Financial closure for Phase-1 of the Project is completed on 17 th September 2012 and Construction activities for Phase-I completed and operating 360 pots out of 360 pots in Smelter and 6 units (6x150 MW) in CPP.
Sr.N	EC Amendment Additional Conditions	Compliance Status
i)	Anode butts generated from the pots shall be cleaned and recycled to the Anode Plant. The spent pot lining generated from the smelter shall be properly treated in spent pot lining treatment plant to remove fluoride and cyanide and dispose of in secured landfill / Shall be disposed off through actual users authorized by SPCBs/ Coprocessing in Cement kilns authorized by SPCBs /Disposal in CHW-TSDF, in line with the provisions of HOWM Rules, 2016 (as amended) and CPCB Guidelines. The location and design of the land fill site shall be approved by the SPCB as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. Leachate collection facilities shall be provided to the secured land fill facilities (SLF). The dross shall be recycled in the cast house. STP sludge shall be utilized as manure for greenbelt development. All the used oil and batteries shall be sold to the authorized recyclers/ re-processors. As proposed, spent pot lining waste shall also be provided to cement and steel industries for further utilization. The project proponent shall develop in- house facilities for treatment of Spent Pot Lining (SPL) generated in the Aluminium smelter. Meanwhile, Refractory part may be sent to CHWTSDF as per the provisions of Hazardous and Other Waste Amendment Rules, 2016. The project proponent shall develop inhouse facilities for the treatment of SPL in 2 to 3 years.	Anode butts generated from the pots is being cleaned and recycled completely for making green anode in the green anode plant. Spent Pot Lining (SPL) contains Carbon Part, Refractory Part and Silicon Carbide bricks. The Standard Operating Procedure (SOP) developed by Central Pollution Control Board (CPCB) for SPL requires detoxification before its end use applications. In accordance with the SOPs, the SPL Carbon part generated from Smelter is being sent to authorized recyclers, namely M/s Regrow Tanso Pvt Ltd, Jharsuguda, for detoxification and used for manufacturing of mineral fuel as a resource/energy recovery in cement plants, Steel and Ferrous alloy industries etc. SPL Silicon carbide bricks is being sent to authorized recyclers M/s Tekno Processors LLP, Sambalpur for processing and sold to authorized users for manufacturing of refractory brick in line with CPCB SOP for Preprocessor of Waste Silicon Carbide refractory bricks generated from pot lining wastes from Primary Aluminium Smelter. The disposal of SPL's refractory part to the CHW-TSDF facility of M/s Re-Sustainability Ltd, Jajpur district, Odisha, has commenced following a successful trial run, which was conducted in the presence of CPCB, SPCB, and other relevant authorities. A protocol was issued to M/s Re-Sustainability Ltd to ensure the safe disposal of SPL in the Secure Landfill area. M/s Re-Sustainability Ltd is handling the disposal of the refractory part in compliance with the terms and conditions specified in the protocol. The carbon part of spent pot lining is disposed to actual users i.e. M/s Regrow Tanso Pvt. Ltd. Jharsuguda, the refractory part to M/s. Re-Sustainability Ltd (CHW-TSDF, Jajpur). In this way 100% SPL is being detoxified and recycled/disposed with 71.42 MT of SPL remaining in stock at the end of Sep-25.

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

		The location and design of the land fill site has been prepared as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and approved from SPCB. The Aluminium dross generated in the process is re-processed in the inhouse dross processing unit /partly supplied to authorized recyclers and the residue generated from dross processing unit is being sent to OSPCB authorized recyclers for Alum/synthetic slag making. STP is in operation at township & Plant area separately, the sludge generated is being used for gardening/greenbelt development. The used oil and batteries are being sold/ supplied to authorized recyclers/reprocessors only.
ii)	The PP shall ensure 100% utilization of Fly ash generated.	The ash generated from the captive power plant is primarily supplied to cement plants and Road construction. Bottom ash is being utilized for filling low-lying areas inside the plant premises & Road Construction. The low-lying area filling and development activity is being carried out with prior approval of the State Pollution Control Board (SPCB), Odisha following the guidelines. The ash generation and utilization status for the period from April 2025 to September 2025 is enclosed as Annexure-6.
iii)	All the measures proposed during the presentation and application shall be implemented.	We have noted and it will be implemented.
iv)	Sale of baked anodes; sale of bath material; and sale of molten metal is permitted following the provisions of Hazardous and Other Waste Management Rules, 2016, applicable if any.	We have noted and accepted.
v)	Anode butts generated from the pots shall be cleaned and recycled to the Anode Plant. The spent pot lining generated from the smelter shall be properly treated in spent pot lining treatment plant to remove fluoride and cyanide and dispose of in secured landfill / Shall be disposed off through actual users authorized by SPCBs/ Coprocessing in Cement kilns authorized by SPCBs /Disposal in CHW-TSDF, in line with the provisions of HOWM Rules, 2016 (as amended) and CPCB Guidelines. The location and design of the land fill site shall	Anode butts generated from the pots is being cleaned and recycled completely for making green anode in the green anode plant. Spent Pot Lining (SPL) contains Carbon Part, Refractory Part and Silicon Carbide bricks. The Standard Operating Procedure (SOP) developed by Central Pollution Control Board (CPCB) for SPL requires detoxification before its end use applications. In accordance with the SOPs, the SPL Carbon part generated from Smelter is being sent to authorized recyclers, namely M/s Regrow Tanso Pvt Ltd, Jharsuguda, for detoxification and used

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

	be approved by the SPCB as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. Leachate collection facilities shall be provided to the secured land fill facilities (SLF). The dross shall be recycled in the cast house. STP sludge shall be utilized as manure for greenbelt development. All the used oil and batteries shall be sold to the authorized recyclers/ re-processors. As proposed, spent pot lining waste shall also be provided to cement and steel industries for further utilization. The project proponent shall develop in- house facilities for treatment of Spent Pot Lining (SPL) generated in the Aluminium smelter. Meanwhile, Refractory part may be sent to CHWTSDf as per the provisions of Hazardous and Other Waste Amendment Rules, 2016. The project proponent shall develop inhouse facilities for the treatment of SPL in 2 to 3 years.	for manufacturing of mineral fuel as a resource/energy recovery in cement plants, Steel and Ferrous alloy industries etc. SPL Silicon carbide bricks is being sent to authorized recyclers M/s Tekno Processors LLP, Sambalpur for processing and sold to authorized users for manufacturing of refractory brick in line with CPCB SOP for Preprocessor of Waste Silicon Carbide refractory bricks generated from pot lining wastes from Primary Aluminium Smelter. The disposal of SPL's refractory part to the CHW-TSDF facility of M/s Re-Sustainability Ltd, Jajpur district, Odisha, has commenced following a successful trial run, which was conducted in the presence of CPCB, SPCB, and other relevant authorities. A protocol was issued to M/s Re-Sustainability Ltd to ensure the safe disposal of SPL in the Secure Landfill area. M/s Re-Sustainability Ltd is handling the disposal of the refractory part in compliance with the terms and conditions specified in the protocol. The carbon part of spent pot lining is disposed to actual users i.e. M/s Regrow Tanso Pvt. Ltd. Jharsuguda, the refractory part to M/s. Re-Sustainability Ltd (CHW-TSDF, Jajpur). In this way 100% SPL is being detoxified and recycled/disposed with 71.42 MT of SPL remaining in stock at the end of Sep-25. The location and design of the land fill site has been prepared as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and approved from SPCB. The Aluminium dross generated in the process is re-processed in the inhouse dross processing unit /partly supplied to authorized recyclers and the residue generated from dross processing unit is being sent to OSPCB authorized recyclers for Alum/synthetic slag making. STP is in operation at township & Plant area separately, the sludge generated is being used for gardening/greenbelt development. The used oil and batteries are being sold/ supplied to authorized recyclers/reprocessors only.
vi)	All the conditions prescribed in the	It is being complied.

Aditya Aluminium: Six Monthly EC Compliance from April 2025– September 2025

	environmental clearance letter No.J-11011/136/2009-IA-II(I) dated 29.11.2012 shall be strictly complied with.	
vii)	The Project Proponent shall take fresh environment clearance in case of any change in the scope of the project.	There is no change in the scope of the project.

Encl: As above


(Authorized Signatory)

MINISTRY OF ENVIRONMENT & FORESTS
EASTERN REGIONAL OFFICE, A/3, CHANDRASEKHARPUR, BHUBANESWAR-751023

FORMAT FOR PROVIDING PARTICULARS ON GREENBELT / PLANTATION
UNDER F(C) ACT 1980 AND E(P) ACT 1986.

1	a) Name of the Project	Aditya Aluminium (A Unit of Hindalco Industries Limited)
	b) Environment/Forest Clearance Nos.	i. Env Clearance vide letter No: J-11011/136/2009-IA-II(I), Dated 29/11/2012, amendment dated 14 June 2013, 14 Aug 2018, 20 July 2020 & 12 Aug 2022 ii. Forest Clearance vide letter No: 8-27/2009-FC, 10.02.2011
2	Location/ Block/ Sub-Divn./ Dist/ State	Aditya Aluminium (A Div. of Hindalco Industries Limited) At/Po- Lapanga, Dist.- Sambalpur Pin - 768 212, Odisha
3	Address for communication	Aditya Aluminium (A Unit of Hindalco Industries Limited) At/Po- Lapanga, Dist.- Sambalpur Pin - 768 212, Odisha
4	Existing vegetation in the area/ region	At present several types of vegetation available in the area, however some of the names mentioned as follows- Aegle marmelo, Albizia lebbeck, Albizia procera, Alstonia scholaris, Annona squamosa, Artocarpus heterophyllus, Azadirachta indica, Bauhinia alba, Butea monosperma, Bauhinia purpurea, Cassia fistula, Dalbergia sissoo, Delonix regia, Ficus benghalensis, Ficus religiosa, Madhuca indica, Mangifera indica, Peltophorum ferrugineum, Pongamia pinnata, Syzygium cumini, Tectona grandis, Terminalia arjuna, Terminalia bellirica, Terminalia bellirica, Termanilia catappa, Thevetia peruviana, Mimusops elangi, Psidium gujava, Samanea saman, Anthocephalus kadamba, Casia seamea, Acasia, Neerium oleander, Anacardium occidentale, etc
5	a) Species: (trees/shrubs/grasses/climbers)	Aegle marmelo, Albizia lebbeck, Albizia procera, Alstonia scholaris, Annona squamosa, Artocarpus heterophyllus, Azadirachta indica, Bauhinia alba, Butea monosperma, Bauhinia purpurea, Cassia fistula, Dalbergia sissoo, Delonix regia, Ficus benghalensis, Ficus religiosa, Madhuca indica, Mangifera indica, Peltophorum ferrugineum, Pongamia pinnata, Syzygium cumini, Tectona grandis, Terminalia arjuna, Terminalia bellirica, Terminalia bellirica, Termanilia catappa, Thevetia peruviana, Mimusops elangi, Psidium gujava, Samanea saman, Anthocephalus kadamba, Casia seamea, Acasia, Neerium oleander, Anticardium occidental, Dalbergia latifolia, Heloptela, Thespesia, Bamboo, Butea monosperma etc species available.
	b) Major prevalent species of each type:	Anthocephallus cadamba Terminalia arjuna, Peltoferrum ferrugenium, Gmelina arboria, Alberzia Lebbeck, Delonix regia etc are the prevalent species found. Butea monosperma, Madhuca indica etc
6	Land coverage by the project:	1347.35 Ha

	a.Name and number of tree/species felled	2002 nos of trees felled through OFDC, Sambalpur (CKL) Division.
	b.Name and number of plant species still available in the area	Plant species and number will be counted after completion of all the project activities and will be submitted to your good office
	c. By protecting the area will indigenous stock come up	Nil
	d.Extent of greenbelt developed	446 hectares covered under greenbelt.
7	Plantations required to be carried out as per	
	a) Conditions of Environmental Clearance in Ha/Nos.	33% of total project area
	b) Conditions of Forest Act (c) Clearance in Ha/Nos.	25 % of total project area
	c. Voluntarily in Ha/Nos.	NA

8. Details of plantation

a) Total area available for plantation in each category

Greenbelt	Dumps	Back filled area	Road sides	Block plantation
The >33% of the project area has been covered under greenbelt/green cover and the plant. The phase- I facilities completed, and Phase-II construction work not started. Till date 446 hectares of land has been covered under greenbelt.				

b) Plantation details (category wise & methodology used)

Year of plantation	Species Planted	Spacing	Height attained(feet)	Total area covered	Area still available
2010-11 & 2011-12	Aegle marmelo, Albizia lebbeck, Albizia procera,	2*2	32'-36'	14.7 Ha	>33% of the project area covered under Green Belt.
2012-13	Alstonia scholaris, Annona squamosa, Artocarpus heterophyllus, Azadirachta indica, Bauhinia alba, Butea monosperma, Bauhinia purpurea, Cassia fistula,	3*3	25'-27'	38.2 Ha	
2013-14		3*3	22'-25'	11.2 Ha	
2014-15		3*3	20'-22'	16.8 Ha	
2015-16		4*4	18'-20'	24.36 Ha	
2016-17		2*2	17'-20'	20.0 Ha	
2017-18		2*2	14'-18'	46.8 Ha	
2018-19		2*2	13'-15'	45.0 Ha	
2019-20		2*2	10- 13'	82.96 Ha	
2020-21		2*2	8'-10'	80.94 Ha	
2021-22		2*2	7'-9'	63.67 Ha	
2022-23		2*2	6'-8'	Species Enhancement in existing plantation area	
2023-24		-	5'-7'		
2024-25		-	4'-6'	Density Enhancement in existing plantation area	
2025-26			3 ft	Density Enhancement	
Total				446 Ha	

c) Survival of Plantation:

Total Plantation (No.)	9,68,230
Survival (No.)	8,72,000
Survival rate	Approx. 90%

9. Agency carrying out plantation and maintenance: NA

10. Financial details (year wise) plantation wise and item wise:

Sl. No.	Year	Fund allocated(Rs)	Expenditure made(Rs)	Average cost of each surviving plant in Rs.
1	2010-11	81,62,000	81,62,000.00	245.00
2	2011-12			
3	2012-13	46,21,600	46,21,600.00	121.00
4	2013-14	13,62,500	13,62,500.00	121.00
5	2014-15	18,53,000	18,53,000.00	115.00
6	2015-16	18,65,000	18,65,000	109.00
7	2016-17	49,00,000	49,00,000	100.00
8	2017-18	68,00,000	68,00,000	71.00
9	2018-19	70,00,000	70,00,000	77.00
10	2019-20	70,00,000	72,00,000	84.00
11	2020-21	75,00,000	75,00,000	70.00
12	2021-22	85,00,000	85,00,000	126.00
13	2022-23	85,00,000	85,00,000	188.00
14	2023-24	85,00,000	85,00,000	188.00
15	2024-25	85,00,000	85,00,000	67.00
16	2025-26	85,00,000	30,00,000	40.00

11. Inspection of plantation by field experts and their comments and follow up actions:

Forest officials from Divisional Forest Office, Sambalpur and Forest Range Office, Rengali are visiting to our location at periodic intervals and giving their technical guidance from time to time. Joint Director/Director of Regional Office of MoEF&CC, Bhubaneswar also visit our plant site periodically.

12. Remarks/ any other information:

Indigenous species have been planted as per the Guideline of CPCB.


(Signature)

Report-II

PROFORMA FOR PROVIDING INFORMATION ON REHABILITATION

1. No. of villages affected : 11
2. Families Affected : 1450

Families affected	SC	ST	OTH	TOTAL
	-	-	-	1450

3. Compensation package offered per family:

State/ Centre norms	Project package
As per the R&R Policy 2006, Govt. of Odisha	As per the R&R Policy 2006 and 2013, Govt. of Odisha. Aditya Aluminium follows the RR Policy and subsequent Compensation Revision also.

4. Budget estimate for rehabilitation:

- a) Total outlay : 84.59 Crores
- b) Amount paid/used : 82.95 Crores

5. Employment details

- a) Total employment to be provided : 60
- b) Employment given so far : 59

6. Rehabilitation & Resettlement details: Total Displaced Persons Numbers – 431

a	No. of families rehabilitated				
i	Name of the Site	Aditya Aluminium			
ii	Families rehabilitated	SC	ST	OTH	Total
		11	393	23	427
b	Families yet to be rehabilitated				
i	Name of the Site(s)	Aditya Aluminium			
ii	No. of families (Total - 430)	SC	ST	OTH	Total
		00	4	0	04

7. Any other information: For 04 Families, we have paid all the compensation related to land, structure, trees etc. The families are preferring to stay inside, as there is no ongoing activity in & around their settlement lands. However, we have intimated District authorities for their resettlement to the nearest rehabilitation colony where we have made all the required facilities including Houses available in line with R&R policy of the Govt. of Odisha. The Special Land Acquisition Officer has issued a notice to the families for shifting to the designated houses no (M-1,M-2 & N-6 in the nearest R&R Colony.


(Authorised Signatory)

ଜିଲ୍ଲାପାଳଙ୍କ କାର୍ଯ୍ୟାଳୟ, ସମ୍ବଲପୁର

ସ୍ୱତନ୍ତ୍ର ଭୂ-ଅର୍ଜନ ପ୍ରକୋଷ

ସଂଖ୍ୟା- 24 / ସ୍ୱତନ୍ତ୍ର ଭୂ-ଅର୍ଜନ ଟା:

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PR No. 2
29.1.25
17/06/23

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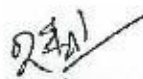
ଅଶୋକ ଓରାମ ପି: ରାମା ଓରାମ

ବିରେଣୀ ଓରାମ ପି: ରାମା ଓରାମ

ନି:ଭୋଇପାଲି (ଆଦିତ୍ୟ ବିର୍ଲା ଜଳ ଉତ୍ସାର ନିକଟସ୍ଥ)

ଆ:କଟରବରା, ଜିଲ୍ଲା: ସମ୍ବଲପୁର

ଏତଦ୍ଦ୍ୱାରା ଆପଣ ମାନଙ୍କୁ ଜଣାଇ ଦିଆଯାଉଛି କି, ନିମ୍ନ ସ୍ୱାକ୍ଷରକାରୀଙ୍କ କାର୍ଯ୍ୟାଳୟ ରୁ ବାରମ୍ବାର ନୋଟିସ କରାଯାଇ ଆପଣଙ୍କର ଆପତ୍ତି ଓ ଅଭିଯୋଗ ବାଖଲ କରିବା ପାଇଁ ସୁଯୋଗ ଦିଆଯାଇଥିଲେ ମଧ୍ୟ ଆପଣ କୌଣସି ଆପତ୍ତି ଦର୍ଶାଇଲେ ନାହିଁ ଅଥବା ପ୍ରଶ୍ନାସନ ରୁ ସହଯୋଗ ମଧ୍ୟ କଲେ ନାହିଁ । ମୌଜା- ଭୋଇପାଲି ଖାତା ନମ୍ବର- ୯୩, ୯୪ ରୁ ଅଧିକୃଷ୍ଟିତ ହୋଇଥିବା ମୋଟ ରକର- ୧୧୮.୬୫ଟି ଜମି, ଗୃହ ଓ ଗଛ ବାବଦ କୁ ମୋଟ ୬୯୮୮୨୭୯.୦୦ ଜମା ରାଶି କୁ ୨.୦୮.୨୦୦୬ ରିଖ ରେ ଆପଣମାନେ ପ୍ରାପ୍ତ କରିଛନ୍ତି ଏବଂ ଆପଣଙ୍କ ପରିବାର ର ସନ୍ତୋଷ ଓରାମ ପି- ରାମା ଓରାମ ଓ କୁମରମଣି ଓରାମ ପି- ରାମା ଓରାମ ଙ୍କ ପରିବାର ସଦସ୍ୟ ଲୁଧାପାଲି ଛିଡ଼ ପୁନର୍ବସ ଓ ଅଲଥାନ କଲୋନୀ କୁ ସ୍ଥାନାନ୍ତରିତ ହୋଇ ସାରିଛନ୍ତି । ଆପଣଙ୍କ ପାଇଁ ମଧ୍ୟ ରହିବା ନିମନ୍ତେ ଆଉ ଏଣୁ ଆଉ କଲୋନୀ ଲୁଧାପାଲି ରେ ଘର ର ବ୍ୟବସ୍ଥା ହୋଇଯାଇଅଛି । ଏଣୁ ଆପଣଙ୍କୁ ଅନୁରୋଧ ଯେ, ଆପଣ ବର୍ତ୍ତମାନ ରହୁଥିବା ଘର କୁ ଛାଡ଼ି ଉକ୍ତ ଘର କୁ ସ୍ଥାନାନ୍ତରଣ ହୋଇ କମ୍ପାନୀ ସକାଶେ ଅଧିଗ୍ରହଣ ହୋଇଥିବା ଆପଣଙ୍କ ଜମି ର କ୍ଷତିପୂରଣ ପ୍ରାପ୍ୟ ସହିତ ପୁନର୍ବସତି ଓ ଅଲଥାନ ଦୁବିଧା ସମ୍ବନ୍ଧୀୟ ଯାହାବି ବାବି ଅଛି, ଆପଣ ଏହି ନୋଟିସ ଗ୍ରହଣ କରିବାର ୧୫ ଦିନ ମଧ୍ୟରେ ନିମ୍ନ ସ୍ୱାକ୍ଷରକାରୀଙ୍କ ନିକଟରେ ଲିଖିତରେ ଜଣାଇବେ । ଏଣୁ କମ୍ପାନୀ ଦ୍ୱାରା ଅଧିକୃତ ଜମିକୁ ନୋଟିସ ଗ୍ରହଣ କରିବା ଦିନଠାରୁ ୩୦ ଦିନ ମଧ୍ୟରେ କମ୍ପାନୀ ଦ୍ୱାରା ପ୍ରଦାନ କରାଯାଇଥିବା ଘର ନମ୍ବର M-1, M-2, ଏବଂ N-6 କୁ ସ୍ଥାନାନ୍ତର ପାଇଁ ଅନୁରୋଧ କରାଯାଇ, ଏବଂ ଆପଣ ଏହି ନୋଟିସ କୁ ଅବମାନନା କଲେ ଆପଣଙ୍କ ବିରୋଧରେ ଆଇନ ଅନୁଯାୟୀ ବୃତ୍ତ କାର୍ଯ୍ୟାନୁଷ୍ଠାନ ଗ୍ରହଣ କରାଯିବ ।


ସ୍ୱତନ୍ତ୍ର ଭୂ-ଅର୍ଜନ ଅଧିକାରୀ

ସମ୍ବଲପୁର

Annexure-01

Aditya Aluminium: Six Monthly EC Compliance from April 25– September 2025

Anode Baking Furnace- Fume Treatment Centre (FTC-1)

Parameters	UOM	Apr'25	May'25	Jun'25	Jul'25	Aug'25	Sep'25	Average
Particulate Matter	Mg/Nm ³	8.6	9.2	8.2	8.6	7.4	5.4	7.9
Sulphur dioxide	Mg/Nm ³	380	385.0	382.4	365.2	360.1	380.5	375.5
Nitrogen Oxides	Mg/Nm ³	68.5	64.2	54.6	56.2	57.2	51.1	56.6
Particulate Fuloride	Mg/Nm ³	0.12	0.14	0.13	0.12	0.11	0.14	0.12
Gasesous Fluroide	Mg/Nm ³	0.42	0.44	0.43	0.41	0.44	0.42	0.42
Total Fluoride	Mg/Nm ³	0.54	0.58	0.56	0.53	0.55	0.56	0.55
Fluoride Emission	Kg/T	0.0014	0.0016	0.0015	0.0014	0.0015	0.0019	0.0016
Tar fumes	Mg/Nm ³	BDL	BDL	BDL	BDL	BDL	BDL	BDL
PAH	Mg/Nm ³	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Anode Baking Furnace- Fume Treatment Centre (FTC-2)

Parameters	UOM	Apr'25	May'25	Jun'25	Jul'25	Aug'25	Sep'25	Average
Particulate Matter	Mg/Nm ³	6.4	7.1	6.2	5.6	8.6	7.5	6.9
Sulphur dioxide	Mg/Nm ³	370.4	375	365	354	365.4	360.5	365.05
Nitrogen Oxides	Mg/Nm ³	68.0	61	56.5	53.4	55.2	52.2	57.7
Particulate Fuloride	Mg/Nm ³	0.11	0.13	0.12	0.1	0.13	0.11	0.11
Gasesous Fluroide	Mg/Nm ³	0.4	0.42	0.42	0.4	0.43	0.41	0.41
Total Fluoride	Mg/Nm ³	0.51	0.55	0.54	0.5	0.56	0.52	0.53
Fluoride Emission	Kg/T	0.00090	0.00086	0.00079	0.00080	0.00091	0.00078	0.0008
Tar fumes	Mg/Nm ³	BDL	BDL	BDL	BDL	BDL	BDL	BDL
PAH	Mg/Nm ³	BDL	BDL	BDL	BDL	BDL	BDL	BDL

Annexure-02

Aditya Aluminium: Six Monthly EC Compliance from April 2025– Sept 2025 **GTC-1**

Parameters	UOM	Apr'25	May'25	Jun'25	July'25	Aug'25	Sep'25	Average
Particulate Matter	Mg/Nm ³	4.1	3.2	3.6	3.9	3.29	3.8	3.64
Sulphur dioxide	Mg/Nm ³	82.2	86.2	72.5	70.7	68.6	62.0	73.7
Nitrogen Oxides	Mg/Nm ³	36.5	34.4	32.8	33.1	31.5	30.0	33.05
Particulate Fuloride	Mg/Nm ³	0.12	0.11	0.13	0.14	0.12	0.13	0.13
Gasesous Fluroide	Mg/Nm ³	0.42	0.44	0.40	0.43	0.42	0.44	0.425
Total Fluoride	Mg/Nm ³	0.54	0.55	0.53	0.57	0.54	0.57	0.55
Fluoride Emission	Kg/T	0.052	0.054	0.051	0.057	0.056	0.059	0.055

GTC-2

Parameters	UOM	Apr'25	May'25	Jun'25	July'25	Aug'25	Sep'25	Average
Particulate Matter	Mg/Nm ³	3.8	3.5	3.7	3.0	2.5	3.4	3.3
Sulphur dioxide	Mg/Nm ³	78.5	80.4	74.4	70.2	68.6	70.4	73.75
Nitrogen Oxides	Mg/Nm ³	46.6	43.1	41.1	40.5	41.1	40	42.06
Particulate Fuloride	Mg/Nm ³	0.12	0.14	0.12	0.10	0.13	0.11	0.12
Gasesous Fluroide	Mg/Nm ³	0.40	0.43	0.42	0.41	0.44	0.43	0.42
Total Fluoride	Mg/Nm ³	0.52	0.57	0.54	0.51	0.57	0.54	0.54
Fluoride Emission	Kg/T	0.049	0.053	0.053	0.049	0.058	0.054	0.053

[illegible]

Annexure-04**Forage Fluoride Monitoring Results**

Sampling Location	Species	May'25	Aug'25
		Fluoride (in ppm)	Fluoride (in ppm)
Bomaloi	Aegle marmelo, Oryza Sativa	2.1	1.64
Gurupali	Cynodon dactylo, Azadirachta Indica	1.82	1.72
Plant Site	Dalbergia sissoo, Cynodon dactylon	2.6	2.44
Thelkoloi	Pongame oil tree, Cynodon dactylon	2.0	1.70
Gumukarma	Bambusoideae, Oryza Sativa	1.8	1.54
Ghichamura	Mimusops elengi, Oryza Sativa	1.5	2.1
Tileimal	Oryza Sativa, Cynodon dactylon	1.74	1.30
Lapanga	Azadirachta indica, Oryza Sativa	2.4	2.31
Jangala	Cynodon dactylon, Oryza Sativa	1.36	1.25
Bhadrapali	Pongame oil tree, Cynodon dactylon, Oryza Sativa	1.68	1.46

CPP Stack Emission Monitoring Results

(Period-Apr-2025 to Sep-2025)

Sr. No.	Stack	Parameter	Apr-25	May-25	Jun-25	July-25	Aug-25	Sep-25
1	CPP-1	PM	43.4	45.2	42.2	44.7	42.8	43.2
		SO ₂	1020.1	985.2	910.6	940.2	960.6	920.6
		NO _x	258.4	280.3	254.5	264.6	272.5	260.4
		Hg	0.0013	0.0014	0.0015	0.0014	0.0013	0.0013
2	CPP-2	PM	45.5	43.1	40.4	42.6	40.5	42.6
		SO ₂	1010.1	1102.4	920.4	1065.1	1072.2	1110.6
		NO _x	270.4	212.6	218.3	258.5	225.4	256.5
		Hg	0.0014	0.0014	0.0015	0.0014	0.0014	0.0015
3	CPP-3	PM	44.5	45.4	43.2	46	43.4	SD*
		SO ₂	1060.5	1071.5	946.5	1130.4	1182	SD*
		NO _x	212.5	214.6	218.7	280.2	276.5	SD*
		Hg	0.0013	0.0013	0.0014	0.0014	0.0013	SD*
4	CPP-4	PM	41.6	44.2	46.1	43.7	SD*	40.0
		SO ₂	1220	1140.1	1235.6	1210.1	SD*	1206.5
		NO _x	235.6	218.2	290.5	284.2	SD*	292.4
		Hg	0.0014	0.0014	0.0014	0.0013	SD*	0.0014
5	CPP-5	PM	46.1	44.6	42.5	40	43.5	41.1
		SO ₂	1228	1238.4	1146	1245.5	1220	1246.2
		NO _x	291.1	296.2	282.6	286.6	256.5	280.6
		Hg	0.0014	0.0014	0.0014	0.0014	0.0013	0.0014
6	CPP-6	PM	31.1	27.2	22.4	37.4	42.4	18.6
		SO ₂	458	510.1	507.5	1105.1	965.5	520.2
		NO _x	208	210.6	225.4	320.4	276.7	310.6
		Hg	0.0013	0.0013	0.0013	0.0014	0.0012	0.0012

*SD- Unit under Shutdown

Status of Utilization of Fly Ash and Bottom Ash

(Period-Apr-25 to September-25)

S. No.	Description	Quantity in MT
1.	Quantity of fly ash generated	789651.24
2.	Quantity of bottom ash generated	42142.38
	Total Ash Generated	831793.62
1.	Supply to Brick Manufacturing Units	0.0
2.	Supply Cement Plants	676901.18
3.	Low Lying Area Filling (CTE/CTO obtained)	32523.03
4.	Utilization in Construction of Roads/Road and Flyover embarkment	8342.32
5.	*Sent to Emergency Ash Pond through HCSD	1,14,027.89
	Total ash utilised	7,28,649.71
	% of total ash utilization	87.5

*Remaining unutilized ash is stored in emergency ash pond, which will be evacuated and supplied to various end users in 3-year compliance Cycle in line with Fly ash notification 2021.

Ref: Envlab/25-26/R-09003

Date: 30.06.2025

ASH ANALYSIS REPORT JUNE-2025

Name of Industry : M/s Hindalco Industries Limited (Unit- Aditya Aluminium), Lapanga.
 Sampling Location : FA-01: CPP Fly Ash Silo
 Date of Sampling : 16.06.2025
 Date of Analysis : 17.06.2025 TO 20.06.2025
 Sample Collected By : VCSPL Representative in presence of Aditya Aluminium Representative.

Sl. No.	Parameters	Unit	Analysis Results	Unit	Analysis Results
			FA-01		FA-01
Chemical Analysis					
1	Na ₂ O	%	0.25	mg/kg	2500
2	MgO	%	0.92	mg/kg	9200
3	Al ₂ O ₃	%	22.2	mg/kg	222000
4	SiO ₂	%	52.1	mg/kg	521000
5	P ₂ O ₅	%	0.025	mg/kg	250
6	SO ₃	%	2.1	mg/kg	21000
7	K ₂ O	%	0.75	mg/kg	7500
8	CaO	%	4.8	mg/kg	48000
9	TiO ₂	%	-	mg/kg	---
10	MnO	%	0.25	mg/kg	2500
11	Fe ₂ O ₃	%	9.6	mg/kg	96000
Heavy Metals Analysis					
1	Mercury as Hg	%	<0.001	mg/kg	<0.001
2	Arsenic as As	%	<0.001	mg/kg	<0.001
3	Lead as Pb	%	0.0171	mg/kg	171
4	Chromium as Cr	%	< 0.002	mg/kg	< 0.002
5	Vanadium as V	%	<0.001	mg/kg	<0.001
6	Iron as Fe	%	5.3426	mg/kg	53426
7	Cobalt as Co	%	<0.001	mg/kg	<0.001
8	Copper as Cu	%	0.064	mg/kg	640
9	Nickel as Ni	%	0.089	mg/kg	890
10	Zinc as Zn	%	0.0525	mg/kg	525
11	Strontium as Sr	%	--	mg/kg	--
12	Barium as Ba	%	<0.001	mg/kg	<0.001


 Reviewed By


 Approved By



Ref: Envlab/25-26/R-09004

Date: 30.06.2025

ASH ANALYSIS REPORT JUNE-2025

Name of Industry : M/s Hindalco Industries Limited (Unit- Aditya Aluminium), Lapanga.

Sampling Location: BA-01: CPP Bottom Ash Silo

Date of Sampling : 16.06.2025

Date of Analysis : 17.06.2025 TO 20.06.2025

Sample Collected By : VCSPL Representative in presence of Aditya Aluminium Representative.

Sl. No.	Parameters	Unit	Analysis Results	Unit	Analysis Results
			BA-01		BA-01
Chemical Analysis					
1	Na ₂ O	%	0.22	mg/kg	2200
2	MgO	%	2.6	mg/kg	26000
3	Al ₂ O ₃	%	27.3	mg/kg	273000
4	SiO ₂	%	49.2	mg/kg	492000
5	P ₂ O ₅	%	0.024	mg/kg	240
6	SO ₃	%	1.3	mg/kg	13000
7	K ₂ O	%	0.96	mg/kg	9600
8	CaO	%	3.28	mg/kg	32800
9	TiO ₂	%	0	mg/kg	---
10	MnO	%	0.28	mg/kg	2800
11	Fe ₂ O ₃	%	8.1	mg/kg	81000
Heavy Metals Analysis					
1	Mercury as Hg	%	<0.001	mg/kg	<0.001
2	Arsenic as As	%	<0.001	mg/kg	<0.001
3	Lead as Pb	%	0.0156	mg/kg	156
4	Chromium as Cr	%	< 0.002	mg/kg	< 0.002
5	Vanadium as V	%	<0.001	mg/kg	<0.001
6	Iron as Fe	%	6.4	mg/kg	64000
7	Cobalt as Co	%	<0.001	mg/kg	<0.001
8	Copper as Cu	%	0.029	mg/kg	290
9	Nickel as Ni	%	0.098	mg/kg	980
10	Zinc as Zn	%	0.07	mg/kg	700
11	Strontium as Sr	%	--	mg/kg	--
12	Barium as Ba	%	<0.001	mg/kg	<0.001



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Web : www.mitrask.com

Lab No: BBS/CLIN/17/01



Annexure-8

TEST REPORT

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.

(Unit- Aditya Aluminium)

At/Po: Lapanga ,Beside SH-10

Sambalpur , Odisha-768212

Report No. : BBS/400

Date : 03.07.2025

Sample No. : MSKGL/ED/2025-26/06/01510

Sample Description : Surface Water

Sampling Location : Decantation Pond

Date of sampling : 23.06.2025

ANALYSIS RESULT

SL. No.	Test Parameters	Unit	Standard as per Sch.VI of EP Rules, 1986	Test Method / Specification	Result
1.	pH value at 26°C	---	5.5 to 9.0	APHA(23 rd Edtn.)4500-H*	7.40
2.	Turbidity	N.T.U	----	APHA(23 rd Edtn.)2130B	10.5
3.	Total Dissolved Solids (as TDS)	mg/l	----	APHA(23 rd Edtn.)2540C	495.5
4.	Calcium (as Ca)	mg/l	----	APHA(23 rd Edtn.)3500 Ca B	72.8
5.	Iron (as Fe)	mg/l	3.0	APHA(23 rd Edtn.)3500 Fe B	0.39
6.	Magnesium (as Mg)	mg/l	----	APHA(23 rd Edtn.)3500 Mg B	26.0
7.	Sulphate (as SO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-SO ₄ E	58.0
8.	Alkalinity (as CaCO ₃)	mg/l	----	APHA(23 rd Edtn.)2130B	92.0
9.	Lead (as Pb)	mg/l	0.1	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
10.	Mercury (as Hg)	mg/l	0.01	IS 3025(Part 48)-1994	BDL(DL:0.001)
11.	Arsenic (as As)	mg/l	0.2	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
12.	Total Chromium (as Cr)	mg/l	2.0	APHA(23 rd Edtn.)3111 D 2017	BDL(DL:0.01)
13.	Sodium (as Na)	mg/l	----	APHA(23 rd Edtn.)3500 Na B	25.6
14.	Potassium (as K)	mg/l	----	APHA(23 rd Edtn.)3500 K B	7.5
15.	Zinc (as Zn)	mg/l	5.0	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.02)
16.	Total Suspended Solids (as TSS)	mg/l	100.0	APHA(23 rd Edtn.)2540D	BDL(DL:5.0)
17.	Conductivity	us/cm	----	APHA(23 rd Edtn.)2510B	740.0
18.	Phosphate (as PO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-P D	BDL(DL:0.3)

Prepared By:-



For Mitra S.K. Private Limited

A.K. Rats
Authorized Signatory

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Web : www.mitrask.com



TEST REPORT

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.

(Unit- Aditya Aluminium)

At/Po: Lapanga ,Beside SH-10

Sambalpur , Odisha-768212

Report No. : BBS/401

Date : 03.07.2025

Sample No. : MSKGL/ED/2025-26/06/01514

Sample Description : Surface Water

Sampling Location : Ash Pond

Date of sampling : 23.06.2025

ANALYSIS RESULT

SL. No.	Test Parameters	Unit	Standard as per Sch.VI of EP Rules, 1986	Test Method / Specification	Result
1.	pH value at 26°C	---	5.5 to 9.0	APHA(23 rd Edtn.)4500-H*	7.48
2.	Turbidity	N.T.U	----	APHA(23 rd Edtn.)2130B	5.8
3.	Total Dissolved Solids (as TDS)	mg/l	----	APHA(23 rd Edtn.)2540C	462.3
4.	Calcium (as Ca)	mg/l	----	APHA(23 rd Edtn.)3500 Ca B	75.0
5.	Iron (as Fe)	mg/l	3.0	APHA(23 rd Edtn.)3500 Fe B	0.32
6.	Magnesium (as Mg)	mg/l	----	APHA(23 rd Edtn.)3500 Mg B	24.0
7.	Sulphate (as SO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-SO ₄ E	82.0
8.	Alkalinity (as CaCO ₃)	mg/l	----	APHA(23 rd Edtn.)2130B	104.0
9.	Lead (as Pb)	mg/l	0.1	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
10.	Mercury (as Hg)	mg/l	0.01	IS 3025(Part 48)-1994	BDL(DL:0.001)
11.	Arsenic (as As)	mg/l	0.2	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
12.	Total Chromium (as Cr)	mg/l	2.0	APHA(23 rd Edtn.)3111 D 2017	BDL(DL:0.01)
13.	Sodium (as Na)	mg/l	----	APHA(23 rd Edtn.)3500 Na B	20.8
14.	Potassium (as K)	mg/l	----	APHA(23 rd Edtn.)3500 K B	6.2
15.	Zinc (as Zn)	mg/l	5.0	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.02)
16.	Total Suspended Solids (as TSS)	mg/l	100.0	APHA(23 rd Edtn.)2540D	14.0
17.	Conductivity	us/cm	----	APHA(23 rd Edtn.)2510B	690.0
18.	Phosphate (as PO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-P D	BDL(DL:0.3)

Prepared By:-



For Mitra S.K. Private Limited

Authorized Signatory

Mitra S. K. Private Limited

Building No.D5, Unit No- 230, Bhumi World Industrial Park,
Mumbai, Nashik Highway, Pimplas Village, Bhiwandi, Near
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TEST REPORT

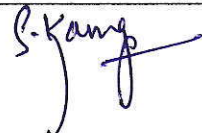
Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.
(Unit- Aditya Aluminium)
At/Po: Lapanga , Beside SH-10
Sambalpur , Odisha-768212

Report No. : BBS/402
Date : 03.07.2025
Sample No. : MSKGL/ED/2025-26/06/01515
Sample Description : Ground Water
Sampling Location : Piezometric Borewell-1
(Near Ash Pond)
Date of Sampling : 23.06.2025

ANALYSIS RESULT

Organoleptic and Physical Parameters as per IS 10500 : 2012

Sl. No.	Test Parameters	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.41
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	140.6
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	28.03
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	16.0
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.12
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.16
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	11.22
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO3 in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:3.0)
14.	Phenolic Compounds as C6H5OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO4 in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	20.0
17.	Total Hardness as CaCO3 in mg/l	200	600	IS 3025 (Part 21)-2013	116.0
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.01)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	15.8
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	210.0
26.	Potassium as K in mg/l	----	----	APHA 23rd Edition, 3500 K B 2017	2.8
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO3 in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	72.0

Report Prepared by: 



Mitra S. K. Private Limited



Authorized Signatory

Mitra S. K. Private Limited

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TEST REPORT

Name & Address of the Customer :

HINDALCO INDUSTRIES LTD.

(Unit- Aditya Aluminium)

At/Po: Lapanga , Beside SH-10

Sambalpur , Odisha-768212

Report No. : BBS/403

Date : 03.07.2025

Sample No. : MSKGL/ED/2025-26/06/01515

Sample Description : Ground Water

Sampling Location : Pizometric Borewell-2
(Near Proposed Ash Pond)

Date of Sampling : 23.06.2025

ANALYSIS RESULT

Organoleptic and Physical Parameters as per IS 10500 : 2012

Sl. No.	Test Parameters	Requirement Acceptable Limit	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.38
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	155.4
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	32.03
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	15.4
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.22
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.12
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	10.24
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO3 in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:3.0)
14.	Phenolic Compounds as C6H5OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO4 in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	22.4
17.	Total Hardness as CaCO3 in mg/l	200	600	IS 3025 (Part 21)-2013	122.6
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.005)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	12.4
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	232.0
26.	Potassium as K in mg/l	----	----	APHA 23 rd Edition, 3500 K B 2017	2.4
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO3 in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	70.0

Report Prepared by:



Mitra S. K. Private Limited

A. K. Lash
Authorized Signatory

Mitra S. K. Private Limited

Building No.D5, Unit No- 230, Bhumi World Industrial Park,
Mumbai, Nashik Highway, Pimplas Village, Bhiwandi, Near
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Dist. Thane- 421302.
Tel. : 0252 2672352.
Email: mumbailab@mitrask.com
Web : www.mitrask.com



TEST REPORT

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.
(Unit- Aditya Aluminium)
At/Po: Lapanga , Beside SH-10
Sambalpur , Odisha-768212

Report No. : BBS/404
Date : 03.07.2025
Sample No. : MSKGL/ED/2025-26/06/01516
Sample Description : Ground Water
Sampling Location : Pizometric Borewell-3
(Near RR Colony)
Date of Sampling : 23.06.2025

ANALYSIS RESULT

Organoleptic and Physical Parameters as per IS 10500 : 2012

Sl. No.	Test Parameters	Requirement Acceptable Limit	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.42
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	234.5
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	40.04
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	27.0
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.36
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	BDL(DL:0.05)
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	15.61
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO3 in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:3.0)
14.	Phenolic Compounds as C6H5OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO4 in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	37.5
17.	Total Hardness as CaCO3 in mg/l	200	600	IS 3025 (Part 21)-2013	164.0
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.005)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	20.2
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	350.0
26.	Potassium as K in mg/l	----	----	APHA 23 rd Edition, 3500 K B 2017	3.0
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO3 in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	98.0

Report Prepared by: 



Mitra S. K. Private Limited

Authorized Signatory

Mitra S. K. Private Limited

Building No.D5, Unit No- 230, Bhumi World Industrial Park,
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Dist. Thane- 421302.
Tel. : 0252 2672352.
Email: mumbailab@mitrask.com
Web : www.mitrask.com

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TEST REPORT

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.
(Unit- Aditya Aluminium)
At/Po: Lapanga , Beside SH-10
Sambalpur , Odisha-768212

Report No. : BBS/405
Date : 03.07.2025
Sample No. : MSKGL/ED/2025-26/06/01517
Sample Description : Ground Water
Sampling Location : Pizometric Borewell-4
(Bomaloi Village)
Date of Sampling : 23.06.2025

ANALYSIS RESULT

Organoleptic and Physical Parameters as per IS 10500 : 2012

Sl. No.	Test Parameters	Requirement Acceptable Limit	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.40
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	127.3
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	24.02
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	17.4
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.18
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	BDL(DL:0.05)
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	10.24
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO3 in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:3.0)
14.	Phenolic Compounds as C6H5OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO4 in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	22.0
17.	Total Hardness as CaCO3 in mg/l	200	600	IS 3025 (Part 21)-2013	92.0
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.005)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	16.4
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	190.0
26.	Potassium as K in mg/l	----	----	APHA 23 rd Edition, 3500 K B 2017	2.21
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO3 in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	80.0

Report Prepared by:



Mitra S. K. Private Limited

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Authorized Signatory

Mitra S. K. Private Limited

Building No.D5, Unit No- 230, Bhumi World Industrial Park,
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Lab No: MSK/ED/2025/0430



TEST REPORT

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.
(Unit- Aditya Aluminium)
At/Po: Lapanga ,Beside SH-10
Sambalpur , Odisha-768212

Report No. : BBS/500
Date : 26.09.2025
Sample No. : MSKGL/ED/2025-26/09/0430
Sample Description : Surface Water
Sampling Location : Decantation Pond
Date of sampling : 06.09.2025

ANALYSIS RESULT

SL. No.	Test Parameters	Unit	Standard as per Sch.VI of EP Rules, 1986	Test Method / Specification	Result
1.	pH value at 26°C	---	5.5 to 9.0	APHA(23 rd Edtn.)4500-H*	7.32
2.	Turbidity	N.T.U	----	APHA(23 rd Edtn.)2130B	4.0
3.	Total Dissolved Solids (as TDS)	mg/l	----	APHA(23 rd Edtn.)2540C	542.7
4.	Calcium (as Ca)	mg/l	----	APHA(23 rd Edtn.)3500 Ca B	76.0
5.	Iron (as Fe)	mg/l	3.0	APHA(23 rd Edtn.)3500 Fe B	0.23
6.	Magnesium (as Mg)	mg/l	----	APHA(23 rd Edtn.)3500 Mg B	30.0
7.	Sulphate (as SO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-SO ₄ E	46.0
8.	Alkalinity (as CaCO ₃)	mg/l	----	APHA(23 rd Edtn.)2130B	80.0
9.	Lead (as Pb)	mg/l	0.1	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
10.	Mercury (as Hg)	mg/l	0.01	IS 3025(Part 48)-1994	BDL(DL:0.001)
11.	Arsenic (as As)	mg/l	0.2	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
12.	Total Chromium (as Cr)	mg/l	2.0	APHA(23 rd Edtn.)3111 D 2017	BDL(DL:0.01)
13.	Sodium (as Na)	mg/l	----	APHA(23 rd Edtn.)3500 Na B	26.6
14.	Potassium (as K)	mg/l	----	APHA(23 rd Edtn.)3500 K B	7.0
15.	Zinc (as Zn)	mg/l	5.0	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.02)
16.	Total Suspended Solids (as TSS)	mg/l	100.0	APHA(23 rd Edtn.)2540D	BDL(DL:5.0)
17.	Conductivity	us/cm	----	APHA(23 rd Edtn.)2510B	810.0
18.	Phosphate (as PO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-P D	BDL(DL:0.3)

Prepared By:- *S.K. Mohanty*



For Mitra S.K. Private Limited

A.K. Path.
Authorized Signatory

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Page 1 of 1



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**TEST REPORT**

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.
(Unit- Aditya Aluminium)
At/Po: Lapanga , Beside SH-10
Sambalpur , Odisha-768212

Report No. : BBS/501
Date : 26.09.2025
Sample No. : MSKGL/ED/2025-26/09/0492
Sample Description : Surface Water
Sampling Location : Ash Pond
Date of sampling : 06.09.2025

ANALYSIS RESULT

SL. No.	Test Parameters	Unit	Standard as per Sch.VI of EP Rules, 1986	Test Method / Specification	Result
1.	pH value at 26°C	---	5.5 to 9.0	APHA(23 rd Edtn.)4500-H*	6.79
2.	Turbidity	N.T.U	----	APHA(23 rd Edtn.)2130B	6.6
3.	Total Dissolved Solids (as TDS)	mg/l	----	APHA(23 rd Edtn.)2540C	704.1
4.	Calcium (as Ca)	mg/l	----	APHA(23 rd Edtn.)3500 Ca B	80.0
5.	Iron (as Fe)	mg/l	3.0	APHA(23 rd Edtn.)3500 Fe B	0.32
6.	Magnesium (as Mg)	mg/l	----	APHA(23 rd Edtn.)3500 Mg B	28.0
7.	Sulphate (as SO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-SO ₄ E	76.5
8.	Alkalinity (as CaCO ₃)	mg/l	----	APHA(23 rd Edtn.)2130B	80.0
9.	Lead (as Pb)	mg/l	0.1	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
10.	Mercury (as Hg)	mg/l	0.01	IS 3025(Part 48)-1994	BDL(DL:0.001)
11.	Arsenic (as As)	mg/l	0.2	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.005)
12.	Total Chromium (as Cr)	mg/l	2.0	APHA(23 rd Edtn.)3111 D 2017	BDL(DL:0.01)
13.	Sodium (as Na)	mg/l	----	APHA(23 rd Edtn.)3500 Na B	25.5
14.	Potassium (as K)	mg/l	----	APHA(23 rd Edtn.)3500 K B	8.2
15.	Zinc (as Zn)	mg/l	5.0	APHA(23 rd Edtn.)3120B 2017	BDL(DL:0.02)
16.	Total Suspended Solids (as TSS)	mg/l	100.0	APHA(23 rd Edtn.)2540D	14.0
17.	Conductivity	us/cm	----	APHA(23 rd Edtn.)2510B	1051.0
18.	Phosphate (as PO ₄)	mg/l	----	APHA(23 rd Edtn.)4500-P D	BDL(DL:0.3)

Prepared By: *S.K. Mahanty*



For Mitra S.K. Private Limited
A.K. Rath.
Authorized Signatory

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Page 1 of 1



Mitra S. K. Private Limited

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**TEST REPORT**

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.
(Unit- Aditya Aluminium)
At/Po: Lapanga , Beside SH-10
Sambalpur , Odisha-768212

Report No. : BBS/502
Date : 26.09.2025
Sample No. : MSKGL/ED/2025-26/09/0452
Sample Description : Ground Water
Sampling Location : Piezometric Borewell-1
(Near Ash Pond)
Date of Sampling : 06.09.2025

ANALYSIS RESULT**Organoleptic and Physical Parameters as per IS 10500 : 2012**

Sl. No.	Test Parameters	Requirement (Acceptable Limit)	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.36
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	194.7
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	24.02
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	8.0
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.37
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.18
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	8.78
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO3 in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	0.56
14.	Phenolic Compounds as C6H5OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO4 in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	25.0
17.	Total Hardness as CaCO3 in mg/l	200	600	IS 3025 (Part 21)-2013	96.0
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.01)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	12.2
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	290.6
26.	Potassium as K in mg/l	----	----	APHA 23rd Edition, 3500 K B 2017	2.5
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO3 in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	50.2

Report Prepared by: *S.K. Mohanty*

Mitra S. K. Private Limited



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Page 1 of 1



Mitra S. K. Private Limited

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TEST REPORT

Name & Address of the Customer :
HINDALCO INDUSTRIES LTD.
(Unit- Aditya Aluminium)
At/Po: Lapanga , Beside SH-10
Sambalpur , Odisha-768212

Report No. : BBS/503
Date : 26.09.2025
Sample No. : MSKGL/ED/2025-26/09/0453
Sample Description : Ground Water
Sampling Location : Pizometric Borewell-2
(Near Proposed Ash Pond)
Date of Sampling : 06.09.2025

ANALYSIS RESULT

Organoleptic and Physical Parameters as per IS 10500 : 2012

Sl. No.	Test Parameters	Requirement Acceptable Limit	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.38
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	140.7
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	13.61
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	12.8
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.11
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.22
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	5.36
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO ₃ in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	0.82
14.	Phenolic Compounds as C ₆ H ₅ OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO ₄ in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	14.6
17.	Total Hardness as CaCO ₃ in mg/l	200	600	IS 3025 (Part 21)-2013	56.0
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.005)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	6.4
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	210.0
26.	Potassium as K in mg/l	----	----	APHA 23 rd Edition, 3500 K B 2017	1.9
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO ₃ in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	58.0

Report Prepared by: *S.K. Mohanty*



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Page 1 of 1

Mitra S. K. Private Limited

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TEST REPORT

Name & Address of the Customer :

HINDALCO INDUSTRIES LTD.

(Unit- Aditya Aluminium)

At/Po: Lapanga , Beside SH-10

Sambalpur , Odisha-768212

Report No. : BBS/504

Date : 26.09.2025

Sample No. : MSKGL/ED/2025-26/09/0454

Sample Description : Ground Water

Sampling Location : Pizometric Borewell-3
(Near RR Colony)

Date of Sampling : 06.09.2025

ANALYSIS RESULT

Organoleptic and Physical Parameters as per IS 10500 : 2012

Sl. No.	Test Parameters	Requirement Acceptable Limit	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.61
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	227.8
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	44.05
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	17.6
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.33
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.19
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	12.2
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO3 in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:3.0)
14.	Phenolic Compounds as C6H5OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO4 in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	38.6
17.	Total Hardness as CaCO3 in mg/l	200	600	IS 3025 (Part 21)-2013	160.0
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.005)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	24.2
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	340.0
26.	Potassium as K in mg/l	----	----	APHA 23 rd Edition, 3500 K B 2017	5.5
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO3 in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	142.0

Report Prepared by: *S.K. Mohanty*



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TEST REPORT

Name & Address of the Customer :

HINDALCO INDUSTRIES LTD.

(Unit- Aditya Aluminium)

At/Po: Lapanga , Beside SH-10

Sambalpur , Odisha-768212

Report No. : BBS/505

Date : 26.09.2025

Sample No. : MSKGL/ED/2025-26/06/0455

Sample Description : Ground Water

Sampling Location : Pizometric Borewell-4
(Bomaloi Village)

Date of Sampling : 06.09.2025

ANALYSIS RESULT

Organoleptic and Physical Parameters as per IS 10500 : 2012

Sl. No.	Test Parameters	Requirement Acceptable Limit	Permissible limit in the absence of alternate Source	Test Method / Specification	Result
1.	pH at 26°C	6.5-8.5	No Relaxation	IS 3025 (Part 11)-1984 Rffm: 2012	7.46
2.	Turbidity in mg/l	1	5	IS 3025 (Part 10)-1984 Rffm: 2012	BDL(DL:1.0)
3.	Total Dissolved Solids as TDS in mg/l	500	2000	IS 3025 (Part 16)-1984; Rffm:2012	158.1
4.	Aluminium as Al in mg/l	0.03	0.2	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.01)
5.	Boron as B in mg/l	0.5	1.0	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.05)
6.	Calcium as Ca in mg/l	75	200	IS 3025 (Part 40)- 1991 Rffm: 2014	20.02
7.	Chloride as Cl in mg/l	250	1000	IS 3025 (Part 32)-1988 Rffm: 2014	18.6
8.	Copper as Cu in mg/l	0.05	1.5	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
9.	Flouride as F in mg/l	1.0	1.5	IS 3025 (Part 60)- 2008 Rffm: 2013	0.26
10.	Iron as Fe in mg/l	0.3	No Relaxation	IS 3025 (Part 53)-1988 Rffm: 2014	0.20
11.	Magnesium as Mg in mg/l	30	100	IS 3025 (Part 46)-1994 Rffm: 2014	6.34
12.	Manganese as Mn in mg/l	0.1	0.3	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
13.	Nitrate as NO ₃ in mg/l	45	No Relaxation	IS 3025 (Part 34)-1988 Rffm: 2014	BDL(DL:3.0)
14.	Phenolic Compounds as C ₆ H ₅ OH in mg/l	0.001	0.002	IS 3025 (Part 43)- 1992; Rffm: 2014	BDL(DL:0.0001)
15.	Selenium as Se in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
16.	Sulphate as SO ₄ in mg/l	200	400	IS 3025 (Part 24)- 1986 Rffm: 2014	21.0
17.	Total Hardness as CaCO ₃ in mg/l	200	600	IS 3025 (Part 21)-2013	76.0
18.	Cadmium as Cd in mg/l	0.003	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
19.	Cyanide as CN in mg/l	0.05	No Relaxation	IS 3025 (Part 27)- 1986; Rffm:2003	BDL(DL:0.005)
20.	Lead as Pb in mg/l	0.01	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
21.	Mercury as Hg in mg/l	0.001	No Relaxation	IS 3025(Part 48)-1994	BDL(DL:0.0001)
22.	Arsenic as As in mg/l	0.01	0.05	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.001)
23.	Total Chromium as Cr in mg/l	0.05	No Relaxation	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.005)
24.	Sodium as Na in mg/l	----	----	APHA 23 rd Edition, 3500 Na B	11.0
25.	Conductivity in us/cm	----	----	APHA 23 rd Edition, 2510B	236.0
26.	Potassium as K in mg/l	----	----	APHA 23 rd Edition, 3500 K B 2017	2.5
27.	Zinc as Zn in mg/l	5	15	IS 3025 (Part 2) 2004 RA 2014	BDL(DL:0.02)
28.	Total Alkalinity as CaCO ₃ in mg/l	200	600	IS 3025 (Part 23)- 1986 Rffm: 2009	80.0

Report Prepared by: *S.K. Mohanty*



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Page 1 of 1



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Compliance Status from April- 25 to September- 25

COMPLIANCE TO CREP GUIDELINES FOR SMELTER

Sr. No.	Particulars	Compliance
1	Environmental clearance for new smelters to be given by MoEFCC only with pre-baked technology	Smelter design is based on pre-baked technology only.
2	Fluoride emissions should be limited to 0.8 kg/ton of aluminium production and dry scrubbing of fluorides	Fluoride emissions is being controlled by installing GTC & FTC below 0.8 kg/ton of aluminium metal produced. The average total fluoride emission for the period April'25 to September'25 is 0.0925 Kg/Ton of metal production.
3	Fluoride consumption in the smelter should be limited to 10 kg/ton of aluminium produced	The specific fluoride (as F) consumption for the period Apr'25 to Oct'25 is 7.62 Kg/ton of metal produced.
4	The fluoride in forage should be limited to Average of 12 consecutive months - 40 ppm Average of 2 consecutive months - 60 ppm One month - 80 ppm Regular monitoring data to be submitted to SPCB and CPCB.	Forage fluoride is being monitored on quarterly basis as a part of post project monitoring activities. The monitored data is being regularly submitted to SPCB and CPCB.
5	The average life of the pots should be 2500 days. The possibility of using the SPL in cement or steel industry after recovery of aluminum fluoride should be explored.	The carbon part of spent pot lining is disposed to actual users i.e. M/s Regrow Transo Pvt. Ltd. Jharsuguda, the refractory part to M/s. Re-Sustainability Ltd (CHW-TSDF, Jajpur) and mixed fines to cement plant for coprocessing in cement kiln and silicon carbide to authorized recyclers. Beside SPL refractory parts are also supplied to Technoprocessor LLP for trial run purpose. In this way 100% SPL is being detoxified and recycled/disposed with 71.42 MT of SPL remaining in stock at the end of Sep-25 and kept inside the well-ventilated permanent covered sheds for disposal to CHW-TSDF/Actual users.
6	The SPL should be disposed in secured landfill.	
7	Achieving particulate matter limit of 50 mg/Nm3 in anode baking furnace.	It is being Complied with.

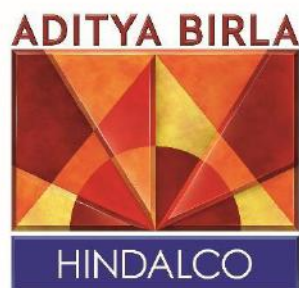
Compliance Status from April- 25 to September- 25

COMPLIANCE TO CREP GUIDELINES FOR CPP

Sr. No.	Conditions	Compliance
1	Implementation of Environmental Standards (emission & effluent) in non-compliant* Power Plants (31 & 27) - Submission of action plan: June 30, 2003 - Placement of order for Pollution of control equipment: September, 2003 - Installation & commission: December 31, 2005	Not Applicable
2	For existing thermal power plants, a feasibility study shall be carried out by Central Electricity Authority (CEA) to examine possibility to reduce the particulate matter emissions to 100 mg/Nm ³ . The studies shall also suggest the road map to meet 100 mg/Nm ³ . The studies shall also suggest the road map to meet 100 mg/Nm ³ wherever found feasible. CEA shall submit the report by March 2004.	Not Applicable
3	New / expansion power projects to be accorded environmental clearance on or after 1.4.1.2003 shall meet the limit of 100 mg/Nm ³ for particulate matter.	Complied. PM emission is well below stipulated limit of 50 mg/Nm ³ .
4	Development of SO ₂ & NO _x emission standards for coal based plants by December 2003. - New/ expansion power projects shall meet the limit of SO ₂ & NO _x w.e.f. 1.1.2005. - Existing power plants shall meet the limit of SO ₂ & NO _x w.e.f. 1.1.2006.	Standard for SO ₂ & NO _x has been published by MOEFCC.
5	Install/activate opacity meters/ continuous monitoring system in all the units by December 31, 2004 with proper calibration system.	Continuous monitoring system installed in the stacks attached to Power Plant for monitoring of PM, SO ₂ & NO _x .
6	Development of guidelines/ standards for mercury and other toxic heavy metals emissions by December 2003.	Standard for Hg emission for captive power plant has been published by MOEFCC. Monthly monitoring report is being submitted to SPCB.
7	Review of stack height requirement and guidelines for power plants based on micro meteorological data by June 2003	Guideline has been published for stack height by MOEFCC in this regard.
8	Implementation of use of beneficiated coal as per GOI Notification:	Not Applicable

Compliance Status from April- 25 to September- 25

	Power plants will sign fuel supply agreement (FSA) to meet the requirement as per the matrix prepared by CEA for compliance of the notification as short term measure. Options/mechanism for setting up of coal washeries as a long term measure * Coal India will up its own washery * Sate Electricity Board to set up its own washery * Coal India to ask private entrepreneurs to set up washeries for CIL and taking washing charges * SEBs to select a private entrepreneur to set up a washery near pit- head installation of coal beneficiation plant	
9	Power plants will indicate their requirement of abandoned coal mines for ash disposal & Coal India/ MOC shall provide the list of abandoned mines by June 2003 to CEA.	Not Applicable
10	Power plants will provide dry ash to the users outside the premises or uninterrupted access to the users within six months.	It is being Complied with.
11	Power Plants should provide dry fly ash free of cost to the users	Dry fly ash is being provided to the ash brick manufacturing units in free of cost.
12	State P.W.Ds/ construction & development agencies shall also adhere to the specifications/Schedules of CPWD for ash-based products utilization MoEF will take up the matter with State Governments.	Not Applicable
13 (i)	New plants to be accorded environmental clearance on or after 1.04.2003 shall adopt dry fly ash extraction or dry disposal system or Medium (35-40%) ash concentration slurry disposal system or Lean phase with hundred percent ash waste re-circulation system depending upon site specific environmental situation.	Complied
13 (ii)	Existing plants shall adopt any of the systems mentioned in 13(i) by December 2004	Implemented
14	Fly ash Mission shall prepare guidelines/manuals for fly ash utilization by March 2004.	Noted
15	New plants shall promote adoption of clean coal and clean power generation technologies * Units will submit bank guarantee to respective SPCB	Noted



ENVIRONMENT POLICY

Effective from: **April 1, 2024**

First Revision: **August 09, 2022**

Second Revision: **February 13, 2024**

Third Revision: **September 11, 2025**



ENVIRONMENT POLICY

We, at Hindalco Industries Limited, operating across the process chain from mining to semi-fabricated products in non-ferrous metals, will strive to continually improve our environmental performance for sustainable operations and responsible growth globally, by integrating sound environmental systems & practices and Pollution Prevention approach.

To achieve this, we shall:

- Comply with all applicable legal, national, and international environmental requirements, and continually improve performance through a strengthened Environmental Management System.
- For Environmental KPIs, set measurable targets, continuously monitor progress, and assess environmental risks to effectively manage and mitigate impacts on the environment and society.
- Allocate sufficient resources such as organisational structure, technology and funds for implementation of the policy and for regular monitoring of performance.
- Adopt pollution prevention approach for all our processes; enhance material efficiency and achieve high productivity.
- Conserve key resources like (energy, water, raw materials, fuel) through efficient technologies, process improvements and conservation programs.
- Adopt energy-efficient and cleaner technologies aligned with techno-economic viability, regional needs, and growth plans.
- Promote waste minimization through prevention, reduction, reuse, recycling, recovery, and adopt circular economy practices.
- Align with TNFD recommendations by setting site-specific biodiversity targets that progress from No Net Loss¹ towards Net Positive Impact² by 2050.
- Collaborate and engage with employees, regulators, suppliers, contractors, customers, authorized business partners, communities, and other stakeholders to strengthen environmental practices, understand priorities, and address key challenges.
- Adapt environmental performance over life cycle as an important input to the decision-making processes in the organization.
- Raise environmental awareness on identifying and managing the environmental impacts for internal and external stakeholders through training, communication, participation and consultation
- Communicate this policy internally and externally, ensuring transparency on commitments and performance.
- Conduct environmental due diligence before undergoing any mergers and acquisitions.

This policy shall be made available to all employees, suppliers, customers, authorized business partners, community and other stakeholders, as appropriate. The implementation of this policy is the responsibility of respective heads of units with the monitoring and tracking done by the Apex Sustainability Committee under the guidance of the Managing Director.

¹ As defined in Hindalco Biodiversity Policy

² As defined in Hindalco Biodiversity Policy

Implementation Status of Public Hearing Commitments held in 2012

Sl. No.	Point Raised During Public Hearing	Comments of the PP during Public Hearing	Implementation status
1	The Project Proponent should provide employment to the locals on priority basis.	The industry has already provided employment to be locals based on eligibility in the ongoing projects and they are committed to do so in the proposed expansion of project.	The industry has already provided employment to local residents based on their eligibility in the existing projects and is committed to continuing this in the proposed expansion project. A total of 2613 locals from Sambalpur district are employed at Aditya. Out of these, 1250 individuals are from the revenue villages of Lapanga, Bomaloi, Derba, Khadiapali, Tileimal, Dharopani, Pondloi, Ludhapali, Bhoipali, Katarbaga, and Jangala. In total, 2517 people from across Odisha have been employed.
2	The industry should establish an ITI training centre to train the young people in technical field so as to enable them for getting suitable employment in the plant.	The industry has proposed to upgrade the existing ITI at Rengali to facilitate the training programme for the project affected people for the technical Jobs.	The industry has facilitated ongoing technical training for 56 deserving youth at both Amaresh Patel ITI, Rengali, and KIIT University, Bhubaneswar, based on applications received from five Gram Panchayats. Additionally, the Aditya Birla Skill Centre in Sambalpur has trained over 486 youths, with 275 successfully placed in various positions. This underscores the effectiveness of the skill development programs and their positive impact on the local community. Such initiatives are vital in empowering young people and improving their employability. A total of Rs. 447.4(2.008 for FY 2025) lakhs have been invested in various skill-based training programs. Local VSS ITI supported with Classroom infra and training materials during this FY'25 enhancing the capability of the institute.
3	The industry should carry out massive plantation in the vacant spaces of the surrounding villages, R.R colony etc. Trees which are not under the purview of the core plant area are to be protected and minimum 25% of the project area to be made green cover.	The industry has already planted 35,000 saplings inside the factory premises. Also, the industry has proposed massive plantation in the vacant spaces of the surrounding villages, R.R Colony etc.	The industry has planted a total of 9,68,230 saplings within the factory premises till date. Additionally, 74277 saplings, including species like mango, banana, drumstick, guava, lemon, and papaya, have been planted in the vacant spaces of nearby villages such as Naikapada, Tileimal, Dharopani, Bomaloi, Narupada, Derba, Lapanga, Pondaloi, and Ludhapali. Furthermore, 74,277 saplings have been planted to villagers in the surrounding areas up to 2025, in addition to the factory premises. Of the total plant area of 1,347.35 hectares, over 446 hectares have already been developed as a greenbelt or under plantation across the plant, ash pond, and township areas.

4	The industry should inform the Public about the air pollution control measures to be adopted in the proposed plant for control of air pollution and also proactive measures to be taken by the company for control of rise in ambient temperature. Pollution measurement machines to be installed in every villages and pollution control committees to be formed to regulate the pollution.	The industry has proposed to install real time ambient air quality monitoring station in the project area for information on different pollutant.	The industry has installed four Continuous Ambient Air Quality Monitoring Stations within the plant premises. Additionally, manual Ambient Air Quality Monitoring is conducted at four stations inside the plant and buffer zone, through a NABL-accredited laboratory on a periodic basis. Monitoring reports are regularly submitted to MoEF&CC and SPCB as part of the six-monthly EC compliance report. To control air pollution, the industry has installed GTC, FTC, ESPs, and bag filters. Moreover, a semi-dry FGD system has been installed in Unit-6 of the Captive Power Plant. Greenbelt development has been carried out on > 33% of the plant area, and the company has adopted state-of-the-art technology and equipment for both the smelter and power plants as part of its proactive environmental measures.
5	The Project Proponent should inform the public about the peripheral developmental works to be carried out in future.	The industry has already provided 15 additional classrooms in 5 school at Lapanga, Dharopani, Jangala, Ghichamura & Katarbaga and other renovation of works of School will be taken up as part of their CSR activities. In infrastructure development the industry has completed 6 km concrete road from Lapanga to Dharopani and other internal roads to the nearby villages are under progress and other similar road works will be taken up in due course of project development.	Peripheral developmental works are being carried out in consultation with the Gram Panchayat Sarpanch, villagers, opinion makers and well-wishers as per the CSR guideline. FY 2025-26 provided 5 nos of smart classroom boards to the five nos of high schools. Anganwadi renovation 6 nos, 5450 nos of snacks provided 43 nos school and 39 nos of Anganwadi, Pratibha Samman provided tabs to 23 nos students, SUP program 3 nos conducted, firewood of 100 ton have been provided to schools of 5 GPs. Sports promotion for 62 nos students for district level event, 5 nos of RO drinking water facility provided in 5 schools. Nikshya mitra kits provided 720 nos to TB patients, First Aid centre treated 1321 patients and 621 patients treated in the Vision center Rengali. MMU running benefitted 1865 nos of people in 5 GPs. Sunstroke Awareness, Nutrition, Health awareness, Free eye checkup, 90 days drinking water tanker supply to 108 villages. Under Livelihood Basketry project supported to 35 nos of rural women, 65 nos of women SHG members got trained on

			various food processing programs, world environment Day celebrated. Bagged CII-ITC CSR Award for excellence in CSR.
6	The industry should make necessary arrangements for provision of drinking water in the affected area.	The industry has already initiated to supply drinking water by tankers in the project affected villages.	In 2015-16, Rs. 5.17 crores was allocated for a drinking water supply project in the Rengali Block. Since 2010, the industry has been providing drinking water to five Gram Panchayats, covering villages such as Lapanga, Bomaloi, Derba, Khadiapali, Tileimal, Dharropani, Pondloi, Ludhapali, Bhoipali, Katarbaga, Jangala, Laida, and Ghichamura. From 2021 onwards, this service was extended to Laida GP. Under Project Jal Vahini, safe drinking water is delivered directly to the community through water tankers, with over 80 trips daily involving 32 vendors, reaching more than 15,000 people in 108 villages/hamlets for 90 days in 6 GPs. A total of Rs. 9.3394 crores have been spent on drinking water programs in the peripheral areas since 2007.
7	The industry should make necessary arrangement to provide	The industry has already conducted 55 health camps, and more than 11500 patients have received free	The industry established a First Aid Centre for the community in Lapanga in 2013, which continues to operate, having treated 18079 patients as of 2025. The centre offers free consultations and medicines, with two full-time

	round the clock doctors for better medical service in the Lapanga area.	treatment by reputed doctors till date.	doctors available daily from 9:00 AM to 12:00 PM and 4:00 PM to 6:00 PM. A total of Rs. 75.03 lakhs has been spent on the Lapanga First Aid Centre. In addition, the Vision Centre program continues to provide services across all five Gram Panchayats. A total of Rs. 71.66 Crores have been spent on healthcare activities in surrounding villages such as Dhorropani, Jangla, Bomaloi, Lapanga, Katarbaga, Ghichamura, Pondaloi, and Ludhapali. These activities include health camps, mother and child healthcare, SuPoshan, eye care, TB elimination, disability support, malnutrition management (MDD) and sanitation
8	The industry should make alternate arrangement to source water instead of deep bore wells in & around the project area.	The industry has proposed to get water from the Hirakud Reservoir to meet its requirement.	The industry is sourcing water from the Hirakud Reservoir to fulfil all the industrial requirements. In addition, the industry has developed surface water harvesting structures to the tune of 22 lakhs cum to store water in the lean season and it will harvest the rainwater during rainy season in the same reservoirs.
9	The industry should give financial support to grow small scale industries in the localities.	The industry has assured to give support to grow the livelihood of the villagers as per their CSR policy.	The industry is actively supporting farmers to enhance the livelihoods of villagers as part of its socio-economic development plan. Numerous training programs have been conducted to promote self-employment, including capacity-building sessions for SHG (Self-Help Group) women, leadership development training, mushroom cultivation training, and exposure visits across villages such as Lapanga, Bomaloi, Derba, Khadiapali, Tileimal, Dharopani, Pondloi, Ludhapali, Bhoipali, Katarbaga, Jangala, Laida, and Ghichamura. The industry is also providing support to 400 SHGs, including 30 involved in Income Generating Activities (IGAs) like spice production, oil processing, paper cup making, vegetable farming, phenol and hand wash production, duck rearing, seven poultry units, tailoring safety jackets, and producing turmeric powder, Badi papad, and paper plates. These initiatives cover SHGs across the same villages, comprising a total of 4263 women. Additionally, seven farmers' groups have been adopted by the industry. Farmers have been engaged in various livelihood activities such as black rice, sweet corn, vegetable crop production, and other cash crops, allowing them to diversify and strengthen their incomes through multiple sources.

10	The industry should pay financial support for each local traditional festival to villagers. Cremation ground should be provided in each village. Alternate Football ground to be provided to Bomaloi villagers as the company is occupying the existing football ground.	The industry has assured to give financial support for each local traditional festival as per CSR policy and the industry has committed to develop football ground near Bomaloi village if suitable land is provided by the District Administration.	The company provides financial support for local traditional festivals such as Nuakhai, Sheetal Sasthi, Astaprahari Namayagya, and sports events like football, badminton, and cricket tournaments, in collaboration with the local community. Additionally, women's sports and school sports programs are held annually in various villages to promote rural sports. The company also maintains nearby football grounds each year. A total of Rs. 1.7475 crores have been spent on local traditional festivals, while Rs. 50.37 lakhs have been allocated for rural sports and related activities. Furthermore, Rs. 25 lakhs have been spent on the development of the football ground in Bomaloi village.
11	The industry should provide community toilets at the surrounding affected villages. Special care to be taken for physical handicapped persons in the affected areas	• Community toilets at the surrounding affected villages will be provided as per CSR policy. • The industry authority will take all efforts to give special benefits for the physically handicapped persons in the affected areas.	A total of 25 toilets has been constructed in the villages of Bomaloi, Pitapali, Derba, Lapanga, Dharropani, Rohidashpada, Gumkarma, Ghichamura, Pondaloi, and others. An amount of Rs. 8.17 lakhs have been spent on the construction of these toilets. Fresh 12 nos community toilet are under process. There are several govt initiatives being implemented in the affected areas towards physically disabled persons. After discussion with govt authorities and individuals, the industry has added few more initiatives and awareness programmes and spent to the tune of Rs 0.66 lakhs for their betterment under project Astitwa.

Annexure - 12

Expense incurred under Enterprise Social Commitment till September- 2025:

Sl. Nos.	Description	Amount Spent (In Crores)	Remarks
1	G D Birla Medical Research and Education Foundation for School at Kurki	20.25	
2	Land taken on Lease from IDCO for School at Kurki	9.10	
3	Sponsorship of Kalinga Lancers in Indian Hockey league FY15, FY16 & FY17	4.50	
4	ESC expenses in & around Aditya Aluminium including Hirakud areas in FY17	7.61	
5	Sponsorship for Asian Athletic Championship 2017	0.50	
6	ESC expenses in & around Aditya Aluminium including Hirakud areas during April 18 to March 19	4.65	
7	ESC expenses in & around Aditya Aluminium including Hirakud areas during April 2019 to March 2020	0.62	
8	ESC expenses in & around Aditya Aluminium including Hirakud areas during April 2020 to Mar 2021	5.31	
9	ESC expenses in & around Aditya Aluminium including Hirakud areas during April 2021 to Mar 2022	8.81	
10	ESC expenses in Education (EDU)	0.33	
11	ESC expenses in in & around in Environment and sustainable Livelihood	0.57	
12	ESC expenses in in & around in Healthcare in Hirakud areas also	1.06	
13	ESC expenses in in & around in social causes	0.40	
14	ESC expenses in in & around in Rural & Development projects	0.26	
15	Aditya Expenses from Oct-22 to March-23	0.76	
16	Hirakud power and Smelter Expenses from Oct-22 to Mar-23	0.87	
17	Aditya Expenses from Apr-23 to Sept-23	1.67	
18	Hirakud power and Smelter Expenses from Apr-23 to Sept-23	0.90	
19	Aditya Expenses from Oct-23 to Mar-24	1.80	
20	Hirakud power and Smelter Expenses from Oct-23 to Mar-24	1.77	
21	Aditya Expenses from Apr-24 to Sept.-24	1.02	
22	Hirakud power and Smelter Expenses from Apr-24 to Sept.-24	1.52	
23	Aditya Expenses from Oct-24 to Mar.-25	2.01	
24	Hirakud power and Smelter Expenses from Oct-24 to Mar.-25	1.90	
25	Aditya Expenses from Apr-25 to Sep.-25	1.20	
26	Hirakud power and Smelter Expenses from Apr-25 to Sept.-25	1.76	
Total Expense		81.15	

Aditya Aluminium intends to continue with the following activities under Enterprise Social Commitment like: -

- a) Infrastructure development in villages around the Project area.
- b) Drinking Water supply facilities.
- c) Green cover development in collaboration with State Govt. departments.
- d) Football playground or mini stadium in Bomaloi village, as stated in the minutes of public consultation held before environmental clearance.
- e) Free distribution of schoolbooks & bags to children.
- f) Constructing Toilets for girls in schools/villages.
- g) Scholarship to poor, talented students in the schools.
- h) Subsidy for Ash supply (Rs 150/- per Tonne at present) to local Ash brick manufacturers, as per OSPCB/MOEF&CC Notifications.
- i) Providing Ash brick manufacturing machines to unemployed youth in the villages and one time assistance to establish the Unit.
- j) Contributing to the development of Railway infrastructures in consultation with the railway authorities (e.g., ROB).
- k) Implementation of skill development programmes and providing necessary infrastructure to existing ITI, Polytechnic colleges.
- l) Development of Schools in the State of Odisha.

The remaining 5% amount for Phase-1 capacity (i.e., Smelter of 0.38 MTPA and CPP of 900 MW) is proposed to be spent over a period of 39 years from the year 2017.

Annexure-13

Ambient Noise Monitoring Report (Apr-25 to Sep-25)									
Sr. No.	Month	Near Raw Water Reservoir		CPP Ash silo		Near Railway Siding		Near Inside Township	
		Day	Night	Day	Night	Day	Night	Day	Night
1	Apr-25	55.4	47.6	53.6	45.1	60.3	46.7	49.6	39.8
2	May-25	56.0	46.8	55.3	45.5	56.0	45.9	50.8	40.5
3	Jun-25	55.2	47.59	56.7	47.68	57.4	48.02	53.5	42.18
4	July-25	55.0	47.1	55.4	51.4	56.2	51.5	52.9	43.2
5	Aug-25	53.9	47.2	54.8	51.5	55.6	52.0	53.0	40.2
6	Sep-25	54.5	48.9	56.0	51.7	56.4	51.8	51.3	42.7
Average in dB (A)		55.00	47.53	55.30	48.81	56.98	49.32	51.85	41.43

CSR Half Yearly Report for FY 2025-26

ADITYA ALUMINIUM LAPANGA - HINDALCO INDUSTRY LIMITED

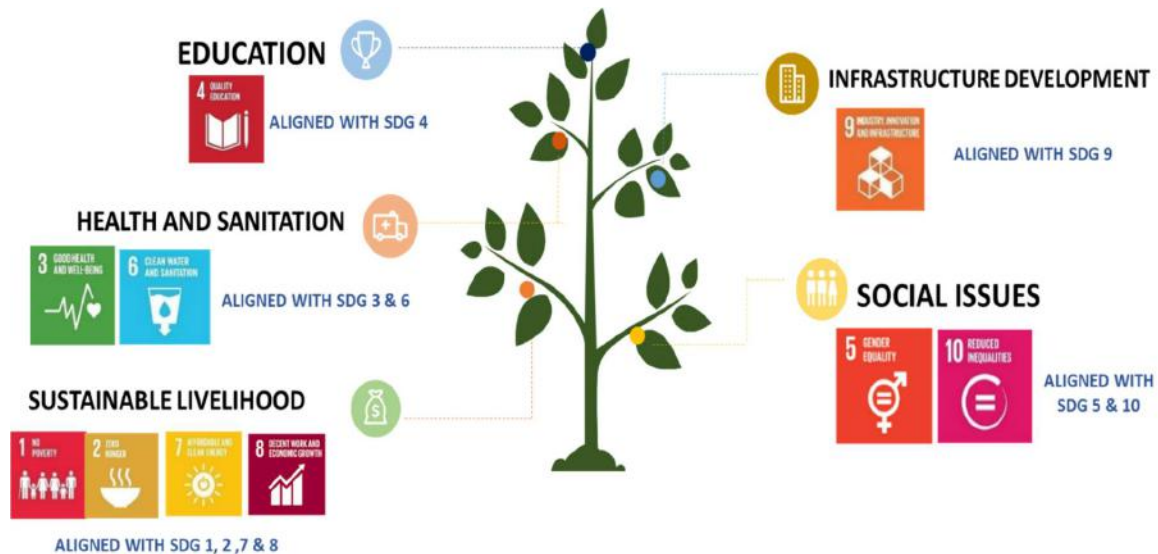


CSR Vision

“To actively contribute to the social and economic development of the communities in which we operate and beyond. In sync with the UN SDGs our endeavour is to lift the burden of poverty weighing down the underserved and foster inclusive growth. In doing so, build a better, sustainable way of life for the weaker, marginalized sections of society and enrich lives. Be a force for good.”

- Mrs. Rajashree Birla, Chairperson.

PRIME AREAS ALIGNED TO SDGS:



EDUCATION – Project ADHYAYAN

Pratibha Samman Program:

Reaffirming its commitment to education and community development, **Pratibha Samman**, a special felicitation program to honor outstanding academic achievers from six Gram Panchayats of Rengali Block, Sambalpur District, who secured 70% and above marks in the Class 10th Board Examination conducted by the Board of Secondary Education, Odisha, in the academic year 2024-25. A total of 23 meritorious students were felicitated and awarded **Samsung Tablets** to enhance their digital literacy and support their future educational pursuits. The event, held at the company's Club House, was graced by the presence of key dignitaries including Mr. Satyanarayan Agarwal, Block Chairman; Ms. Monika Bohidar, ABDO; BEO Mr. Mahendra Bagh, school Headmasters; and Sarpanchs from the six



Gram Panchayats. From Aditya Aluminium, the event was attended by Mr. Jagannath Prasad Nayak, Unit Head; Mr. Vinoda Nand Thakur, Unit HR Head; Mr. Rajat Majumder, Finance Head; Mr. Gulshan Tiwari, CPP Head; Mr. Ranjit Kumar Sharma; Mr. Suvendu Biswas, IT Head; Mr. Hemo Ranjan Pattnaik, Land Head; and Mr. Madhu Sudan Jena. The program saw the participation of approximately 76 students, parents, local stakeholders, and government officials. The primary objective of Pratibha Samman was not only to recognize academic excellence but also to inspire and motivate students through career counselling for higher education and future aspirations. All PRI members, teachers, and parents present appreciated Aditya Aluminium for this thoughtful initiative aimed at empowering young minds through education, digital inclusion, and positive community engagement.



Observation of World Health Day:

The World Health Day program was organized at Lohamani High School and Golamal village, in collaboration with PHC Rengali and Aditya Health Care Initiative, aimed to promote health awareness and well-being in the community. This year's theme, "Healthy Beginnings, Hopeful Futures," was central to the event, which sought to educate participants on the importance of maintaining a healthy lifestyle from an early age. The program was featured by Dr. Subrat Nanda from PHC Rengali, who shared insightful guidance on various aspects of health, including proper nutrition, sleep habits, hydration, and the significance of physical activity for overall wellness. His interaction with the children and villagers was designed to empower them with practical knowledge to foster long-term health. Apart from that we have also conducted more than 200 BP check-up during the programme. Additionally, over 150 sanitary napkins were distributed to adolescent girls and women, emphasizing the importance of hygiene, particularly in rural settings. The event also hosted a quiz competition, which engaged students and villagers in discussions about health topics, with winners receiving prizes as incentives for participation. The presence of key figures, such as Mr. Manoranjan Behera, Deputy Manager, CSR & RR of Aditya Aluminium, Lapanga, Mr. Soumya Ranjan Mishra & Mr. Damodar Sahu (Aditya Associate representative) along with school staff, villagers, and CSR team from Aditya Aluminium, further strengthened the collaborative nature of the program. This initiative not only highlighted the commitment to improving health awareness but also demonstrated the role of community and corporate partnership in fostering a healthier future for all.



Single Use Plastic (SUP) Awareness:

This initiative focuses on raising awareness about the harmful effects of single-use plastics and promotes eco-friendly alternatives for a sustainable future. Single Use Plastic Awareness program was organized three awareness program at Lapanga school, Bhalupatra and Bhoiplai village with 245 students. Students and teacher participated and triggered on “No to Say single use plastic”. Environment Department and CSR team facilitated the need-based program. The community member was keen to learn as it was new topic to them and environment related issue.



POCSO Awareness Session:

Aditya Aluminium Lapanga organized POCSO awareness session at Lapanga high school on 12th April 2025 under project SADHANA. The session was led by Ms. Asmita Topdar Lead Legal Aditya Aluminium Lapanga for school children and teachers. Around 70 students and teachers attended the session and learned about the POCSO act 2012. The objective was to sensitize children on POCSO, child abuse at school and community, how to complain and procedure etc. The session was facilitated by Mr. Manoj Kumar Nayak Principal Lapanga high school.



Project Mini Science Centre (STEM Learning):

Five Mini Science Centres were established to foster STEM (Science, Technology, Engineering, and Mathematics) education. Over 900 students have accessed these centres and demonstrated their learning using the provided tools. STEM learning classes in all 5 schools are ongoing, and children are actively learning the session with the demonstration and practical session given. Teachers in all 5 schools monitor the students and give proper guidance to the students on practical technical sessions.



Project Pustakalaya:

The project Pustakalya aims to promote reading and education by providing access to books and educational resources. More than 995 children from five schools visit the library daily. Library habit is being introduced to the students. Learning level of kids evaluated, and awareness created on book reading and storytelling session. Monitoring the infrastructure, books and library scheduled and conducted storytelling, book reading and various quiz program in schools. The assessment & story telling session at Pustakalaya was conducted in 2 schools where more than 75 students and teachers participated and enjoyed the learning session.

**Independence Day Celebration 2025:**

Independence Day 2025 in India is a national observance that marks the adoption of the Indian Constitution. This year, India will mark its 79th Independence Day being observed on *Friday, 15th*



August, 2025, under the theme “Naya Bharat” is the official theme of Independence Day 2025, celebrating India’s rise as a prosperous, secure, and self-reliant nation aligned with the Viksit Bharat 2047 vision and the legacy of Operation Sindoor. “Naya Bharat” reflects the nation’s commitment to progress, unity, and empowerment. Under guidance of Mr. Ravi Niwas Head CSR RR, During the year, 5350 snacks packets prepared by SHGs and distributed to 43 schools & 37 AWC.

Firewood Support to Schools and Anganwadi Centre:

As part of a community welfare initiative, more than 60 tons of firewood were provided free of cost to 15 government schools to support the preparation of Mid-Day Meals. This contribution directly benefits over 1250 children, who receive freshly cooked, nutritious meals every school day.



Sports & Games - Sairendri Nayak Memorial Inter High School Football Tournament, Sambalpur:

To encourage inter-school sportsmanship and provide exposure to competitive events, we Aditya Aluminium facilitated bus transportation for 20 students from Lapanga High School to participate in the prestigious Sairendri Nayak Memorial Inter High School Football Tournament. Their involvement not only boosted school pride but also enhanced their skills and team spirit.



Block Level Sports & Games Competition:

Total of **62 students from five Gram Panchayats** participated in the Block Level Sports & Games competition. We are proud to have supported and mobilized this significant participation, which reflects the growing enthusiasm for physical education and community-level sports. These initiatives highlight our ongoing commitment to nurturing talent, promoting healthy lifestyles, and building a strong foundation for youth development through sports.



Digital Classroom:

A Digital Classroom Project was implemented by setting up digital learning facilities in five Government High Schools, Lapnga High School, Dhorropani High School, Lahamani High School and Katarbaga High School, enabling access to modern educational tools for over 990 students. Each digital classroom was equipped with interactive smart boards, projectors, computers, internet connectivity, and curriculum-aligned digital content to enhance the teaching-learning process.



Safe Drinking Water Facility:

Installation of 5 water purifier in 5 schools, Dhorropani High School, Gumkarma Seva Ashram, Ghichamura High School, ITI Rengali, Orissa Adarsh Vidyalaya to provide safe drinking water facilities to school children and staffs. More than 840 schoolchildren and staff are getting benefits.



HEALTH – PROJECT AROGYA

Aditya Community Dispensary (First Aid Centre):

Aditya Community Dispensary running successfully at Lapanga Besides SH-10, 1321 number of patients were accessed with free medicine and doctor consultancy from our First Aid Centre, Lapanga. More than 45 to 50 villagers access the first aid facilities. From April 2025 to September 2025, 6067 beneficiary got facility of free doctor consultation and medicine.



Project Vision Centre:

Vision center is a small spoke center which was established to give primary check-up to the unprivileged people who can't reach to the Hub-Eye Hospital. Normal treatment can be provided to the patients after check up by trained optometrists and consultation will be provided by Video conference. Aditya started the project in the year 2020. There is no eye care facility available in a radius of 20 km. To remove blindness due to cataract & to provide a centralized system to avail the facility to the poor and marginalized living- it has been aimed. This is the first center running by the Aditya in collaboration by Vision India Foundation. During this period from April to September 2025 around 681 patients treated with nominal charges. 25 cataract patients were operated on successfully at base hospital Sambalpur.



National TB Elimination Program (Ni-Kshay Mitra):

India has been actively involved in TB control activities for more than 50 years now. Still TB continues to be India's most severe health problem. The country is now better prepared to tackle TB better than before. It now holds advanced and effective interventions and



technologies for diagnosis, treatment and care of TB cases. As many of our villages are vulnerable to the disease, and in collaboration with Govt. of India, under Aditya Health Care Service, our dedicated warriors working closely with govt. guidelines for elimination of TB under Nikshay mitra program. During the month including spread of awareness program, district level felicitation program organized, and Aditya felicitated by CDMO, for relentless contribution towards elimination of TB in Rengali Block. In addition, 250 number of nutrition kit distributed to TB patients.

Medical Mobile Unit (MMU) Inauguration:

Reaffirming its commitment to rural health and well-being, Aditya Aluminium, Lapanga (A unit of Hindalco Industries Ltd.) has launched a Mobile Medical Unit (MMU) under its flagship CSR initiative, “Aarogya – Healthy Life, Healthy Community.” Launched in collaboration with The Hans Foundation, the MMU is a vital component of Project Aarogya, aimed at providing door-to-door healthcare services across six Gram Panchayats: Bomaloi, Lapanga, Jangla, Ghichamura, Katarbaga, and Nishanbhanga.



The Mobile Medical Unit will offer:

Free doctor consultations and medicines

- ✓ Basic pathological services
- ✓ Daily health awareness programs
- ✓ A dedicated healthcare team comprising a doctor, pharmacist, and community mobilizer will deliver these services directly to households in the plant's vicinity.

The MMU was formally flagged off by key leadership and stakeholders:



Mr. Jagannath Prasad Nayak, Unit Head, Aditya Aluminium, Mr. Gulshan Tiwari, CPP Head, Mr. Vinoda Nand Thakur, Unit HR Head, Mr. Avijit, Group CSR Head, Hindalco, Mr. Siba Mohapatro, CSR Cluster Head, Dr. Arindam Roy Choudhury, CMO, Aditya Health Center, and Mr. Stephen Arokiaraj. Local dignitaries, including Mr. Satyanarayan Agarwal (Block Chairman, Rengali), Mr. Kiran Behera (Samiti Member, Lapanga), residents and representatives from all six Panchayats welcomed the initiative and expressed gratitude, emphasizing its importance in improving access to quality healthcare in underserved regions. This Mobile Medical Unit marks a significant step in Aditya Aluminium's ongoing efforts to strengthen sustainable, community-centric healthcare systems in rural Odisha. During this

period from April to September 2025 around 1865 rural villagers got benefited by the MMU services.

SWASTH NARI SASHAKT PARIWAR ABHIYAN:

Aditya Aluminium, Lapanga a Unit of Hindalco Industries Limited through its Corporate Social Responsibility (CSR) initiatives, has actively extended support to the Pradhan Mantri Swasth Nari Sakth Pariwar programme. The collaboration with Laida Community Health Centre (CHC), Rengali, aims to strengthen women's and family health in the region. By aligning with both national and state healthcare priorities, the initiative seeks to improve access to quality healthcare services and promote overall community wellbeing. This partnership reflects the company's commitment to sustainable development and social impact in local communities. The program was held from 20th September to 24th September 2025 at Katarbaga PHC, Rengali PHC, Laida CHC and Khinda PHC in partnership with HANS Foundation. Various lab test was conducted with the help of Mobile Medical Unit which included Diabetic, Cholesterol, SGOT, SGPT and Haemoglobin etc. Around 770 patients availed the facility and total 253 tests were conducted. The government officials appreciated the efforts made by Aditya Aluminium CSR team for the support provided within short period of time.



PROJECT ASTITVA:

As part of our health-focused initiatives, we propose to organize a Multi-Category Therapy Camp under our flagship Project ASTITVA for specially abled children from these Gram Panchayats. The camp aims to serve underprivileged children in the vicinity of Aditya Aluminium Lapanga, by addressing the gap in accessibility to quality therapy services and professional support. Conducted survey at villages and attended block level camp for understanding the program.



The camp will offer services including:

- Physiotherapy and Occupational Therapy
- Special Education and Psychosocial Support
- Speech Therapy

Objectives of the Program:

- Early screening and identification of children with developmental delays and disabilities
- Provision of comprehensive rehabilitation services
- Access to assistive aids and medical support
- Promotion of inclusive growth, independence, and engagement through sports and vocational activities



World Breastfeeding Week 2025:

Prioritise Breastfeeding: Create Sustainable Support Systems

Introduction

World Breastfeeding Week is celebrated every year from August 1 to 7. Its purpose is to promote the importance of breastfeeding and encourage mothers to engage in it. "Breastfeed, while working too."

Awareness Program

Health workers provided detailed information to pregnant women and nursing mothers about the benefits of breastfeeding, the correct techniques, and care during breastfeeding. A free health check-up and nutrition counselling camp for mothers and newborns was organized. Experienced mothers shared their experiences and advised new mothers.



Information was to provided on the following key points

- ✓ The baby should be given mother's milk within the first hour of birth.
- ✓ The thick yellow milk (colostrum) that comes first is like nectar for the baby — it boosts immunity.
- Exclusively breastfeed from birth to six months.
- During this period, do not give water, honey, cow's milk, or any other food to the baby.
- Continue breastfeeding even after six months.

Around more than 200 pregnant mothers, lactating mothers and adolescent girls participated in the awareness session and gained knowledge on importance of breastfeeding. The session also included institutional delivery no early child marriage etc so that adolescent girls and village women get educated on social cause.

MASS Drug Administration - FILARIASIS Medicine Distribution Program:

Aditya Aluminium Lapanga, a Unit of Hindalco Industries Limited Conducted MASS Drug Administration Activities on elimination of Lymphatic Filariasis in collaboration with District Government Health Department and Aditya Health Care Centre. The objective was to give awareness on Filaria and to suggest taking medicine for the age group above two can take this medicine for preventing Filaria. The Employees and the Township people got benefited by the program.



NATIONAL NUTRITION WEEK 2025 'Eat Right for a Better Life':



Aditya Aluminium Lapanga A Unit of Hindalco Industries Limited CSR team Organized National Nutrition Week 2025 at RR Colony Pondloi and Ludhapali. The programme was attended by Dr. Araka Chatterjee Aditya health centre, Ravi Niwash CSR head, AWW, ASHA and CSR team. The discussion was on the following points were oriented by Dr. Arka Chatterjee.

1. Importance of Nutrition for mother, children and adolescent.
2. Different sources of Nutrition.
3. Type of Nutrition.
4. Nutrition required for a healthy baby.

In addition to this there was a quiz competition and healthy baby show and a prize distribution program. The programme ended with positive note as eat healthy for healthy future.

World Malaria Day 2025:

Aditya Aluminium, Lapanga, in collaboration with Aditya Health Centre, CHC Laida and PHC Rengali, observed World Malaria Day at Laumal Village under Katarabaga Gram Panchayat. The event focused on raising awareness about Malaria Prevention and Control, in line with this year's theme: "Malaria Ends with Us: Reinvest, Reimagine, Reignite." The program featured a range of activities, including an awareness session, a quiz competition, prize distribution, Oath Taking and the distribution of mosquito nets. Discussions were held on Malaria symptoms, Patient care and Preventive measures. Total of 120 households were provided with mosquito nets to help prevent the spread of malaria. Key topics discussed included the importance of, Use of mosquito nets while sleeping, maintaining personal hygiene, Ensuring environmental cleanliness to eliminate mosquito breeding grounds. The event was graced by several dignitaries: Sri Jadumani Gani, PHEO, Laida, Sri Subrata Mishra, VBDTS, Sambalpur, Sri Dr. Sourabh Mourya Aditya health Centre, Sri Ravi Niwas Head CSR & R&R, Deputy General Manager, Aditya Aluminium, Lapanga, Sri Manoranjan Behera, Deputy Manager CSR, Aditya Aluminium, Lapanga, The program also showed active participation from the CSR staff of Aditya Aluminium and residents of Laumal village. The efforts and initiatives of the Peripheral Development Department were widely appreciated by the local community for their commitment to health and wellbeing.



International Women's Health Day 2025:

Aditya Aluminium, Lapanga observed International Women's Health Day at Bhoipali under the Jangala Gram Panchayat, with the participation of 218 women. The primary objective of the event was to raise awareness about women's health-related rights and empower them to take proactive steps toward safeguarding their health.



With the support of the District Health Department, Dr. Subhadra Das from Katarbaga PHC presided over the programme. Around 250 women from Bhoipali and Sithapali villages attended the event. Dr. Subhadra Das emphasized that health is a fundamental right by birth and urged the community to act collectively in promoting and protecting women's health. She also highlighted the importance of personal hygiene and encouraged women to continuously advocate for their health and well-being. The Peripheral Development Department of Aditya

Aluminium assured full support to the local community in health-related initiatives. The programme received high appreciation from the attendees and was considered a meaningful step toward women's empowerment and health awareness.

Free Eye Check-up Camp for Truckers under 'Healthy Vision, Safe Roads' Initiative:

Reinforcing its commitment to road safety and community well-being, the CSR department of Aditya Aluminium, Lapanga organized a Free Eye Check-up Camp for the truckers' community within the plant premises, under the banner of "Healthy Vision, Safe Roads." The camp was conducted in collaboration with Trilochan Netralaya, providing free eye examinations and consultations. Approximately 170 truck drivers from various states benefited from



the initiative, receiving essential vision care services that are critical to their safety and performance on the road. The truckers expressed heartfelt gratitude to the organizing team, acknowledging the importance of such health-focused interventions that cater to their specific needs. This initiative highlights Aditya Aluminium's ongoing efforts to support the well-being of the transport community while promoting safer roads through better vision care.

Awareness on Sunstroke:

An awareness programme on Sunstroke was successfully conducted at Bomaloi village, aiming to educate the public on the causes, symptoms, prevention, and immediate response to sunstroke cases. The session witnessed the active participation of 50 villagers, demonstrating community interest and concern for health safety, especially during the hot summer season.



Objective of the Programme:

✓To create awareness about sunstroke.

✓To sensitize the public on its causes and the necessary steps to take when someone is affected.

Topics Discussed:

1. Symptoms of Sunstroke:

- ✓High body temperature
- ✓Hot and dry skin
- ✓Rapid breathing
- ✓Vomiting
- ✓Change in mental state



2. Precautions to be Taken After a Sunstroke:

- ✓Move the affected person to a cooler environment
- ✓Remove excess clothing
- ✓Apply cool water or ice packs to the body
- ✓Ensure they drink cool, non-alcoholic beverages
- ✓Monitor vital signs and seek medical help if needed

3. Preventive Measures:

- ✓Stay well hydrated by drinking plenty of fluids
- ✓Avoid sun exposure during peak heat hour ✓seek shade when possible
- ✓Wear loose-fitting, light-coloured clothing
- ✓Use sunscreen to protect the skin from sunburn.

Periodical Health Camp:

Health camps play a critical role in providing medical care and creating awareness about health issues in rural areas. While there are many reasons why health camps in rural areas a necessity are, the lack of access to healthcare facilities is one of the most significant factors. In rural areas, access to medical facilities and doctors is limited. This is mainly because of a lack of hospitals, clinics, and qualified medical professionals. To overcome the situation our dedicated



health care team, organised periodical health camps from time to time at rural villages. During

the period April to September 2025, periodical health camp was organised at RR Colony, Pondloi and Ludhapali where 101 patients attended and treated with free medicines.

Project JAL VAHINI:

Water is a source of life for all of us and helps our natural environment thrive. In this era of climate change, the unavailability of water is going to hit the developing world the most. Maintaining a balance between natural and human-



made components is the only way to survive. Odisha has been going through water scarcity, drought, floods, groundwater depletion and much more. Despite several schemes undertaken by Government to ensure safe drinking water for rural villages, still it is daydream for rural communities of Rengali Block. Every year, people of Rengali facing acute safe drinking water. District & block authorities, PRI Members every year appealed to provide safe drinking water in remote villages. Since a long Aditya have taken this seriously under Project: JAL VAHINI, and at present 32 water tanker engaged to supply safe drinking water to 31 revenue village and 101 hamlets.

PROJECT SUPOSHAN:

Project SUPOSHAN in collaboration with partner organisation HELP conducted numbers of awareness program on Breastfeeding week. Also on Health & Hygiene awareness conducted at 3 selected villages and AWCs, where 85 AWWs, ASHAs, SHG leaders, adolescent girls and children participated. In addition, the Training on Capacity building of ASHA & AWW on management of SUPOSHAN Program has been organized by our partner agency, HELP. Organized 2 number of Nutrition Mela was Conducted at Shardhapali AWC where 08 number of Nutrition Kit distributed to the Anemia students who are tested and identified as Anemia. 37 number of pregnant and lactating mother participated in the program.



PROJECT SAMADHAN:

Project SAMADHAN has been inaugurated in this month of May; project aims at Menstrual hygiene and Sanitation. The program will focus on adolescent healthcare and support mechanism for development in 10 High schools. The partner NGO Gram Utthan has been allocated for implementation of the program in six Gram panchayats. Started with baseline and endline studies at ten villages. 25 number of Awareness on Menstrual Hygiene – cum- Sanitary Pad Distribution programme were conducted at different village and School level. Where 1839 Sanitary pad are distributed to the participants to know the benefit of pad and its uses. The programme were conducted by Gram-Utthan in collaboration with AWW. 11 number of incinerator machine has been installed at 11 schools. Where more than 400 girls student will be benefited by using this incinerator.



LIVELIHOOD – Project SHAKTI & UNNATI:

Under the CSR initiative, the SHGs in the target village are monitored closely and regularly. At present 2125 members are clubbed into 201 number of SHGs. The group members repaid bank loans and extended for internal lending. This ongoing SHG program under the CSR initiative is beneficial to the target community Members. At present, Bamboo craft, Moringa powder, Pickels, Mixture/Namkeen, Hand Wash, Phenyl, Safety Jacket Unit, Poultry Farming, Papad making, Broom Making, Paper Plate & Cup business by SHG members promoted in the local market. Inspired by the initiative, other SHG are preparing their business plan to start up their IGP. Looking to the present scenario. Strategic planning developed to strengthen their expertise in new business opportunity and marketing. During this period 56 SHG meeting, 42 Stakeholder meeting and community consultancy meetings, Meeting with Sarpanch on Community toilet operation and maintenance was organised and around 2450 members were involved and discussed on their upcoming business strategy and programs.



Project Basketry:

Aditya Aluminium (Hindalco) is creating sustainable livelihood opportunities for rural women through Project Basketry, in partnership with the NGO Uphold Earth. This initiative aims to provide bamboo saplings to local artisans—empowering them with resources to cultivate bamboo for long-term self-sufficiency, reviving bamboo-based traditional livelihoods in Laumal and nearby villages, and contributing to environmental sustainability. Under its CSR programs, Aditya Aluminium Lapanga conducted a 40-day skills training program in bamboo handicrafts—focusing on the creation of everyday utility products—in Laumal village, Sambalpur district, Odisha. The project commenced on 12 September 2024. Since then, 15 beneficiaries have sold a total of 1,350 products—including laundry bins of various sizes, paper bins, and baskets—generating revenue of Rs. 250730.



Rural Women Self-Help Group Stall.

Featuring: “Maa Tarini SHG, Lapanga, Women Star SHG, Jangla, Maa Subhadra SHG & Maa Samleswari SHG of Bomaloi, Rengali Block, Sambalpur, Odisha”. At our Aditya Township Durga Puja Celebration our SHG women stall was displayed with Moringa powder, Millets mixture/namkeen and Varieties of pickles. The township residents appreciated the organic products and enjoyed the eatables also asked to bring more organic products for nutrition values and food habits. Special thanks to the management for giving us the opportunity and guiding us also CSR RR head for always giving new innovative ideas for giving growth the projects. Our SHG members also got the opportunity to enjoy the divine grace of Durga Puja at Township temple.



Meeting with Key Aditi Ladies Club Members:

CSR team, conducted a meeting with key Ladies Club members to present an overview of CSR activities, ongoing projects, and their impact. They expressed strong interest in participating and contributing to societal initiatives. Members suggested supporting school children through co-curricular activities, indoor games, coaching classes, and cultural programs, as well as livelihood-based skill training, township stalls during Puja celebrations, and product placement in the township complex shop. They appreciated the briefing on CSR programs and their community reach.



Income Generation Activity Training Program:

CSR team Organized Income Generation Activity Training on Badi papad, pickles and other eatable items making training for progressive SHG members and women entrepreneurs. The objective of the Training program was to educate the SHG members on different varieties of badi papad and unique products for IGA and to develop women entrepreneurs from Periphery villages so as to improve their source of income. The certified ORMAS trainer from Bhubaneswar Mrs. Gitarani Panda was the resource person for the day. women and progressive entrepreneurs participated in the training program and learn on different varieties of badi papad & pickles and other eatable items and how to compete on local markets with their products and eatable items.

1. Mung Papad
2. Urad dal Papad
3. Sagoo (Tamato) Papad
4. Rice flour plain Papad
5. Rice flour (Pudina) Papad
6. Rice flour (Tomato) Papad
7. Sagoo plain Papad.
8. Drumstick pickle
9. Bitter guard pickle
10. Tamarind pickle
11. Lemon pickle
12. Mix pickle (Carrot, Zinger, Green chilli, Garlic)



Around 65 SHG women from nine SHG group from 4 villages, Lapanga, Tiliemal and RR colony Pondloi actively participated in the training program and gained knowledge on entrepreneurship Development.

79th Independence Day Celebration:

Aditya Aluminium Lapanga, A Unit of Hindalco Industries Limited- participated in block level Independence Day celebration at Rengali ground in association with Block Development Office. Our active SHG members from Lohamani and Tiliemal village displayed their products through stall like moringa tea, millets namkeens and moringa namkeens which is highly organic and adds various nutrients. The guests, BDO, Block Chairman and other government dignitaries visited the stall and appreciated the unique and organic products made by the SHG members themselves. Various schools and colleges students also participated in the event and made the event more vibrant and patriotism with parade march and culture program full of enthusiasm and Josh at the ground. Love to see young generation with such motivation and love for the country our future generations.



Aditya Birla Skill Centre Sambalpur Graduation Day:

Aditya Aluminium Lapanga CSR team participated in Aditya Birla Skill Centre Graduation Day where different trades students got certificates which were felicitated by Senior management of Hirakud Smelter and Power plant. Happy to share that our six Adolescent girls from Lapanga and Bomaloi got training certificate and got placement as retail executives at Jharsuguda and now they are earning source of income for themselves and are self-dependent, self-reliant and confident to move forward for their source of Livelihood.



MSME and DIC Awareness Program:

Aditya Aluminium Lapanga CSR in collaboration with District Industrial Centre organized DIC MSME awareness program at Lapanga village



at Rajiv Bhawan. Around 48 SHG members, CRPs, MBK and other village women attended the session. The objective of the day was to educate and aware women on entrepreneurship Development and how to be Financially self-reliant for their socio economic development and growth. Mr. Shantanu Kumar Bhoi and Mr. Sitaranjan Gochayat from District Industrial Centre Sambalpur were the key person to orient and aware SHG members and women on MSME and government schemes. The SHG members and women actively participated in the session through question-and-answer session and gained knowledge on MSME.

Marketing Opportunity for SHG products:

50 number of Broom Supplied at Plant by Jai Maa Samlei SHG group from Bomaloi village. 80 number of phenyls was supplied at Township Complex by Women star group from Lohamani village and Maa Tarini SHG from Lapanga village.



Convergence Meeting on Government Schemes:

Comprehensive development occurs in areas by integrating the physical, institutional, social and economic infrastructure. Many of the sectoral schemes of the Government converge in this goal, although the path is different. There is a strong complementarity between the State, central Govt. and Non-Govt. organizations. It is foremost important to encourage women, and farmers regarding and other beneficiaries, schemes and projects, process of application, illegibility and subsidiary support. During the period, discussion was held with SBIRSET, Dept. of Fishery, Horticulture, BEO, BPM, ICDS, OLM and Mission Shakti regarding various schemes and projects and beneficiary criteria for implementation of projects.



UNNATI: Under its CSR initiatives, Aditya Aluminium, Lapanga, is developing a sustainable agriculture model through Project UNNATI, covering 4,642 farmers across target



villages. The project engages farmers in integrated agricultural practices and crop production using solar irrigation systems (drip and sprinkler). The primary focus is to educate and involve farmers in high-tech agricultural practices, improve crop productivity, and promote the adoption of organic farming. Solar based Drip irrigation system demonstration at villages with Khetaworks team. Solar and Battery Agricultural farm equipment demonstration at villages.

Infrastructure Development (Project Kayakalp):

1. Market complex work at RR Colony Pondloi is completed.
2. Construction of Crematorium work at Lapanga has been completed.
3. Construction of Borewell structure at Katarbaga RI office has been completed.
4. Lohamani Pond renovation work has been completed.

Social Cause (Project Samwad):

Attended and participated Nuakhai Bhetghat in Khadiapali village and financial support to Salad, Rengali for Nuakhai Bhetghat program.



World Environment Day 2025:

Aditya Aluminium Lapanga CSR department observed World Environment Day 2025 at Ludhapali RR colony under Katarbaga GP in collaboration with Environment department. The event aimed to raise awareness on environment precaution and control in line with the global theme 'Beat Plastic Pollution' - Calls for collective action to tackle plastic pollution. The program includes awareness Sessin, drawing competition, quiz competition, prize distribution and tree plantation. Around 87 children women and men from RR colony participated in the program and got awareness on plastic pollution and how to control it from environment point of view. Special thanks to HR team for the participation.



ABGLP CSR Immersion Program – Aditya Aluminium, Lapanga: The ABGLP CSR Immersion Program was successfully held at Aditya Aluminium, Lapanga on 13th June 2025. The visit began with interactions with key leaders—Mr. Gulshan Tiwari (CPP Head), Mr. Vinoda Nand Thakur (Unit HR Head), and a CSR overview by Mr. Ravi Niwas. Participants visited Smelter Plant, including the Pot Room and Cast House, followed by field visits to major CSR initiatives such as the Vision Centre, Solar-Based Irrigation Project, and Project Basketry. Through direct engagement with villagers, farmers, and bamboo artisans, participants gained

meaningful insights about the social impact of Aditya's CSR efforts and the company's focus on sustainable development.

Meeting with CDMO on Model PHC project:

Organized various stakeholder meetings in District & Block level like, BDO, Education department (BEO), Health department (CDMO & PHO, CHC & PHC), Horticulture, Mission Shakti, and Gram Panchayat.



Corporate Video shoot:

We have successfully completed the corporate video shoot across various CSR intervention areas, capturing real-life impact stories and field-level activities. The shoot included footage from diverse project locations, showcasing key initiatives, community participation, and the transformative outcomes of our programs. It highlighted areas such as livelihood development, healthcare, education, SHG activities, and environmental efforts.



Bagged CII-ITC Award on journey to excellence in Sustainable Business:



- Ration support to Katarbaga Durga Puja Program
- Financial support to Dhanupali Durga Puja Program
- Participated in Bomaloi Samleswari temple Durga Puja program
- Financial support to 2 RR Colony for organizes Ganesh Puja program.

[illegible]

Ref: Envlab/25-26/R-09010

Date: 01.07.2025

METEOROLOGICAL MONITORING REPORT JUNE-2025

1. Name of Industry : M/s Hindalco Industries Limited
 2. Data Collected By : Unit-Aditya Aluminium, Lapanga, Sambalpur
 Automatic Weather Monitoring Station

Date	Temperature(°C)		Relative Humidity (%)		Wind Speed Km/h		Wind	Rain falls (mm)
	Max	Min	Max	Min	Max	Min	Direction	
01.06.2025	39.5	22.1	98	71	6.6	2.8	ENE	0
02.06.2025	38.9	22.9	82	77	4.2	2.2	ESE	0
03.06.2025	38.4	25.2	89	72	4.7	1.1	NNE	0
04.06.2025	39.7	22.4	89	54	3.3	1.1	SE	0
05.06.2025	39.1	25.7	88	71	5	0.3	ESE	0
06.06.2025	40.7	25.6	79	54	4.2	0.8	ENE	0
07.06.2025	41.4	25.9	90	58	3.9	0.8	SE	0
08.06.2025	41.9	27.8	89	71	4.7	0.3	NNE	0
09.06.2025	40.7	29.6	90	63	2.8	0.6	SE	0
10.06.2025	42.3	27.2	88	51	4.7	0.6	ESE	0
11.06.2025	43.4	28.7	76	58	5.5	1.1	S	0
12.06.2025	42.7	29.1	80	59	3	1.1	WSW	0
13.06.2025	43.4	29.2	90	65	3.3	0.8	SSE	0
14.06.2025	43.7	28.5	81	57	5.3	1.4	SE	0
15.06.2025	42.6	26.9	82	59	3.9	1.1	NNE	0
16.06.2025	41.9	28.7	86	64	5	1.9	SSE	5
17.06.2025	42.7	27.6	89	55	3.9	2.2	ESE	21.1
18.06.2025	39.8	27.2	85	64	5.3	1.4	ESE	17.6
19.06.2025	40.4	26.2	83	47	7.2	2.2	NNE	19.9
20.06.2025	40.7	27.8	89	50	5.5	1.7	ESE	6.4
21.06.2025	41.5	27.6	76	54	5.8	1.9	ESE	0
22.06.2025	34.3	28.1	88	63	5.5	1.1	SE	0
23.06.2025	36.9	27.5	89	69	2.8	1.1	E	0
24.06.2025	36.3	25.8	88	52	2.8	0.3	WNW	1.3
25.06.2025	36.9	27.4	84	51	2.5	1.1	NNE	0
26.06.2025	37.2	27.5	86	50	3.6	1.1	NW	10.3
27.06.2025	38.5	26.8	87	73	4.4	1.1	NNW	3.3
28.06.2025	38.7	27.2	87	53	2.8	0.8	NNE	1.4
29.06.2025	39.1	29.7	83	56	4.2	0.6	ENE	2.8
30.06.2025	40.4	29.3	88	56	6.6	2.5	ESE	7.8
AVERAGE	40.1	27.1	56.1	59.6	4.5	1.3	0	96.9


 Reviewed By


 Approved By



Ref: Envlab/25-26/R-13287

Date: 03.10.2025

METEOROLOGICAL MONITORING REPORT SEPTEMBER-2025

1. Name of Industry : M/s Hindalco Industries Limited
2. Data Collected By : Unit-Aditya Aluminium, Lapanga, Sambalpur
Automatic Weather Monitoring Station

Date	Temperature(°C)		Relative Humidity (%)		Wind Speed Km/h		Wind	Rain falls (mm)
	Max	Min	Max	Min	Max	Min	Direction	
01.09.2025	34.0	25.0	80.0	55.0	9.0	2.0	NNE	1.2
02.09.2025	29.0	26.0	83.0	46.0	7.0	1.0	SSE	14.2
03.09.2025	29.0	25.0	100.0	66.0	16.0	6.0	NNE	92.0
04.09.2025	34.0	25.0	96.0	61.0	13.0	6.0	ESE	2.2
05.09.2025	31.0	26.0	85.0	55.0	7.0	3.0	ENE	0.0
06.09.2025	34.0	26.0	91.0	48.0	6.0	3.0	SSE	0.0
07.09.2025	33.0	25.0	89.0	50.0	10.0	4.0	SE	0.0
08.09.2025	35.0	25.0	89.0	47.0	11.0	1.0	NE	6.0
09.09.2025	36.0	25.0	79.0	40.0	5.0	2.0	NNE	0.0
10.09.2025	36.0	26.0	81.0	50.0	6.0	3.0	NNE	0.8
11.09.2025	36.0	26.0	86.0	41.0	8.0	2.0	ENE	28.6
12.09.2025	34.0	26.0	88.0	51.0	7.0	2.0	WNW	0.8
13.09.2025	32.0	26.0	80.0	58.0	8.0	5.0	NNW	0.0
14.09.2025	32.0	25.0	86.0	48.0	7.0	3.0	NNE	6.6
15.09.2025	32.0	24.5	87.0	55.0	11.0	2.0	SSE	7.8
16.09.2025	33.0	24.0	85.0	51.0	9.0	4.0	NE	0.0
17.09.2025	33.0	25.0	82.0	54.0	10.0	6.0	SE	0.0
18.09.2025	36.0	25.0	86.0	54.0	10.0	4.0	SSE	0.0
19.09.2025	37.0	26.0	85.0	49.0	9.0	1.0	SW	0.0
20.09.2025	36.0	26.0	83.0	50.0	8.0	1.0	SSW	0.0
21.09.2025	34.0	25.0	79.0	52.0	8.0	1.0	SE	3.0
22.09.2025	34.0	24.0	88.0	46.0	9.0	4.0	SW	1.2
23.09.2025	30.0	25.0	83.0	40.0	9.0	2.0	SSE	63.2
24.09.2025	33.0	26.0	73.0	48.0	21.0	6.0	SW	0.2
25.09.2025	34.0	25.0	97.0	49.0	6.0	1.0	SW	0.2
26.09.2025	28.0	25.0	85.0	51.0	12.0	3.0	NW	31.7
27.09.2025	32.0	26.0	97.0	58.0	21.0	8.0	NNE	1.2
28.09.2025	34.0	26.0	98.0	52.0	12.0	7.0	NNE	4.4
29.09.2025	34.0	26.0	98.0	45.0	8.0	1.0	N	0.0
30.09.2025	35.0	25.0	85.0	53.0	5.0	1.0	NNW	0.0
AVERAGE	33.3	25.4	86.8	50.8	9.6	3.2	0.0	265.3



AAQ Monitoring Report (Apr'25 to Sep'25)							
AAQM-1 – Near Raw Water Reservoir							
Parameter	UOM	Month					
		Apr-25	May-25	Jun-25	July-25	Aug-25	Sep-25
PM ₁₀	(µg/m ³)	67.1	65.0	38.6	36.2	28.4	32.0
PM _{2.5}	(µg/m ³)	30.2	31.1	21.1	20.5	14.6	13.5
SO ₂	(µg/m ³)	12.1	14.0	11.2	10.4	12.6	13.0
NO _x	(µg/m ³)	7.1	8.2	8.4	9.1	7.5	8.0
CO	(mg/m ³)	0.3	0.25	0.23	0.19	0.26	0.3
O ₃	(µg/m ³)	4.0	4	5	4.0	4.0	5.0
NH ₃	(µg/m ³)	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
C ₆ H ₆	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BaP	(ng/m ³)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni	(ng/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pb	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As	(ng/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
F	(µg/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

AAQ Monitoring Report (Apr'25 to Sep'25)							
AAQM-2 – CPP Ash Silo							
Parameter	UOM	Month					
		Apr-25	May-25	Jun-25	July-25	Aug-25	Sep-25
PM ₁₀	(µg/m ³)	68.1	64.2	36.4	35.5	32.6	30.6
PM _{2.5}	(µg/m ³)	33.4	31.0	20.4	19.6	15.5	18.2
SO ₂	(µg/m ³)	11.0	15.2	10.6	9.6	8.2	9.6
NO _x	(µg/m ³)	5.6	5.2	6.7	7.2	6.4	7.2
CO	(mg/m ³)	0.25	0.27	0.24	0.25	0.30	0.30
O ₃	(µg/m ³)	5.0	5.0	4	4.6	3.0	4.0
NH ₃	(µg/m ³)	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
C ₆ H ₆	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BaP	(ng/m ³)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni	(ng/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pb	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As	(ng/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
F	(µg/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

AAQ Monitoring Report (Apr'25 to Sep'25)							
AAQM-3 – Railway Siding							
Parameter	UOM	Month					
		Apr-25	May-25	Jun-25	July-25	Aug-25	Sep-25
PM ₁₀	(µg/m ³)	63.5	60.1	32.6	33.2	28.4	32.4
PM _{2.5}	(µg/m ³)	34.5	32.0	18.5	17.6	14.4	15.2
SO ₂	(µg/m ³)	12.6	11.3	9.6	10.2	12.2	14.2
NO _x	(µg/m ³)	6.2	6.6	7.2	8.4	7.3	6.5
CO	(mg/m ³)	0.23	0.3	0.21	0.18	0.20	0.19
O ₃	(µg/m ³)	4.0	4.0	5	5.0	5.0	3.0
NH ₃	(µg/m ³)	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
C ₆ H ₆	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BaP	(ng/m ³)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni	(ng/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pb	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As	(ng/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
F	(µg/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AAQ Monitoring Report (Apr'25 to Sep'25)							
AAQM-4 – Inside Township							
Parameter	UOM	Month					
		Apr-25	May-25	Jun-25	July-25	Aug-25	Sep-25
PM ₁₀	(µg/m ³)	70.0	68.6	40.4	38.6	34.2	41.2
PM _{2.5}	(µg/m ³)	31.1	28.2	26.6	24.4	22.4	22.4
SO ₂	(µg/m ³)	14.0	13.2	12.4	11.2	10.6	12.6
NO _x	(µg/m ³)	6.5	7.1	7.6	9.2	6.3	7.6
CO	(mg/m ³)	0.26	0.29	0.26	0.24	0.28	0.26
O ₃	(µg/m ³)	5.0	5.0	5	5.4	4.0	4.2
NH ₃	(µg/m ³)	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
C ₆ H ₆	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
BaP	(ng/m ³)	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Ni	(ng/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pb	(µg/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
As	(ng/m ³)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
F	(µg/m ³)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01



Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-08995

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry			:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga									
Sampling Location			:	Monitoring Station No.- AAQMS-1: Gumkarma									
Monitoring Instruments			:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler									
Sample collected by			:	VC SPL representative									
Date	PARAMETERS												
	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)	F (µg/m ³)
04.04.2025	57.3	29.3	13.2	14.4	< 4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	60.8	34.5	14.3	13.6	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	59.7	31.2	13.9	15.5	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	58.2	30.2	12.4	16.0	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	60.1	28.6	14.1	13.7	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	63.4	33.1	14.8	15.6	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	60.7	31.9	11.3	16.5	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	54.9	29.8	12.5	15.3	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	56.6	31.1	13.1	16.7	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	55.2	26.6	14.4	17.2	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	57.1	27.5	13.5	16.7	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	54.5	28.2	11.6	13.5	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	52.1	26.4	12.8	14.3	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	56.5	27.8	13.2	15.4	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	53.2	24.6	14.1	16.6	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	56.4	28.5	12.3	15.3	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	55.2	27.4	11.8	14.6	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	52.2	24.2	12.4	16.6	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	53.6	25	13.9	17.2	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	51.1	26.5	14	16.6	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	50.1	22.3	12.5	14.2	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	53.6	23.7	13.8	15.2	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	54.4	24.7	14	16.6	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	51.6	22.8	12.5	15.8	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	52.5	25.5	11.6	14.3	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	05	01	20	1.0	06	--
Average	58.3	30.8	14.6	18.6	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimetric	Gravimetric	Improved West and Geake method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indophenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconium SPADNS Method
BDL Values:SO ₂ < 4 µg/m ³ , NO _x < 9 µg/m ³ ,O ₃ <4 µg/m ³ , Ni<0.01 ng/m ³ , As< 0.001 ng/m ³ , C ₆ H ₆ <0.001 µg/m ³ , BaP<0.002 ng/m ³ , Pb<0.001 µg/m ³ , F<0.01µg/m ³ CO<0.1 mg/m ³													


Reviewed By


Approved By



Ref: Envlab /25-26/R-08996

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry			:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga									
Sampling Location			:	Monitoring Station No.- AAQMS-2: Ghichamura									
Monitoring Instruments			:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler									
Sample collected by			:	VCSPL representative									
Date	PARAMETERS												
	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)	F (µg/m ³)
04.04.2025	53.1	25.3	10.1	17.2	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	51.8	29.4	9.6	15.6	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	50.9	24.6	8.5	16.8	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	54.7	30.1	9.2	14.2	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	56.3	25.6	10.6	15.6	<4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	53.2	29.8	10.4	16.3	<4.0	0.30	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	50.7	28.3	10.1	15.8	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	46.8	30.4	9.7	14.2	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	53.6	29.5	8.4	15.1	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	51.7	30.7	9.3	15.3	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	58.6	32.6	9.5	13.9	<4.0	0.30	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	55.2	31.2	10.2	14.2	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	56.4	30.9	8.7	15.1	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	59.2	28.6	8.2	14.6	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	50.7	29.4	9.6	15.3	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	54.6	30.5	9.1	15.1	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	53.9	29.3	10	14.9	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	48.6	27.1	10.6	15.1	<4.0	0.30	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	50.2	30.2	11.2	16.2	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	48.2	26.9	9.8	15.4	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	49.7	28.5	8.7	14.9	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	47.5	25.6	9.2	15.1	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	48.2	26.4	9.4	14.6	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	50.1	24.9	10.1	14.9	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	52.2	25.2	9.8	13.8	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	5	1	20	1	6	--
Average	52.2	28.4	9.6	15.1	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimetric	Gravimetric	Improved West and Geake method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indophenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconium SPADNS Method
BDL Values:SO ₂ < 4 µg/m ³ , NO _x < 9 µg/m ³ ,O ₃ <4 µg/m ³ , Ni<0.01 ng/m ³ , As< 0.001 ng/m ³ , C ₆ H ₆ <0.001 µg/m ³ , BaP<0.002 ng/m ³ , Pb<0.001 µg/m ³ , F<0.01µg/m ³ CO<0.1 mg/m ³													





Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab /25-26/R-08997

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
Sampling Location	:	Monitoring Station No.- AAQMS-3: Tileimal
Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler
Sample collected by	:	VCSPL representative

Date	PARAMETERS												
	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)	F (µg/m ³)
04.04.2025	47.5	27.2	12.4	16.1	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	50.3	26.5	11.9	15.8	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	49.6	25.5	12.1	14.7	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	48.3	27.2	12.5	16.3	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	51.1	28.2	12.4	15.5	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	50.5	24.4	11.9	16.2	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	47.2	25.6	11.8	15.8	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	46.9	26.2	10.7	16.3	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	52.2	27.4	13.5	15.7	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	53.1	29.3	12.9	14.9	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	51.1	31.1	14.8	16.5	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	50.5	26.3	13.6	15.8	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	48.6	28.2	13.1	15.2	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	51.3	26.6	12.6	14.6	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	53.5	24.7	14.2	16.2	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	52.3	28.2	11.6	15.8	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	55.6	25.8	11.2	14.3	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	54.3	25.4	11.8	13.8	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	49.6	23.5	10.4	15.1	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	52.2	25.5	10.9	17.9	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	51.1	29.2	11.2	15.3	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	54.5	27.1	10.8	13.6	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	52.1	24.8	11.1	15.5	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	50.5	23.5	10.7	14.2	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	48.6	26.6	10.3	15.1	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	05	01	20	1.0	06	--
Average	54.3	29.8	12.1	15.4	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimetric	Gravimetric	Improved West and Geake method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indo phenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconium SPADNS Method

BDL Values: SO₂ < 4 µg/m³, NO_x < 9 µg/m³, O₃ < 4 µg/m³, Ni < 0.01 ng/m³, As < 0.001 ng/m³, C₆H₆ < 0.001 µg/m³, BaP < 0.002 ng/m³, Pb < 0.001 µg/m³, F < 0.01 µg/m³, CO < 0.1 mg/m³



Reviewed By



Approved By



Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab /25-26/R-08998

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
Sampling Location	:	Monitoring Station No.- AAQMS-4: Bomaloi
Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler
Sample collected by	:	VCSPL representative

Date	PARAMETERS												
	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)	F (µg/m ³)
04.04.2025	54.6	27.7	13.8	20.1	5.3	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	53.6	28.6	14.6	18.6	5.1	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	54.5	29.7	15.2	19.7	5.5	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	54.2	28.6	14.6	21.2	5.3	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	54.3	27.7	14.7	20.6	5.2	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	55.2	28.7	15.3	19.6	5.4	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	53.6	27.2	15.1	18.5	5.3	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	55.2	29.3	15.9	16.9	5.1	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	54.6	28.8	15.1	20.2	4.9	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	55.1	30.2	14.6	21.4	5.2	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	56.3	31.3	14.9	19.5	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	53.8	29.6	15.2	18.6	4.3	0.3	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	54.5	28.5	15.7	19.1	4.9	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	53.6	27.3	14.6	17.5	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	53.4	28.8	15.3	19.2	5.1	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	54.3	30.1	15.1	16.3	5.3	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	50.5	28.9	14.6	19.5	4.6	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	52.3	25.5	14.7	20.1	4.9	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	51.7	24.4	16.1	17.6	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	51.1	23.7	17.5	17.9	4.3	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	50.4	24.2	15.3	18.2	4.6	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	50.0	25.1	15.1	19.3	4.1	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	49.7	22.4	15.6	18.5	4.4	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	50.2	23.7	16.1	17.6	4.9	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	48.6	25.5	15.4	18.2	5.1	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	5	1	20	1	6	--
Average	53	27.4	15.2	19	4.9	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indophenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconium SPADNS Method

BDL Values:SO₂< 4 µg/m³, NO_x< 9 µg/m³,O₃<4 µg/m³, Ni<0.01 ng/m³, As< 0.001 ng/m³, C₆H₆<0.001 µg/m³, BaP<0.002 ng/m³, Pb<0.001 µg/m³, F<0.01µg/m³,CO-<0.1 mg/m³



Reviewed By



Approved By



Ref: Envlab/25-26/R-08999

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
Sampling Location	:	Monitoring Station No.- AAQMS-5: Kapulas
Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler
Sample collected by	:	VCSPL representative

Date	PARAMETERS												
	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)	F (µg/m ³)
04.04.2025	53.1	29.5	15.1	22.2	< 4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	50.9	30.1	14.9	19.6	< 4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	57.3	31.5	15.3	21.5	< 4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	52.6	24.9	15.2	18.9	< 4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	56.4	26.8	15.9	19.2	< 4.0	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	55.9	28.6	14.6	21.1	< 4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	49.2	26.9	15.1	19.1	< 4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	52.7	27.4	15.6	20.2	< 4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	56.9	28.8	15.9	19.6	< 4.0	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	55.4	30.0	16.4	18.5	< 4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	58.2	31.8	14.9	19.4	< 4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	54.6	29.6	15.2	20.3	< 4.0	0.34	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	53.9	28.5	15.6	21.2	< 4.0	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	51.2	29.5	17.3	20.9	< 4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	55.7	30.2	16.1	22.5	< 4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	54.6	27.6	16.3	19.5	< 4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	56.1	30.1	15.9	20.2	< 4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	50.2	24.2	17.8	21.3	< 4.0	0.3	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	49.6	25.1	14.3	16.9	< 4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	48.5	26.0	15.2	18.5	< 4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	50.1	24.2	16.9	17.9	< 4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	48.2	25.5	17.4	19.5	< 4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	49.1	26.0	15.8	21.3	< 4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	47.7	24.4	16.2	21.5	< 4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	46.9	26.6	16.1	19.6	< 4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	5	1	20	1	6	--
	52.6	27.7	15.8	20	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indophenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconium SPAD NS Method

BDL Values: SO₂< 4 µg/m³, NO_x< 9 µg/m³, O₃< 4 µg/m³, Ni<0.01 ng/m³, As< 0.001 ng/m³, C₆H₆<0.001 µg/m³, BaP<0.002 ng/m³, Pb<0.001 µg/m³, F<0.01µg/m³CO-<0.1 mg/m³



Reviewed By



Approved By



Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-09000

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
Sampling Location	:	Monitoring Station No.- AAQMS-6: Phulchanghal
Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler
Sample collected by	:	VC SPL representative

Date	PARAMETERS												
	PM10 ($\mu\text{g}/\text{m}^3$)	PM2.5 ($\mu\text{g}/\text{m}^3$)	SO ₂ ($\mu\text{g}/\text{m}^3$)	NO _x ($\mu\text{g}/\text{m}^3$)	O ₃ ($\mu\text{g}/\text{m}^3$)	CO (mg/m^3)	NH ₃ ($\mu\text{g}/\text{m}^3$)	C ₆ H ₆ ($\mu\text{g}/\text{m}^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu\text{g}/\text{m}^3$)	As (ng/m^3)	F ($\mu\text{g}/\text{m}^3$)
04.04.2025	55.2	30.7	17.8	21.3	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	50.9	28.6	16.2	25.3	<4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	54.3	31.2	15.9	20.9	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	50.6	30.5	18.4	21.3	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	59.8	31.5	17.6	20.6	<4.0	0.3	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	51.7	29.6	17.2	20.7	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	53.6	30.2	16.9	19.3	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	55.8	26.9	19.9	19.5	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	59.6	29.6	18.2	20.2	<4.0	0.3	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	53.8	30.1	20.6	21.5	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	57.4	31.5	16.9	18.6	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	55.2	27.9	18.4	19.4	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	52.6	30.5	17.2	20.2	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	56.9	26.8	16.9	21.6	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	58.1	26.9	19.5	18.6	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	56.3	29.5	18.2	19.2	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	57.4	31.2	14.6	20.1	<4.0	0.3	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	49.6	26.1	16.9	16.8	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	48.2	24.2	15.8	18.5	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	47.5	23.5	14.2	20.1	<4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	48.6	25.5	16.9	17.6	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	47.5	26.1	15.8	16.9	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	49.1	26.6	17.2	18.2	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	48.7	24.6	16.3	18.1	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	50.5	27.3	16.8	20.6	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	5	1	20	1	6	--
Average	53.1	28.2	17.2	19.8	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimetric	Gravimetric	Improved West and Gaeke method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indophenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconium SPADNS Method

BDL Values: SO₂ < 4 $\mu\text{g}/\text{m}^3$, NO_x < 9 $\mu\text{g}/\text{m}^3$, O₃ < 4 $\mu\text{g}/\text{m}^3$, Ni < 0.01 ng/m^3 , As < 0.001 ng/m^3 , C₆H₆ < 0.001 $\mu\text{g}/\text{m}^3$, BaP < 0.002 ng/m^3 , Pb < 0.001 $\mu\text{g}/\text{m}^3$, F < 0.01 $\mu\text{g}/\text{m}^3$, CO < 0.1 mg/m^3





Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-09001

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
Sampling Location	:	Monitoring Station No.- AAQMS-7: Khadiapali
Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler
Sample collected by	:	VCSPL representative

Date	PARAMETERS												
	PM10 ($\mu\text{g}/\text{m}^3$)	PM2.5 ($\mu\text{g}/\text{m}^3$)	SO2 ($\mu\text{g}/\text{m}^3$)	NOx ($\mu\text{g}/\text{m}^3$)	O3 ($\mu\text{g}/\text{m}^3$)	CO (mg/m^3)	NH3 ($\mu\text{g}/\text{m}^3$)	C6H6 ($\mu\text{g}/\text{m}^3$)	BaP (ng/m^3)	Ni (ng/m^3)	Pb ($\mu\text{g}/\text{m}^3$)	As (ng/m^3)	F ($\mu\text{g}/\text{m}^3$)
04.04.2025	50.6	26.9	11.9	15.9	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	51.9	28.2	12.1	17.2	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	50.8	27.6	11.6	16.5	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	53.1	29.3	11.8	15.8	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	50.4	29.5	12.2	16.3	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	52.3	28.2	12.3	16.2	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	49.8	29.3	12	14.9	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	55.2	30.1	11.6	15.6	<4.0	0.21	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	56.9	27.5	10.7	17.1	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	47.5	23.9	10.2	16.3	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	49.8	28.5	11.3	14.6	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	53.2	27.6	11.1	14.9	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	55.1	26.9	10.9	15.6	<4.0	0.3	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	54.2	29.5	10.5	16.3	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	50.9	30.1	10.8	18.5	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	53.6	28.5	10.4	16.1	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	55.1	29.2	11.2	16.5	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	50.2	26.5	10.6	15.9	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	47.6	24.9	10.9	15.5	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	49.2	25.1	10.7	15.2	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	50.2	27.2	11.1	15.8	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	51.3	26.3	10.6	13.6	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	46.9	24.4	10.9	16.0	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	48.2	25.8	11.3	15.0	<4.0	0.22	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	50.3	25.6	10.8	14.2	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	5	1	20	1	6	--
	51.2	27.4	11.2	15.8	<4.0	0.24	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimet ric	Gravimetri c	Improved West and Geake method	Modified Jacob & Hochheise r (Na- Arsenite)	Chemical Method	NDIR Spectrosc opy	Indo phenol blue method	Absorptio n & Desorptio n followed by GC analysis	Solvent extraction followed by Gas Chromato graphy analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconiu m SPADNS Method

BDL Values: SO₂ < 4 $\mu\text{g}/\text{m}^3$, NO_x < 9 $\mu\text{g}/\text{m}^3$, O₃ < 4 $\mu\text{g}/\text{m}^3$, Ni < 0.01 ng/m^3 , As < 0.001 ng/m^3 , C₆H₆ < 0.001 $\mu\text{g}/\text{m}^3$, BaP < 0.002 ng/m^3 , Pb < 0.001 $\mu\text{g}/\text{m}^3$, F < 0.01 $\mu\text{g}/\text{m}^3$, CO < 0.1 mg/m^3


Reviewed By


Approved By



Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-09002

Date: 30.06.2025

AMBIENT AIR QUALITY MONITORING REPORT (APRIL-25 TO JUNE-25)

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
Sampling Location	:	Monitoring Station No.- AAQMS-8: Thelkoloji
Monitoring Instruments	:	RDS (APM 460 BL), FPS (APM 550) Envirotech, CO Monitor, VOC Sampler
Sample collected by	:	VCSPL representative

Date	PARAMETERS												
	PM10 (µg/m ³)	PM2.5 (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	O ₃ (µg/m ³)	CO (mg/m ³)	NH ₃ (µg/m ³)	C ₆ H ₆ (µg/m ³)	BaP (ng/m ³)	Ni (ng/m ³)	Pb (µg/m ³)	As (ng/m ³)	F (µg/m ³)
04.04.2025	53.9	27.8	18.1	23.5	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
08.04.2025	54.1	26.5	16.5	21.9	<4.0	0.32	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
11.04.2025	56.6	28	17.2	20.7	<4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
15.04.2025	55.2	29.1	17.9	19.6	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
18.04.2025	53.4	27.6	16.3	20.2	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
22.04.2025	55.2	28.5	18.2	21.6	<4.0	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
25.04.2025	56.1	29.1	18.9	21.6	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
29.04.2025	54.2	26.6	16.4	22.8	<4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.05.2025	55.1	28.7	16.2	21.3	<4.0	0.32	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
06.05.2025	53.4	25.5	15.9	20.9	<4.0	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.05.2025	56.6	29.1	17.4	21.7	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
13.05.2025	54.2	26	17.3	19.9	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.05.2025	55.1	29.2	18.1	20.5	<4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
20.05.2025	56.4	30	18.6	20.1	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.05.2025	54.5	28.8	13.9	17.6	<4.0	0.33	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
27.05.2025	55.5	29.4	15.8	19.5	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
30.05.2025	54.4	28.6	14.7	20.2	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
02.06.2025	53.6	25.4	15.6	21.8	<4.0	0.31	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
05.06.2025	51.9	29.1	16.2	19.6	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
09.06.2025	53.1	28.2	15.9	18.5	<4.0	0.34	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
12.06.2025	52.5	27.4	14.8	18.1	<4.0	0.23	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
16.06.2025	51.1	25.3	16.1	17.8	<4.0	0.28	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
19.06.2025	50.2	26.1	15.9	16.9	<4.0	0.26	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
23.06.2025	50.0	25.6	15.7	17.8	<4.0	0.27	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
26.06.2025	49.6	24.4	15.2	20.2	<4.0	0.25	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
NAAQ Standard	100	60	80	80	100	4	400	5	1	20	1	6	--
Average	53.8	27.6	16.5	20.2	<4.0	0.29	<20.0	<4	<0.5	<2.5	<0.02	<1	<0.01
Testing method	Gravimetric	Gravimetric	Improved West and Geake method	Modified Jacob & Hochheiser (Na-Arsenite)	Chemical Method	NDIR Spectroscopy	Indophenol blue method	Absorption & Desorption followed by GC analysis	Solvent extraction followed by Gas Chromatography analysis	AAS method after sampling	AAS method after sampling	AAS method after sampling	Zirconium SPADNS Method

BDL Values: SO₂< 4 µg/m³, NO_x< 9 µg/m³, O₃<4 µg/m³, Ni<0.01 ng/m³, As< 0.001 ng/m³, C₆H₆<0.001 µg/m³, BaP<0.002 ng/m³, Pb<0.001 µg/m³, F<0.01µg/m³CO-<0.1 mg/m³



Reviewed By



Approved By

Ref: Envlab/25-26/R-10597

Date: 30.06.2025

SURFACE WATER QUALITY ANALYSIS REPORT JUNE-2025

Name of Industry : M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
Sampling location : SW-1: Hirakud Reservoir; SW-2: Lapanga Pond; SW-3: Matwadinadi –U/S,
 SW-4: Bamloi Pond; SW-5: Bhedan River Near Katikela
Date of sampling : 17.06.2025
Date of analysis : 18.06.2025 TO 23.06.2025
Sample collected by : VCSPL Representative

Sl. No	Parameter	Testing Methods	Unit	Standards as per IS-2296:1992 Class –‘C’	Analysis Results				
					SW-1	SW-2	SW-3	SW-4	SW-5
1	pH at 25°C	APHA 4500H ⁺ B	--	6.0-9.0	7.33	7.41	7.55	7.39	7.41
2	Colour	APHA 2120 B, C	Hazen	300	<1.0	<1.0	<1.0	<1.0	<1.0
3	Taste	APHA 2160 C	--	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	APHA 2150 B	--	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	APHA 2130 B	NTU	--	3.6	3.8	3.2	3.7	3.6
6	Total Dissolved Solids	APHA 2540 C	mg/l	1500	120.4	118.6	119.5	116.7	119.6
7	Total Hardness (as CaCO ₃)	APHA 2340 C	mg/l	--	68.0	70.0	72.0	66.0	64.0
8	Total Alkalinity	APHA 2320 B	mg/l	--	62.0	64.0	66.0	68.0	67.0
9	Calcium (as Ca)	APHA 3500Ca B	mg/l	--	20.02	21.62	23.22	20.02	20.02
10	Magnesium (as Mg)	APHA 3500Mg B	mg/l	--	4.39	3.9	3.41	3.9	3.41
11	Residual, free Chlorine	APHA 4500Cl ₂ B	mg/l	--	BDL	BDL	BDL	BDL	BDL
12	Boron (as B)	APHA 4500B, B	mg/l	--	<0.01	<0.01	<0.01	<0.01	<0.01
13	Chloride (as Cl)	APHA 4500Cl ⁻ B	mg/l	600	26	28	27	32	26
14	Sulphate (as SO ₄)	APHA 4500 SO ₄ ²⁻ E	mg/l	400	19.3	20.7	21.2	20.9	23.5
15	Fluoride (as F)	APHA 4500F ⁻ C	mg/l	1.5	0.31	0.28	0.3	0.28	0.27
16	Nitrate (as NO ₃)	APHA 4500 NO ₃ ⁻ E	mg/l	50	1.21	1.16	1.2	1.24	1.26
17	Sodium as Na	APHA3500-Na	mg/l	--	9.1	10.2	10.4	9.3	8.9
18	Potassium as K	APHA 3500-K	mg/l	--	2.7	2.6	2.8	3	3.2
19	Phenolic Compounds (as C ₆ H ₅ OH)	APHA 5530 B,D	mg/l	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
20	Cyanide (as CN)	APHA 4500 CN ⁻ C,D	mg/l	0.05	BDL	BDL	BDL	BDL	BDL
21	Anionic Detergents (as MBAS)	APHA 5540 C	mg/l	1.0	<0.2	<0.2	<0.2	<0.2	<0.2
22	Cadmium (as Cd)	APHA 3111 B,C	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
23	Arsenic (as As)	APHA 3114 B	mg/l	0.2	<0.004	<0.004	<0.004	<0.004	<0.004
24	Copper (as Cu)	APHA 3111 B,C	mg/l	1.5	<0.02	<0.02	<0.02	<0.02	<0.02
25	Lead (as Pb)	APHA 3111 B,C	mg/l	0.1	<0.02	<0.02	<0.02	<0.02	<0.02
26	Manganese (as Mn)	APHA 3500Mn B	mg/l	--	<0.03	<0.03	<0.03	<0.03	<0.03
27	Iron (as Fe)	APHA 3500Fe ₂ B	mg/l	0.5	0.041	0.023	0.031	0.029	0.038
28	Chromium (as Cr ⁺⁶)	APHA 3500Cr B	mg/l	0.05	<0.02	<0.02	<0.02	<0.02	<0.02
29	Selenium (as Se)	APHA 3114 B	mg/l	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
30	Zinc (as Zn)	APHA 3111 B,C	mg/l	15	<0.01	<0.01	<0.01	<0.01	<0.01
31	Aluminium as (Al)	APHA 3500Al B	mg/l	--	<0.1	<0.1	<0.1	<0.1	<0.1
32	Mercury (as Hg)	APHA 3500 Hg	mg/l	--	<0.004	<0.004	<0.004	<0.004	<0.004
33	Mineral Oil	APHA 5220 B	mg/l	--	<0.001	<0.001	<0.001	<0.001	<0.001
34	Pesticides	APHA 6630 B,C	mg/l	--	Absent	Absent	Absent	Absent	Absent
35	E. Coli	APHA 9221-F	MPN/100 ml	--	Absent	Absent	Absent	Absent	Absent
36	Total Coliforms	APHA9221-B	MPN/100 ml	5000	260	220	280	240	240

Note: CL: Colorless, AL: Agreeable, U/O: Unobjectionable, ND: Not detected.

Reviewed By


Approved By


Ref: Envlab/25-26/R-10598

Date: 30.06.2025

SURFACE WATER QUALITY ANALYSIS REPORT JUNE-2025

Name of Industry : M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga
 Sampling location : SW-6: Bhedan River Near Khinda Village; SW-7: Matwadinadi-D/S;
 SW-8: Hirakud Reservoir Near Gurupali village;
 SW-9: Salepali village Pond; SW-10: Sanamal village Pond
 Date of sampling : 17.06.2025
 Date of analysis : 18.06.2025 TO 23.06.2025
 Sample collected by : VCSPL Representative

Sl. No	Parameter	Testing Methods	Unit	Standards as per IS-2296:1992 Class - 'C'	Analysis Results				
					SW-6	SW-7	SW-8	SW-9	SW-10
1	pH at 25°C	APHA 4500H ⁺ B	--	6.0-9.0	7.36	7.44	7.5	7.38	7.45
2	Colour	APHA 2120 B, C	Hazen	300	<1.0	<1.0	<1.0	<1.0	<1.0
3	Taste	APHA 2160 C	--	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	APHA 2150 B	--	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	APHA 2130 B	NTU	--	3.2	3.7	3.5	3.1	3.3
6	Total Dissolved Solids	APHA 2540 C	mg/l	1500	132	125	108	130	117
7	Total Hardness (as CaCO ₃)	APHA 2340 C	mg/l	--	68	70	64	72	66
8	Total Alkalinity	APHA 2320 B	mg/l	--	66	680	70	64	66
9	Calcium (as Ca)	APHA 3500Ca B	mg/l	--	20.82	20.02	19.22	23.22	21.62
10	Magnesium (as Mg)	APHA 3500Mg B	mg/l	--	3.9	4.88	3.9	3.41	2.92
11	Residual, free Chlorine	APHA 4500Cl ₂ B	mg/l	--	BDL	BDL	BDL	BDL	BDL
12	Boron (as B)	APHA 4500B, B	mg/l	--	<0.01	<0.01	<0.01	<0.01	<0.01
13	Chloride (as Cl)	APHA 4500Cl ⁻ B	mg/l	600	28	26	30	32	28
14	Sulphate (as SO ₄)	APHA 4500 SO ₄ ²⁻ E	mg/l	400	22.4	18.6	24.4	25.8	20.6
15	Fluoride (as F)	APHA 4500F ⁻ C	mg/l	1.5	0.3	0.32	0.28	0.26	0.25
16	Nitrate (as NO ₃)	APHA 4500 NO ₃ ⁻ E	mg/l	50	1.2	1.24	1.22	1.3	1.32
17	Sodium as Na	APHA3500-Na	mg/l	--	8.6	9.7	7.6	8.8	9.8
18	Potassium as K	APHA 3500-K	mg/l	--	3.1	2.5	2.6	2.4	3
19	Phenolic Compounds (as C ₆ H ₅ OH)	APHA 5530 B,D	mg/l	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
20	Cyanide (as CN)	APHA 4500 CN ⁻ C,D	mg/l	0.05	BDL	BDL	BDL	BDL	BDL
21	Anionic Detergents (as MBAS)	APHA 5540 C	mg/l	1.0	<0.2	<0.2	<0.2	<0.2	<0.2
22	Cadmium (as Cd)	APHA 3111 B,C	mg/l	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
23	Arsenic (as As)	APHA 3114 B	mg/l	0.2	<0.004	<0.004	<0.004	<0.004	<0.004
24	Copper (as Cu)	APHA 3111 B,C	mg/l	1.5	<0.02	<0.02	<0.02	<0.02	<0.02
25	Lead (as Pb)	APHA 3111 B,C	mg/l	0.1	<0.02	<0.02	<0.02	<0.02	<0.02
26	Manganese (as Mn)	APHA 3500Mn B	mg/l	--	<0.03	<0.03	<0.03	<0.03	<0.03
27	Iron (as Fe)	APHA 3500Fe, B	mg/l	0.5	0.036	0.026	0.03	0.028	0.032
28	Chromium (as Cr ⁺⁶)	APHA 3500Cr B	mg/l	0.05	<0.02	<0.02	<0.02	<0.02	<0.02
29	Selenium (as Se)	APHA 3114 B	mg/l	0.05	<0.001	<0.001	<0.001	<0.001	<0.001
30	Zinc (as Zn)	APHA 3111 B,C	mg/l	15	<0.01	<0.01	<0.01	<0.01	<0.01
31	Aluminium as (Al)	APHA 3500Al B	mg/l	--	<0.1	<0.1	<0.1	<0.1	<0.1
32	Mercury (as Hg)	APHA 3500 Hg	mg/l	--	<0.004	<0.004	<0.004	<0.004	<0.004
33	Mineral Oil	APHA 5220 B	mg/l	--	<0.001	<0.001	<0.001	<0.001	<0.001
34	Pesticides	APHA 6630 B,C	mg/l	--	Absent	Absent	Absent	Absent	Absent
35	E. Coli	APHA 9221-F	MPN/100 ml	--	Absent	Absent	Absent	Absent	Absent
36	Total Coliforms	APHA9221-B	MPN/100 ml	5000	270	240	260	280	310

Note: CL: Colorless, AL: Agreeable, U/O: Unobjectionable, ND: Not detected.

Reviewed By


Approved By




Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-09008

Date: 30.06.2025

GROUND WATER QUALITY ANALYSIS REPORT JUNE-2025

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga.
Sampling location	:	GW-1: Lapanga Village; GW-2: Pandoloi Village GW-3: Bamloi Village; GW-4: Tilaimal Village
Date of sampling	:	17.06.2025
Date of analysis	:	18.06.2025 TO 23.06.2025
Sample collected by	:	VCSPL Representative

Sl. No.	Parameter	Testing Methods	Unit	Standard as per IS -10500:2012 Amended on 2015 & 2018		Analysis Result			
				Acceptable Limit	Permissible Limit	GW-1	GW-2	GW-3	GW-4
1	pH Value at 25°C	APHA 4500H ⁺ B	--	6.5-8.5	No Relaxation	7.25	7.33	7.21	7.29
2	Colour	APHA 2120 B, C	Hazen	5	15	CL	CL	CL	CL
3	Taste	APHA 2160 C	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	APHA 2150 B	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	APHA 2130 B	NTU	1	5	<1.0	<1.0	<1.0	<1.0
6	Total Dissolved Solids	APHA 2540 C	mg/l	500	2000	180.0	168.0	176.0	170.0
7	Total Hardness (as CaCO ₃)	APHA 2340 C	mg/l	200	600	90.0	102.0	94.0	100.0
8	Total Alkalinity	APHA 2320 B	mg/l	200	600	74.0	80.0	76.0	78.0
9	Calcium (as Ca)	APHA 3500Ca B	mg/l	75	200	24.02	28.0	22.42	26.43
10	Magnesium (as Mg)	APHA 3500Mg B	mg/l	30	100	7.32	7.8	8.78	8.29
11	Residual, free Chlorine	APHA 4500Cl ₂ B	mg/l	0.2	1	BDL	BDL	BDL	BDL
12	Boron (as B)	APHA 4500B, B	mg/l	2.4	No Relaxation	<0.1	<0.1	<0.1	<0.1
13	Chloride (as Cl)	APHA 4500Cl ⁻ B	mg/l	250	1000	29.2	24.6	27.8	28.5
14	Sulphate (as SO ₄)	APHA 4500 SO ₄ ²⁻ E	mg/l	200	400	4.6	4.2	4.3	4.8
15	Fluoride (as F)	APHA 4500F ⁻ C	mg/l	1	1.5	0.25	0.26	0.24	0.27
16	Nitrate (as NO ₃)	APHA 4500 NO ₃ ⁻ E	mg/l	45	No Relaxation	3.1	2.3	2.6	2.8
17	Sodium as Na	APHA3500-Na	mg/l	--	--	13.9	11.7	12.8	13.1
18	Potassium as K	APHA 3500-K	mg/l	--	--	3.6	2.8	3.0	3.1
19	Phenolic Compounds (as C ₆ H ₅ OH)	APHA 5530 B,D	mg/l	0.001	0.002	<0.001	<0.001	<0.001	<0.001
20	Cyanide (as CN)	APHA 4500 CN ⁻ C,D	mg/l	0.05	No Relaxation	<0.01	<0.01	<0.01	<0.01
21	Anionic Detergents	APHA 5540 C	mg/l	0.2	1	<0.2	<0.2	<0.2	<0.2
22	Cadmium (as Cd)	APHA 3111 B,C	mg/l	0.003	No Relaxation	<0.001	<0.001	<0.001	<0.001
23	Arsenic (as As)	APHA 3114 B	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
24	Copper (as Cu)	APHA 3111 B,C	mg/l	0.05	1.5	<0.02	<0.02	<0.02	<0.02
25	Lead (as Pb)	APHA 3111 B,C	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
26	Manganese (as Mn)	APHA 3500Mn B	mg/l	0.1	0.3	<0.001	<0.001	<0.001	<0.001
27	Iron (as Fe)	APHA 3500Fe, B	mg/l	1	No Relaxation	0.16	0.14	0.13	0.15
28	Chromium (as Cr)	APHA 3500Cr B	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05
29	Selenium (as Se)	APHA 3114 B	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
30	Zinc (as Zn)	APHA 3111 B,C	mg/l	5	15	<0.01	<0.01	<0.01	<0.01
31	Aluminium as (Al)	APHA 3500Al B	mg/l	0.03	0.2	<0.01	<0.01	<0.01	<0.01
32	Mercury (as Hg)	APHA 3500 Hg	mg/l	0.001	No Relaxation	<0.001	<0.001	<0.001	<0.001
33	Mineral Oil	APHA 5220 B	mg/l	0.5	No Relaxation	<0.001	<0.001	<0.001	<0.001
34	Pesticides	APHA 6630 B,C	mg/l	Absent	--	Absent	Absent	Absent	Absent
35	E.Coli	APHA 9221-F	MPN/ 100 ml	Shall not be detectable in any 100 ml sample	--	Absent	Absent	Absent	Absent
36	Total Coliforms	APHA9221-B	MPN/ 100 ml	Shall not be detectable in any 100 ml sample	--	<1.1	<1.1	<1.1	<1.1

Note: CL: Colorless, AL: Agreeable, ND: Not Detected.





Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-09009

Date: 30.06.2025

GROUND WATER QUALITY ANALYSIS REPORT JUNE-2025

Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga.
Sampling location	:	GW-5: Thelkoloi Village, GW-6: Ghichamura Village, GW-7: Gumkarma Village, GW-8: Chalatikra Village
Date of sampling	:	17.06.2025
Date of analysis	:	18.06.2025 TO 23.06.2025
Sample collected by	:	VCSPL Representative

Sl. No.	Parameter	Testing Methods	Unit	Standard as per IS -10500:2012 Amended on 2015 & 2018		Analysis Result			
				Acceptable Limit	Permissible Limit	GW-5	GW-6	GW-7	GW-8
1	pH Value at 25°C	APHA 4500H ⁺ B	--	6.5-8.5	No Relaxation	7.34	7.28	7.38	7.36
2	Colour	APHA 2120 B, C	Hazen	5	15	CL	CL	CL	CL
3	Taste	APHA 2160 C	--	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
4	Odour	APHA 2510-B	µs/cm	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
5	Turbidity	APHA 2130 B	NTU	1	5	<1.0	<1.0	<1.0	<1.0
6	Total Dissolved Solids	APHA 2540 C	mg/l	500	2000	165.0	187.0	152.0	182.0
7	Total Hardness (as CaCO ₃)	APHA 2340 C	mg/l	200	600	88.0	110.0	96.0	92.0
8	Total Alkalinity	APHA 2320 B	mg/l	200	600	79	78	76	82
9	Calcium (as Ca)	APHA 3500Ca B	mg/l	75	200	24.02	32	24.02	23.22
10	Magnesium (as Mg)	APHA 3500Mg B	mg/l	30	100	6.34	7.32	8.74	8.29
11	Residual, free Chlorine	APHA 4500Cl ₂ B	mg/l	0.2	1	BDL	BDL	BDL	BDL
12	Boron (as B)	APHA 4500B, B	mg/l	2.4	No Relaxation	<0.1	<0.1	<0.1	<0.1
13	Chloride (as Cl)	APHA 4500Cl ₂ B	mg/l	250	1000	26.2	24.5	25.5	27.2
14	Sulphate (as SO ₄)	APHA 4500 SO ₄ ²⁻ E	mg/l	200	400	4.6	5.1	5.3	4.8
15	Fluoride (as F)	APHA 4500F ⁻ C	mg/l	1	1.5	0.26	0.32	0.31	0.28
16	Nitrate (as NO ₃)	APHA 4500 NO ₃ ⁻ E	mg/l	45	No Relaxation	2.9	3.1	2.8	3
17	Sodium as Na	APHA 3500-Na	mg/l	--	--	15.2	13.7	17.7	16.4
18	Potassium as K	APHA 3500-K	mg/l	--	--	4.1	5.3	5	4.6
19	Phenolic Compounds (as C ₆ H ₅ OH)	APHA 5530 B,D	mg/l	0.001	0.002	<0.001	<0.001	<0.001	<0.001
20	Cyanide (as CN)	APHA 4500 CN ⁻ C,D	mg/l	0.05	No Relaxation	<0.01	<0.01	<0.01	<0.01
21	Anionic Detergents (as MBAS)	APHA 5540 C	mg/l	0.2	1	<0.2	<0.2	<0.2	<0.2
22	Cadmium (as Cd)	APHA 3111 B,C	mg/l	0.003	No Relaxation	<0.001	<0.001	<0.001	<0.001
23	Arsenic (as As)	APHA 3114 B	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
24	Copper (as Cu)	APHA 3111 B,C	mg/l	0.05	1.5	<0.02	<0.02	<0.02	<0.02
25	Lead (as Pb)	APHA 3111 B,C	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
26	Manganese (as Mn)	APHA 3500Mn B	mg/l	0.1	0.3	<0.001	<0.001	<0.001	<0.001
27	Iron (as Fe)	APHA 3500Fe, B	mg/l	1	No Relaxation	0.19	0.21	0.23	0.2
28	Chromium (as Cr)	APHA 3500Cr B	mg/l	0.05	No Relaxation	<0.05	<0.05	<0.05	<0.05
29	Selenium (as Se)	APHA 3114 B	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
30	Zinc (as Zn)	APHA 3111 B,C	mg/l	5	15	<0.01	<0.01	<0.01	<0.01
31	Aluminium as (Al)	APHA 3500Al B	mg/l	0.03	0.2	<0.01	<0.01	<0.01	<0.01
32	Mercury (as Hg)	APHA 3500 Hg	mg/l	0.001	No Relaxation	<0.001	<0.001	<0.001	<0.001
33	Mineral Oil	APHA 5220 B	mg/l	0.5	No Relaxation	<0.001	<0.001	<0.001	<0.001
34	Pesticides	APHA 6630 B,C	mg/l	Absent	--	Absent	Absent	Absent	Absent
35	E.Coli	APHA 9221-F	MPN/100 ml	Shall not be detectable in any 100 ml sample	--	Absent	Absent	Absent	Absent
36	Total Coliforms	APHA 9221-B	MPN/100 ml	Shall not be detectable in any 100 ml sample	--	Absent	Absent	Absent	Absent

Note: CL: Colorless, AL: Agreeable, ND: Not Detected.



Reviewed By



Approved By



Ref: Envlab/25-26/R-09005

Date: 30.06.2025

GROUND WATER LEVEL MONITORING REPORT JUNE-2025

Name of Industry	:	M/s Hindalco Industries Limited (Unit-Aditya Aluminium), Sambalpur
Sampling Location	:	GW-1: Near Ash Pond, GW-2: Near Proposed Pond GW-3: Near RR Colony, GW-4: Bomaloi Village
Date of Sampling	:	17.06.2025
Monitoring By	:	VCSPL Representative

SL No.	Date of Sampling	Name of Location	Unit	Water Level
01	17.06.2025	GW1	Mbgl	1.62
02	17.06.2025	GW2	Mbgl	5.65
03	17.06.2025	GW3	Mbgl	2.58
04	17.06.2025	GW4	Mbgl	3.42


Reviewed By


Approved By



Ref: Envlab/25-26/R-09006

Date: 30.06.2025

GROUND WATER QUALITY (Heavy Metals) ANALYSIS REPORT JUNE-2025

Name of Industry	:	M/s Hindalco Industries Limited (Unit-Aditya Aluminium), Sambalpur
Sampling Location	:	GW-1: Near Ash Pond,
Date of Sampling	:	17.06.2025
Date of Analysis	:	18.06.2025 TO 20.06.2025
Monitoring By	:	VCSPL Representative

SL No.	Parameters	Test Method	Unit	Standard	Result
01	Mercury as Hg	APHA 3112 B	Mg/l	0.001	<0.001
02	Arsenic as As	APHA 3112 B	Mg/l	0.01	<0.005
03	Lead as Pb	APHA 3112 B	Mg/l	0.01	<0.005
04	Chromium as Cr	APHA 3112 B	Mg/l	0.05	<0.01


Reviewed By


Approved By



Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-09007

Date: 30.06.2025

GROUND WATER QUALITY ANALYSIS REPORT JUNE-2025

Name of Industry	M/s Hindalco Industries Limited (Unit-Aditya Aluminium), Sambalpur
Sampling Location	GW-1: Near Ash Pond, GW-2: Near Proposed Pond, GW-3: Near RR Colony, GW-4: Ash Pond Area Bore well
Date of Sampling	17.06.2025
Date of Analysis	18.06.2025 TO 23.06.2025
Sample Collected By	VCSPL Representative

Sl. No.	Parameter	Testing Method	Unit	Standard as per IS -10500:2012 Amended on 2015 & 2018		Analysis Results			
				Acceptable Limit	Permissible Limit	GW-1	GW-2	GW-3	GW-4
1.	pH Value	APHA 4500 H ⁺ B	--	6.5-8.5	No Relaxation	7.32	7.31	7.36	7.38
2.	Turbidity	APHA 2130B	NTU	1	5	<1.0	<1.0	<1.0	<1.0
3.	Total Hardness (as CaCO ₃)	APHA 2340 C	mg/l	200	600	96	88	102	100
4.	Iron (as Fe)	APHA 3500 Fe B	mg/l	1.0	No Relaxation	0.24	0.21	0.23	0.22
5.	Chloride (as Cl)	APHA 4500 Cl ⁻ B	mg/l	250	1000	25.6	24.2	21.1	23.2
6.	Dissolved Solids	APHA 2540 C	mg/l	500	2000	125	124	136	145
7.	Calcium (as Ca)	APHA 3500 Ca B	mg/l	75	200	25.63	24.02	28.03	26.43
8.	Magnesium (as Mg)	APHA 3500 Mg B	mg/l	30	100	8.29	6.83	7.8	8.29
9.	Copper (as Cu)	APHA 3111Cu B	mg/l	0.05	1.5	<0.001	<0.001	<0.001	<0.001
10.	Sodium (as Na)	APHA 3500Na B	mg/l	--	--	15.1	16.2	17.2	17.9
11.	Potassium (as K)	APHA 3500 K B	mg/l	--	--	5	4.8	4.4	5.1
12.	Manganese (as Mn)	APHA 3111 B	mg/l	0.1	0.3	<0.005	<0.005	<0.005	<0.005
13.	Sulphate (as SO ₄)	APHA 4500 SO ₄ ²⁻ E	mg/l	200	400	10.6	8.2	9.5	8.6
14.	Nitrate (as NO ₃)	APHA 4500 NO ₃ ⁻ B	mg/l	45	No Relaxation	0.49	0.43	0.54	0.46
15.	Fluoride (as F)	APHA 4500 F ⁻ D	mg/l	1.0	1.5	0.38	0.36	0.34	0.39
16.	Phenolic Compounds (as C ₆ H ₅ OH)	APHA 5530 C	mg/l	0.001	0.002	<0.001	<0.001	<0.001	<0.001
17.	Mercury (as Hg)	APHA 3112B	mg/l	0.001	No Relaxation	<0.001	<0.001	<0.001	<0.001
18.	Cadmium (as Cd)	APHA 3111 B	mg/l	0.003	No Relaxation	<0.001	<0.001	<0.001	<0.001
19.	Selenium (as Se)	APHA 3114 B	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
20.	Arsenic (as As)	APHA 3114 B	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
21.	Cyanide (as CN)	APHA 4500 CN ⁻ C,D	mg/l	0.05	No Relaxation	ND	ND	ND	ND
22.	Lead (as Pb)	APHA 3111 B	mg/l	0.01	No Relaxation	<0.001	<0.001	<0.001	<0.001
23.	Zinc (as Zn)	APHA 3111 B	mg/l	5	15	<0.005	<0.005	<0.005	<0.005
24.	Chromium (as Cr)	APHA 3500 Cr B	mg/l	0.05	No Relaxation	<0.005	<0.005	<0.005	<0.005
25.	Alkalinity	APHA 2320 B	mg/l	200	600	84.2	81.1	86.3	84.4
26.	Aluminium as (Al)	APHA 3500 Al B	mg/l	0.03	0.2	<0.001	<0.001	<0.001	<0.001
27.	Boron (as B)	APHA 4500 B	mg/l	2.4	No Relaxation	<0.001	<0.001	<0.001	<0.001

Note: ND: Not Detected, BDL: Below Detection Limit





Visiontek Consultancy Services Pvt. Ltd.

(Committed For Better Environment)

Ref: Envlab/25-26/R-09012

Date: 30.06.2025

SOIL QUALITY ANALYSIS REPORT JUNE-2025

1.	Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga				
2.	Date of Sampling	:	19.06.2025				
3.	Sampling Location	:	S-1: Project Site; S-2: Thelkoloi; S-3: Ghichamura, S-4: Lapanga; S-5: Bamloi				
4.	Date of Analysis	:	20.06.2025 TO 26.06.2025				
5.	Sample Collected By	:	VCSPL representative				
Sl. No.	Parameters	Unit	S-1	S-2	S-3	S-4	S-5
1	pH at 25°C	--	7.26	7.18	7.2	7.25	7.31
2	Conductivity	--	142	139	154	158	142
3	Soil Texture	--	Sandy Loamy	Clay Loamy	Clay Loamy	Sandy Loamy	Sandy Loamy
4	Sand	%	42.4	23.6	35.3	37.6	42.3
5	Silt	%	14.0	23.4	19.2	19.6	16.6
6	Clay	%	43.6	53	45.5	42.8	41.1
7	Bulk Density	gm/cc	1.52	1.42	1.42	1.45	1.38
8	Exchangeable Calcium as Ca	%	33.8	31.2	30.9	35.1	34.3
9	Exchangeable Magnesium as Mg	%	50.1	53.6	47.9	49.2	52.1
10	Available Sodium as Na	%	0.025	0.023	0.027	0.028	0.026
11	Available Potassium as K	%	0.051	0.057	0.056	0.051	0.059
12	Available phosphorous as P	%	0.022	0.022	0.025	0.02	0.023
13	Available Nitrogen as N	%	0.28	0.24	0.25	0.29	0.26
14	Organic Matter	%	3.4	3.5	3.3	3.6	3.8
15	Organic Carbon as OC	%	1.52	1.56	1.58	1.6	1.54
16	Water soluble Chlorides as Cl	%	0.25	0.28	0.29	0.26	0.27
17	Water soluble Sulphates as SO ₄	%	0.18	0.21	0.19	0.16	0.20
18	Sodium Absorption Ratio	%	0.161	0.160	0.158	0.149	0.138
19	Aluminium as Al	%	0.0001	0.00012	0.00014	0.0016	0.0018
20	Total Iron as Fe	%	0.092	0.055	0.066	0.070	0.076
21	Manganese as Mn	%	0.0018	0.0022	0.0021	0.0023	0.0024
22	Boron as B	%	0.00023	0.00022	0.00026	0.00022	0.00025
23	Zinc as Zn	%	0.00021	0.00022	0.00023	0.00021	0.00015
24	Silica as SiO ₂	%	5.1	4.9	5.3	5.9	6.2
25	Ferric Oxide as Fe ₂ O ₃	%	0.042	0.039	0.031	0.044	0.036
26	Calcium Oxide as CaO	%	31.9	33.1	30.6	30.4	29.5
27	Magnesium Oxide as MgO	%	24.9	26.8	25.1	24.9	25.7
28	Aluminium Oxide as Al ₂ O ₃	%	0.00019	0.00013	0.00022	0.00021	0.00018
29	Iron Oxide as FeO	%	0.033	0.029	0.031	0.026	0.034
30	Manganese Oxide as MnO	%	0.0055	0.0046	0.0043	0.0047	0.0051
31	Potassium Oxide as K ₂ O	%	0.0462	0.0429	0.0437	0.0426	0.0512
32	Phosphorus Oxide as P ₂ O ₅	%	0.0073	0.0068	0.00082	0.0070	0.0078
33	Fluoride as F	%	0.00021	0.00032	0.00036	0.00031	0.00036

ND: Not Detected.





Ref: Envlab/25-26/R-09013

Date: 30.06.2025

SOIL QUALITY ANALYSIS REPORT JUNE-2025

1.	Name of Industry	:	M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga				
2.	Date of Sampling	:	19.06.2025				
3.	Sampling Location	:	S-6: Tileimal; S-7: Jangala; S-8: Gurupali; S-9: Gumkarma; S-10: Bhadrupali.				
4.	Date of Analysis	:	20.06.2025 TO 26.06.2025				
5.	Sample Collected By	:	VCSPL representative				
Sl. No.	Parameters	Unit	S-6	S-7	S-8	S-9	S-10
1	pH at 25°C	--	7.31	6.15	6.39	6.12	6.25
2	Conductivity	--	140	125	136	119.5	124.2
3	Soil Texture	--	Sandy Loamy	Clay Loamy	Clay Loamy	Sandy Loamy	Sandy Loamy
4	Sand	%	24.2	34.1	32.7	40.1	32.2
5	Silt	%	15.4	12.8	20.5	16.8	13.6
6	Clay	%	60.4	53.1	46.8	43.1	54.2
7	Bulk Density	gm/cc	1.42	1.38	1.41	1.42	1.39
8	Exchangeable Calcium as Ca	%	34.5	38.6	37.8	39.1	36.6
9	Exchangeable Magnesium as Mg	%	51.1	52.5	49.2	53.2	48.7
10	Available Sodium as Na	%	0.023	0.027	0.026	0.029	0.025
11	Available Potassium as K	%	0.052	0.049	0.051	0.049	0.048
12	Available phosphorous as P	%	0.020	0.019	0.021	0.018	0.022
13	Available Nitrogen as N	%	0.26	0.25	0.27	0.24	0.28
14	Organic Matter	%	3.8	3.5	3.7	3.6	3.5
15	Organic Carbon as OC	%	1.49	1.68	1.81	1.73	1.66
16	Water soluble Chlorides as Cl	%	0.24	0.23	0.21	0.22	0.25
17	Water soluble Sulphates as SO ₄	%	0.15	0.22	0.19	0.15	0.17
18	Sodium Absorption Ratio	%	0.151	0.161	0.158	0.146	0.153
19	Aluminium as Al	%	0.00013	0.00011	0.00018	0.00014	0.00015
20	Total Iron as Fe	%	0.080	0.058	0.068	0.072	0.070
21	Manganese as Mn	%	0.0022	0.0018	0.0023	0.0021	0.0023
22	Boron as B	%	0.00023	0.00028	0.00026	0.00024	0.00022
23	Zinc as Zn	%	0.00019	0.00023	0.00018	0.00015	0.00017
24	Silica as SiO ₂	%	6.8	5.9	6.4	6.6	6.2
25	Ferric Oxide as Fe ₂ O ₃	%	0.022	0.025	0.031	0.026	0.024
26	Calcium Oxide as CaO	%	27.3	30.1	31.5	31.4	29.8
27	Magnesium Oxide as MgO	%	25.1	33.6	28.7	29.1	23.5
28	Aluminium Oxide as Al ₂ O ₃	%	0.00035	0.00031	0.00025	0.00033	0.00032
29	Iron Oxide as FeO	%	0.0179	0.0168	0.00169	0.0201	0.0219
30	Manganese Oxide as MnO	%	0.0021	0.0019	0.0017	0.0015	0.0016
31	Potassium Oxide as K ₂ O	%	0.0419	0.0403	0.0496	0.0387	0.0513
32	Phosphorus Oxide as P ₂ O ₅	%	0.0076	0.0088	0.0102	0.0084	0.009
33	Fluoride as F	%	0.00043	0.00039	0.00041	0.00033	0.00028





Ref: Envlab/25-26/R-09011

Date: 30.06.2025

NOISE MONITORING REPORT JUNE-2025

1. Name of Industry : M/s Hindalco Industries Ltd (Unit- Aditya Aluminium); Lapanga

2. Monitored By : VCSPL representative

Daytime Noise monitoring results Noise Level in dB (A) JUNE-2025

TIME (6.00AM to 9.00PM)	N1: Gumkarma (05.06.2025)	N2: Ghichamura (09.06.2025)	N3: Bomaloi (12.06.2025)	N4: Tileimal (16.05.2025)	N5: Thelkoli (19.06.2025)	N6: Khadiapali (23.06.2025)	N7: Kapilas (26.06.2025)	N8: Phulchanghal (28.06.2025)
06.00am	51.9	52.6	50.9	49.3	54.2	52.8	47.3	50.8
07.00am	49.3	51.1	51.5	50.7	55.1	54.2	50.5	51.6
08.00am	49.2	50.9	53.2	47.2	52.7	50.9	49.8	46.9
09.00am	50.1	52.4	50.7	46.9	56.3	51.1	48.2	51.1
10.00am	51.6	50.6	49.8	50.1	50.8	52.6	50.1	52.3
11.00am	52.8	51.9	53.2	52.3	48.3	52.9	50.3	50.1
12.00 noon	50.4	50.2	50.9	48.9	50.1	52.7	46.9	50.5
01.00pm	46.9	52.3	53.5	56.3	53.4	53.1	52.7	47.8
02.00pm	53.8	51.5	50.5	52.1	52.9	50.8	51.8	51.5
03.00pm	51.2	51.3	51.6	54.7	52.4	52.3	53.6	52
04.00pm	43.9	49.8	52.7	50.3	54.1	51.1	50.2	52.3
05.00pm	47.1	52.2	53.6	53.9	54.5	52.7	47.9	50.7
06.00pm	45.3	50.6	54.1	53.2	52.1	54.5	52.1	50.4
07.00pm	50.9	54.2	52.9	49.8	50.9	52.9	50.7	52.9
08.00pm	49.3	54.1	50.8	52.1	53.5	54	51.6	51.1
09.00pm	47.7	52.9	52.5	50.7	53.6	52.3	53.4	49.6
Average	49.5	51.7	52	51.2	52.8	52.5	50.4	50.7
Standard as per CPCB	55							

Night time Noise monitoring results Noise Level in dB (A) JUNE-2025

TIME (10.00PM to 5.00AM)	N1: Gumkarma (05.06.2025)	N2: Ghichamura (09.06.2025)	N3: Bomaloi (12.06.2025)	N4: Tileimal (16.05.2025)	N5: Thelkoli (19.06.2025)	N6: Khadiapali (23.06.2025)	N7: Kapilas (26.06.2025)	N8: Phulchanghal (28.06.2025)
10.00pm	35.5	34.1	38.2	36.6	39.3	39.1	39.1	40.0
11.00pm	36.1	35.6	36.5	38.5	40.0	39.2	38.5	38.6
12.00 Midnight	38.2	35	37.4	37.6	37.6	38.6	37.6	36.6
01.00am	40	36.1	38.2	36.6	37.2	40.1	38.2	39.8
02.00am	36	34.5	39.5	38.2	38.1	36.6	39.1	38.5
03.00am	34.5	35.2	35.5	37.3	39.1	38.2	37.6	37.6
04.00am	37.1	35.4	36.7	36	40	40	38.5	40.0
05.00am	35.2	34.8	38.2	37.6	38.3	39.2	36.6	39.7
Average	36.5	35.0	37.5	37.3	38.7	38.8	38.1	38.9
Standard as per CPCB	45							



Reference: - MoEF&CC Office memorandum F. No. IA3-22/8/2021-1A.III [150512] dated 18/07/2022

Glimpses of Sensitization & Awareness of ban on Single Use Plastic Inside Plant, Township and Nearby Villages



SUP Ban Awareness in RR Colony Ludhapali



SUP Ban Awareness in Ghichamura High School

Reference: - MoEF&CC Office memorandum F. No. IA3-22/8/2021-1A.III [150512] dated 18/07/2022



SUP Ban Awareness in Ludhapali Village



SUP Ban Awareness in Jangala Village



SUP Ban Awareness inside Plant

Reference: - MoEF&CC Office memorandum F. No. IA3-22/8/2021-1A.III [150512] dated 18/07/2022



Date: 25.07.2022

OFFICE ORDER

Subject: Discontinuation of Single Use Plastic ("SUP") items.

Dear Colleague,

As we all know, plastic items are not good for sustainable environment. We are hereby making a conscious effort in accordance with the Plastic Waste Amendment Rule, 2021 to refuse/ reduce the consumption of plastic items, including packaging but wherever unavoidable will be separately binned (whenever rejected), collected and send it to disposal for its proper recycling.

We are regularly creating awareness campaigns for all our employees, family members, vendors and stakeholders to reduce the generation of plastic waste. For safer, healthier and inclusive plant and township for all we hereby prohibit the following plastic items inside the plant and all public building of Aditya Aluminium effective immediately.

1. Thermocol/ Plastic items like plates, cups, glasses, cutlery such as forks, spoons, knives, straws, etc.
2. Barricading strips
3. Plastic Folders
4. Plastic sample bags
5. Mineral Water Bottles
6. Single use plastic bottles for drinking purposes
7. Plastic used for packing of motors/ value.
8. Gift wrapping plastic films.
9. Plastic carry bag
10. Plastic or PVC banners (Flex Banners)

Special instructions shall be given to vendors while procuring items to substitute single use plastic packaging with sustainable options. All are requested to cooperate and use alternate biodegradable substitutes.

Thanking You

Yours faithfully

Dr. Vivekanand Mishra

Vice President and HR Head

Hindalco Industries Limited

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Communication to Employee, Workmen and Contactors