



May 20, 2021

To,  
The Director  
Govt. of India, MoEF  
Regional Office (Central)  
Kendriya Bhawan, 5<sup>th</sup> Floor,  
Sector – H, Aliganj  
LUCKNOW – 226 024

**Sub: Expansion of Smelter and Alumina Plant Renukoot, Distt. Sonbhadra, U.P. of M/s Hindalco Industries Limited – Environment Clearance Reg.**

Dear Sir,

Please find herewith-attached point wise compliance of conditions stated in our earlier environmental clearances granted by Ministry for the period of October 2020 to March 2021 along with six monthly progress report. Also find soft copy of compliance report environmental clearance.

1. Compliance letter of Env. Clearance granted vide letter J-111011/929/2008-1A. II (I) dt. December 2, 2011. Please see attached Annexure – I.
2. Compliance letter of Env. Clearance granted vide letter J-13012/21/2003-1A. II (T) dt. June 8, 2004. Please see Annexure – II.
3. Our Consent under Water (Prevention & Control of Pollution) Act 1974 which is valid till December 31, 2024 has been already submitted along with our previous compliance report.
4. Our Consent under Air (Prevention & Control of Pollution) Act 1981 which is valid till December 31, 2024 has been already submitted along with our previous compliance report.
5. Please find attached Copy of Risk Held Cover Letter Public Liability Insurance Policy which is valid till March 31, 2022. Please see Annexure – III.
6. Copy of Air & Water progress report for last Quarter October 2020 – December 2020 & January 2021 – March 2021 as submitted to U.P. Pollution Control Board. Please see attached Annexure – IV.
7. Work Zone monitoring data for the period October 2020 to March 2021. Please see attached Annexure –V.
8. We have Authorization under Rule 5 of Hazardous and Other Wastes (Management, Handling Transboundary Movement) Rules, 2016, which is valid till June 29, 2021 and July 8, 2025. ...2

HINDALCO INDUSTRIES LIMITED  
Renukoot Works  
P.O. Renukoot - 231217  
Distt. Sonbhadra (U.P.)  
Telephone +91 5446 252077-79 / 254791-96  
Fax +91 5446 252107 / 252427

REGISTERED OFFICE  
Ahura Centre, 1<sup>st</sup> Floor, B-Wing  
Mahakali Caves Road,  
Ansheri(East), Mumbai 400 030  
Telephone +91 22 6691 7000  
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Website [www.hindalco.com](http://www.hindalco.com)  
E mail [hindalco@adityabirla.com](mailto:hindalco@adityabirla.com)  
Corporate Identity No. L27020MH1958PLC011238



:2:

9. Noise Monitoring done by us on quarterly basis. The Monitoring result for the period October 2020 – December 2020 and January 2021 – March 2021. Please see attached Annexure – VI.
10. Fly Ash Utilization details for the period October' 2020 to March' 2021. Please see attached Annexure – VII.

We hope you will please find the above in order.

Thanking you,

Yours faithfully,  
FOR HINDALCO INDUSTRIES LIMITED

Mukesh Mittal  
V.P. (Environment and Safety)

cc: Member Secretary, UPPCB, Lucknow  
R.O. UPPCB, Sonbhadra.

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Corporate Identity No. L27020MH1958PLC011238

**Project Code: UP–132–333–2012**

- Name of the Project : Modernization and expansion of existing Alumina Refinery (660 KTPA to 900 KTPA) and Smelter Plant (356 KTPA to 472 KTPA) at Renukoot, District Sonbhadra in Uttar Pradesh.
- Clearance Letter No. : **J –11011/929/2008 – IA – II (I)**
- Period of Compliance Report : October'2020 to March 2021

**A. SPECIFIC CONDITIONS:**

SI. No	Description	Compliance Status
1.i.	The gaseous emissions (PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , PAH, HC, VOCs and Fluoride) from various process units shall conform to the standards prescribed by the concerned authorities from time to time. The UPPCB 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 emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall 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/Nm <sup>3</sup> .	Compliance reports are regularly submitted to MoEF /CPCB/SPCB.  Complied with.
ii.	The poly-aromatic hydrocarbons (PAH) from the carbon plant (anode bake oven) shall not exceed 2 mg/Nm <sup>3</sup> . The data on PAH shall be monitored quarterly and report submitted regularly to the Ministry / Regional Office at Lucknow and UPPCB.	The PAH monitoring was done by M/s Prakriti, Lucknow in the month of December 2020. The report is attached as Annexure – IV.
iii.	Fluoride consumption should be less than 10 kg/ton of Aluminium produced as specified in the CREP guidelines.	In Place.
iv	Fugitive Fluoride emissions from the pot room and in the forage around the smelter complex shall be monitored and data submitted regularly to the Ministry's Regional Office at Lucknow and UPPCB. Further dry scrubbing system to control the emissions from the pot lines should be provided.	Fugitive emission in Pot Room is attached Annexure – V.  Forage Fluoride monitoring is being done by third party once in a year. Please see attached Annexure - A

v.	<p>The proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and SPCB. The criteria pollutant namely; PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub> (Ambient levels as well as stack emissions) or critical sectoral parameters indicated for the project shall be monitored and displayed at the convenient location near the main gate of the company in the public domain.</p>	Complied with.

Sl. No	Description	Compliance Status
vi.	Electrostatic precipitator(s) shall be provided to kiln and boiler stacks to control gaseous emissions within 50 mg/Nm <sup>3</sup> . The height of the stacks shall be as per the CPCB guidelines. Gaseous emissions shall be regularly monitored and records maintained and reports submitted to this Ministry including its Regional Office at Lucknow / CPCB and UPCB six monthly.	The emission monitoring is being done by approved laboratory on quarterly basis. The report is attached as Annexure – IV.
vii.	Total water requirement after expansion from downstream of Rihand River shall not exceed 45,000 m <sup>3</sup> /day. Oily wastewater shall be treated in API separator and routed to reclamation pond for recycling. All the treated wastewater shall be treated in ETP and recycled. Closed circuit system with zero discharge concept shall be adopted to control water pollution. No wastewater shall be discharged outside the plant. The domestic wastewater shall be treated in the sewage treatment plant and treated wastewater conforming to the standards for land application shall be reused for green belt development within the plant premises.	We have adopted / implemented various schemes to reduce fresh water consumption. At present fresh water consumption is approx. 24329 KI / day. The treated effluent water and domestic water meets the prescribed standards and reused in various purpose.  We have adopted systematic approached for achieving ZLD status at Renukoot.
viii.	Red mud shall be stored in the red mud pond only designed as per the CPCB guidelines with proper leachate collection system and ground water all around the red mud disposal area shall be monitored regularly and report submitted to the UPPCB/CPCB and Regional Office of the Ministry at Lucknow. Efforts shall also be made to find out productive uses of red mud in brick and ceramic products etc. proper care shall be taken to ensure no run off or seepage from the red mud disposal site to natural drainage. Sewage sludge shall be used as manure within the premises.	Complied with.  We have installed press filter by which % of red mud has been increased to 75%. We have established red mud utilization in Cement Industries, during the year October 2020 To March 2021, approx. 613515 MT of red mud has been supplied to M/s Ultratech Dala, JP Cement Rewa, ACC Cement Kaymore, Dalmia Cement Kalyanpur, Ultratech Cement Bela, ACC Lakheri, Kota Rajasthan, Gujarat Ambuja, Ropar, UTCL, Maihar, UTCL, Siddhi, UTCL–Aditya Cement, Chittorgarh, Prism Johnson and M/s Heidelberg / Diamond, Damoh .

ix.	Green belt shall be developed in 33% area to mitigate the effects of fugitive emissions as per the CPCB guidelines.	We have greenery in and around our plant which is approx. 33% of our plant area.
x.	Anode butts generated from the pots shall be cleaned and recycled to the Anode Plant. The spent pot lining generated from the smelter should be properly treated in spent pot lining treatment plant to remove fluoride and cyanide and disposed off to the Cement/Steel plants and as minimum as possible to secured landfill. The location and design of the landfill site should be approved by the UPPCB as per Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2008. Leachate collection facilities should be provided to the secured landfill facility (SLF). The dross shall be recycled in the cast house.	<p>Complied with.</p> <p>Anode Butts are reused in our Plant.</p> <p>We have stopped operation of Cryolite Recovery Plant from July 1, 2020 as directed by CPCB vide letter No. B-29016 / (55-1094) / 20 / WM -Div. / AR / 1625 dated June 26, 2020. SPL (Non Carbon) material is being sent to TSDF as per authorization issued by UPPCB on July 8, 2020.</p>

<b>Sl. No</b>	<b>Description</b>	<b>Compliance Status</b>
xi.	Occupational Health Surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	We have a separate OHS with a MBBS doctor for doing health check up of workers in continuous basis. Please find attached Periodical Health Check Up Status for the period of October'2020 to March 2021 as Annexure - A
xii.	The recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium sector should be strictly implemented.	We follow the recommendations of CREP.
xiii.	The company shall comply with all the commitment made during public hearing/public consultation held on 24th July, 2009.	We have taken actions on an issue which was raised during public hearing.
xiv.	At least 5% of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office at Lucknow. Implementation of such program shall be ensured accordingly in a time bound manner.	Noted.  We have CSR department which is taken care of social upliftment of nearby areas. Please find attached beneficiaries details for the period of October'2020 to March 2021 as Annexure - B
xv.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets. Safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	We have provided necessary infrastructure and facilities for construction workers.
xvi.	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	Complied with.

	<p>of environmental or forest norms / conditions, (ii) Hierarchical system or Administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) System of reporting of non compliance / violation environmental norms to the Board of Directors of the company and/or stakeholders or shareholders.</p>	
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**B. GENERAL CONDITIONS:**

<b>Sl. No</b>	<b>Description</b>	<b>Compliance Status</b>
i.	The project authorities must strictly adhere to the stipulations made by the Uttar Pradesh State Pollution Control Board and the State Government.	All statutory guidelines stated by UPCCB are well complied.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	We agree that no expansion shall be done without prior approval of MoEF.
iii.	The gaseous emission from various process units shall conform to the land/mass based standards notified by this Ministry on 19 <sup>th</sup> May, 1993 and standards prescribed from time to time. The State Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location.	All emission is monitored as prescribed and it has been submitted to SPCB / CPCB / MoEF.
iv.	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO2 and NOx are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Lucknow and the SPCB / CPCB once in six months.	Complied with.  The Ambient Air Monitoring & Stack emission is being done by third party on quarterly basis. Please see attached Annexure IV.
v.	Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	We treat all wastewater in our ETP and reused within the plant for process use/Cooling Tower/Horticulture.
vi.	The overall noise levels in and around the plant area shall 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	The noise level is maintained as per standards. In high noise area PPE's are provided to mitigate the impact.

	standards prescribed under EPA Rules. 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime)	
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.	As per CGWB officials Rainwater harvesting structure is not feasible at this location.
viii.	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP and public hearing reports. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc.	We have complied all measures as recommended. A separate CSR dept is working for developing social life of nearby villages.

<b>Sl. No</b>	<b>Description</b>	<b>Compliance Status</b>
ix.	Requisite amount 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 and Forests as well as the State Government. An implementation scheduled for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Lucknow. The funds so provided shall not be diverted for any other purpose.	The cost for environment protection has been earmarked separately.
x.	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal 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 shall also be put on the web site of the company by the proponent.	Complied with.
xi.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Lucknow. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, such as fluoride emission indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Complied with.
xii.	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF the respective Zonal Office of CPCB and the SPCB. The Regional Office of this	We are regularly submitted six monthly compliance report.

	Ministry at Lucknow / CPCB / SPCB shall monitor the stipulated conditions	
xiii.	The environmental statement for each financial year ending 31 <sup>st</sup> 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 alongwith the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Lucknow by e-mail.	The Environment statement for each financial year is regularly submitted to SPCB as prescribed.

<b>Sl. No</b>	<b>Description</b>	<b>Compliance Status</b>
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 and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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 Regional Office at Lucknow.	Complied with.
xv.	Project 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.	Noted.
10.	The Ministry may revoke or suspended the clearance, if implementation of any of the above conditions is not satisfactory.	Noted.
11.	The ministry reserves the right to stipulated additional conditions if found necessary. The company in a time bound manner shall implemented these conditions.	Noted.
12.	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Transboundry Movement) Rules, 2021 and the Public (Insurance) Liability Act, 1991 along with their amendments and rules.	Noted.



# Prakriti Consultants Service: <sup>Annexure - A</sup>

An Approved Laboratory From MoEF - CC & Uttar Pradesh Pollution Control Board  
 (An ISO 14001:2015, ISO 9001:2015 and ISO 45001:2018 Certified Organization)  
 Address: 12, Vishnupuri, Church Road, Aliganj, Lucknow-22606  
 E-mail: prakriti\_md@rediffmail.co  
 Tel: 0522-4002345, Mobile: 0941551881  
 GSTIN :- 09AAJFP5925G1Z

## Test Report for Forage Fluoride

Report No.		Reference No.		Issue Date		
PCS/FF/01/2020		PCS/HIL/02/2020		08/01/20		
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Rentūkoot, Dist- Sonbhadra (UP).					
2. Type of Industry:	Aluminium Industry					
3. Weather Condition:	Clear Sky					
4. Method of Sampling:	As per Standard Method					
5. Sampling Done by:	Mr. Asheesh Kushwaha & Mr. Shubham Pandey					
6. Date of Sampling:	25/12/2020					
7. Sample Receipt in Lab:	26/12/2020					
8. Date of Analysis :	27/12/2020-30-12/2020					
S. No.	Sampling Location	Aerial Distance from Plant site(Km)	Direction	Plant Name	Botanical Name	Conc. Fluoride In (PP)
1.	Muirpur R.F.	10.9	S	Acacia	Acacia nilotica	30.2
2.	Kherahi Village	7.1	SE	Neem	Azadirachta Indica	37.3
3.	Gambhirpur Village	6.2	SE	Grass		28.2
4.	Katauli Village	4.6	E	Cajanus cajan	Red gram, Pigeon pea	20.9
5.	Rantola village	4.0	E	Moringa oleifera	Drum stick tree	40.3
6.	Downstream of Rihand River (intake point)	2.2	W	Gulmohar	Deloxin Regia	18.4
7.	Near store office (Plant.II)	1.2	W	Grass		19.1
8.	Near Guest House	0.3	SW	Pipal	Ficus religiosa	32.2
9.	Turra village	1.5	SW	Cyanodactylon sp	Dub	32.8
10.	Near WTP	0.5	SW	Bher	Zizyphus Mauritiana	28.1
11.	Hanuman Mandir (Near Hindalco Plant)	0.5	SW	Zizyphus numalarica	Jharberi	23.7
12.	Pipri village	2.5	SW	Grass		30.7
13.	Hindalco colony	0.5	N	Burgad	Ficus Bengalensis	27.1
14.	Murdhawa village	2.0	NE	Mahua	Madhuca Latifolia	31.7
15.	Plant II colony	1.5	NE	Jamun	Sygygium Cumini	38.4
16.	Kharpathar village	2.6	NE	Grass		28.1

Authorized Signator

*(Signature)*  
 ( Dr Divya Misra )  
 Managing Director

"End of this Test Report"

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Services Available  
 Environmental Monitoring, Preparation of EIA/EMP, Baseline data generation for Air, Water, Soil, Noise & Meteorology  
 Environmental and Safety Audit reports, Commissioning, Erection, Operation and Maintenance of STP/ETP, Clearances from  
 Ground Water Board, Compliance of E.C., NOC from UP PCB, MoEF


22-May-21

**OCCUPATIONAL HEALTH SERVICES**  
**HINDALCO INDUSTRIES LIMITED, RENUKOOT**

TO  
ENVIRONMENT CELL  
HINDALCO, RENUKOOT

**PERIODICAL HEALTH CHECK UP STATUS**  
(From Oct -2020 To Mar -2021)

CLINICAL	AUDIOMETRY	SPIROMETRY	VISION SCREENING
3452	91	0	201

  
(Dr. Bhaskar Datta)  
Vice President (MS)



  
(Dr. Reena Chauhan)  
Head-OHS & First Aid Centre

Cc : Shri Mukesh Mittal, V.P. (Safety & Env.)

**HINDALCO-RURAL DEVELOPMENT  
OUTCOME OF RURAL DEVELOPMENT ACTIVITIES  
FOR THE PERIOD OF OCTOBER 2020 TO MARCH 2021  
OPERATIONAL AREA:- RENUKOOT; OPERATIONAL VILLAGES-180**

(A)	<b>EDUCATION AND CAPACITY BUILDING PROGRAMME</b>	<b>Benef.</b>
	<b>Activities</b>	
1	Promotion of Continuing Education	12
2	Anganwadi/ Balwadi	0
3	Books and Uniform distribution	0
4	Technical Education	0
5	Aditya Bal Vidya Mandirs	700
6	Career Counselling / Educaional camps	0
<b>Sub Total</b>		<b>712</b>

(B)	<b>Health &amp; Family Welfare Prog.</b>	<b>Benef.</b>
	<b>Activities</b>	
1	Hospital / Health Centre own by Company / Trust	11443
2	General Medical Camps	5949
3	Ante & Post Natal Care	2521
4	Immunisation to Infants / Children	4511
5	Pulse Polio Camps	77357
6	STD / RTI, AIDS Awareness & First Aid	347
7	Adolescence Health Care	112
8	Safe Drinking Water	67000
9	Tuberculosis	10
10	Dental Check ups	0
<b>Sub Total</b>		<b>169250</b>

(C)	<b>ECONOMIC SELF RELIANCE AND WATERSHED DEVELOPMENT</b>	<b>Benef.</b>
	<b>Activities</b>	
1	Vocational Training & support for IGP	359
2	Agriculture Support Programme	2017
3	Soil and water consevarion	4133
4	Animal Husbandry	1612
5	Women Self Help Groups	300
6	Social Forestry/ Plantation/ Horticulture	24598
<b>Sub Total</b>		<b>33019</b>

(D)	<b>INFRASTRUCTURAL DEVELOPMENT :</b>	<b>Benef.</b>
	<b>Activities</b>	
1	School Building	720
2	Community Center	0
3	Sanitation & Hygene	360
4	Roads/ Culverts	3515
5	Wind Mill /Street Lights/ Biogas Plants/ Solar items	0
6	Drinking Wells / Hand pumps	8570
<b>Sub Total</b>		<b>13165</b>

(E)	<b>SOCIAL UPLIFTMENT AND WOMEN EMPOWERMENT</b>	<b>Benef.</b>
	<b>Activities</b>	
1	Values Promotion camps/Awareness drives on knowledge attitude & practice	860



	Dowryless marriage programme, marriages solmanised	8
2	Social Security	0
3	Tournament, Festivals and Cultural prog.	908
4	No of people were provided Blanket	600
<b>Sub Total</b>		<b>2376</b>

(F)	ADITYA BIRLA RURAL TECHNOLOGY PARK, MUIRPUR DEVELOPMENT ACTIVITIES AT THE ADITYA BIRLA RURAL TECHNOLOGY PARK, MUIRPUR	Benef.
1	Vocational Training Centre	1
2	Agricultural Centre	759
3	Animal Husbandry & Veterinary Hospital (health check ups, immunisations, treatment of cattle, AI etc.)	125
4	Training of rural people at Capacity Building Centre	602
5	Treatment at Rural Hospital (daily OPD, operations)	2460
<b>Sub Total</b>		<b>3947</b>

G	COVID-19	Benef.
1	Masks distribution (Nos)	2967
2	Soap distribution (Nos)	491
3	Awareness camps organised (Nos)	117
<b>Sub Total</b>		<b>3575</b>
<b>Grand Total</b>		<b>226044</b>

**Project Code: UP-28-170-04**

Name of the Project : 40 MW Co – Generation Power Plant of  
M/s. Hindalco Industries Ltd., Renukoot

Clearance Letter No. : J-13012/21/2003– IA. II (T) Dt. 08.06.2004

Period of Compliance Report : October'2020 to March 2021

**General Conditions:**

Sr. No.	Conditions	Compliance Status
2.	The environmental clearance for the above project is hereby accorded subject to implementation of following terms and conditions:	
I)	All the conditions stipulated by Uttar Pradesh Pollution Control Board vide their letter No. G-22276/C-2/ NOC/ 3257/2003 dt. 12/09/2003 should be strictly implemented.	Complied with.
II)	6.25 ha. Land is required and is already in possession of the project authorities. No extra land would be acquired for the plant.	In Place.
III)	Coal requirement is estimated a 1000 TPD having calorific value of 2950 K. Cal/kg with 41% ash content and 0.25% sulphur content. Copy of coal linkage approval from S.L.C. should be submitted immediately after receipt of the same. In case of change in calorific values, ash and sulphur contents of coal, Ministry's approval for the same has to be sought before starting the construction work of the power plant.	In Place.
IV)	Stack height of 88 m height shall be provided with continuous online monitoring equipment. Exit velocity of 14.08 m/sec. should be maintained.	Complied with.

V)	High efficiency Electrostatic Precipitator (ESP) having efficiency of 99.8% be installed to limit outlet SPM emission 100 mg/Nm <sup>3</sup> .	Complied with.
VI)	Ash generation would be 84 t/day of bottom ash and 324 t/day of fly ash. Ash generated should be used in a phased manner as per provisions of the notification on Fly Ash Utilization issued by the Ministry in September, 1999 and its subsequent amendments. By the end of 9 <sup>th</sup> year full fly ash utilization should be ensured.	65331 MT of ash had been given to various Cement Industries and other usages during October'2020 to March 2021. Please see attached Annexure – VII.

Sr. No.	Conditions	Compliance Status
VII)	Water requirement should not exceed 6150 m <sup>3</sup> /day and this will be met through recycling of domestic and industrial effluents. There would not be any extra water withdrawal for this plant.	Complied with.
VIII)	Central Groundwater Authority/Board shall be consulted for finalization of appropriate water harvesting technology within a period of four months from the date of clearance.	As per advice of CGWB Authority, rain water-harvesting structure should not be adopted because it may enhance the condition of water logging.
IX)	Regular monitoring of water quality including heavy metals should be undertaken around ash pond and the project area to ascertain the change in the water quality, if any, due to leaching of contaminants from ash disposal area.	Ground Water monitoring is being done by certified lab attached reports in the month of December 2020. Please see attached Annexure – C.
X)	Noise level should be limited to 75 dB (A) and regular maintenance of equipment be undertaken. For people working in the area of generator and other high noise area, earplug should be provided.	It has been maintained.
XI)	Greenbelt should be developed in about 1.25 ha. around the ash dyke area and available space in the township. Tree density of 1500 – 2000 trees per ha. should be maintained.	Complied with.
XII)	Regular monitoring of the air quality should be carried out in and around the power plant and records be maintained. Periodic six monthly reports should be submitted to this Ministry.	Complied with.

XIII)	For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.	Water sprinkling is being done regularly at identified areas. Complied with.
XIV)	There would be no discharge of wastewater / liquid effluent from the plant.	There is no discharge of wastewater from the plant.
XV)	All other mitigative measures shall be taken as enumerated in Chapter 5 of the EIA report.	All other mitigative measures are being taken as enumerated in Chapter 5 of the EIA report.

Sr. No.	Conditions	Compliance Status
XVI)	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board/Committee and may also be seen at Web site of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>	Necessary actions have been already taken.
XVII)	A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	A separate environment monitoring cell with suitable qualified staff is in place for implementation of the stipulated environmental safeguards.
XVIII)	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards should be submitted to this Ministry/ Regional Office / CPCB / SPCB.	Reports are being submitted regularly to the Ministry /Regional Office/ CPCB/ SPCB.
XIX)	Regional Office of the Ministry of Environment and Forests located at Lucknow will monitor the implementation of the stipulated conditions. Completed set of Environmental Impact Assessment Report and Environment Management Plan should be forwarded to the Regional Office for their use during monitoring.	Being monitored by Regional Office, Lucknow.

XX)	Separate funds should be allocated for implementation of environmental protection measures along with item – wise break – up. These cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year – wise expenditure should be reported to the Ministry.	Complied with.
XXI)	Full cooperation should be extended to Scientists/ Officers from the Ministry / Regional Office of the Ministry at Lucknow / the CPCB / the SPCB who would be monitoring the compliance of environmental status.	Full cooperation is being extended to Scientists/ Officers from the Ministry Regional Office/CPCB/SPCB during their visits.

<b>Sr. No.</b>	<b>Conditions</b>	<b>Compliance Status</b>
3.	The Ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry.	Noted
4.	The environmental clearance accorded shall be valid for a period of 5 years for construction/ operation of the power plant. In case, if the project authorities fails to do so within this stipulated period, this environmental clearance shall stand lapsed automatically.	Noted
5.	In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition (s) imposed and to add additional environmental protection measures required, if any.	Noted
6.	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986. Hazardous Waste (Management & Handling) Rules, 1989 and its amendments the Public Liability Insurance Act, 1991 and its amendments, the Environment Impact Assessment Notification of January, 1994 and its amendments.	Noted





# Prakriti Consultants Service <sup>Annexure-D</sup>

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 Address: 12, Vishnupuri, Church Road, Aliganj, Lucknow-226001  
 E-mail: prakriti\_md@rediffmail.co  
 Tel: 0522- 4002545, Mobile: 0941551881  
 GSTIN :- 09AAJFF5925G1Z

ULR- TC82412100000047

## Test Report for Ground Water Quality



<b>Report No.</b> PCS/GWQ/01/2020	<b>Lab Reference No.</b> PCS/HIL/01/2020	<b>Issue</b> 12/01/2020
1. Name of Proponent: M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).		
2. Type of Industry: Aluminium Industry		
3. Weather Condition: Clear Sky		
4. Sampling Location: Radha Krishna Temple		
5. Quantity of Sample: 2 Litre Water Sample Collected in Bottle		
6. Method of Sampling: As per Standard Method		
7. Sampling Done by: Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari		
8. Date of Sampling: 09/12/2020- 10/12/2020		
9. Sample Receipt in Lab: 11/12/2020		
10. Date of Testing: 12/12/2020 -22/12/2020		

Sl. No.	Parameters	Unit	Reference Method*	Radha Krishna Temple	BIS Standard IS 10500: 2012 Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
1.	pH	-	4500H+ B	7.81	6.5 - 8.5	NR**
2.	TDS	mg/l	2540 C	121	500	2000
3.	Hardness as CaCO <sub>3</sub>	mg/l	2340 C	296	200	600
4.	Alkalinity	mg/l	2320 B	288	200	600
5.	Chloride as Cl	mg/l	4500-CLB	65.9	250	1000
6.	Sulphate as SO <sub>4</sub>	mg/l	4500-SO <sub>4</sub>	5.6	200	400
7.	Fluoride as F	mg/l	4500-F,C	0.62	1.0	1.5
8.	Calcium as Ca	mg/l	3500-Ca	128.0	75	200
9.	Magnesium as Mg	mg/l	3500-Mg,E	26.0	30	100
10.	Sodium as Na	mg/l	3500-Na,D	50.0	-	-
11.	Potassium as K	mg/l	3500-K,D	10.0	-	-
12.	Nitrate as NO <sub>3</sub>	mg/l	4500-B	4.01	45	NR**
13.	Copper as Cu	mg/l	3111-Cu- B	0.005	0.05	NR**
14.	Chromium as Cr	mg/l	3111- Cr- B	0.038	0.05	NR**
15.	Cadmium as Cd	mg/l	3111-Cd- B	<0.008	0.003	NR**
16.	Iron as Fe	mg/l	3111- Fe- B	0.18	0.3	NR**
17.	Nickel as Ni	mg/l	3111-Ni- B	0.013	0.02	NR**
18.	Lead as Pb	mg/l	3111-Pb- B	0.006	0.01	NR**
19.	Zinc as Zn	mg/l	3111- Zn- B	1.18	5	15
20.	Arsenic as As	mg/l	3111- As- B	<0.01	0.1	0.5
21.	Residual Free Chlorine	mg/l	4500-CLB	0.1	0.2	1.0

\*As per APHA/AWWA; 22nd Ed. (2012) \*\* NR- No relaxation.  
 Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.  
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 5. No deviation as per the Standard Method.

Authorized Signatory  
  
 (Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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 Environmental and Safety Audit reports, Commissioning, Erection, Operation and Maintenance of STP/ETP, Clearances from  
 Ground Water Board, Compliance of E.C., NOC from UPCCB, MoEF



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 Tel: 0522-4002545, Mobile: 0941551881  
 GSTIN - 09AAJFP5925G1Z

## Test Report for Ground Water Quality

Report No. PCS/GWQ/02/2020	Lab Reference No. PCS/HIL/01/2020	Issue I 12/01/20
1.Name of Proponent: 2.Type of Industry: 3. Weather Condition: 4. Sampling Location: 5. Quantity of Sample: 6.Method of Sampling: 7.Sampling Done by: 8.Date of Sampling: 9.Sample Receipt in Lab: 10.Date of Testing:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP). Aluminium Industry Clear Sky Radha Krishna Temple 2 Litre Water Sample Collected in Bottle As per Standard Method Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari 09/12/2020- 10/12/2020 11/12/2020 12/12/2020 -22/12/2020	

Sl. No.	Parameters	Unit	Reference Method*	Radha Krishna Temple	BIS Standard IS 10500:2012 Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
22	Colour	Hazen	2120 B	Clear	5	15
23	Odour	-	2150 A	Odourless	Agreeable	Agreeable
24	Taste	-	-	Agreeable	Agreeable	Agreeable
25	Turbidity	NTU	2130 B	0.6	1	5
26	Manganese ( as Mn)	mg/l	3111-Mn, D	0.05	0.1	0.3
27	Mercury as Hg	mg/l	3500-Hg,B	<0.01	0.001	NR**
28	Total Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	
29	Fecal Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	

\*As per APHA/AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.  
 Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under "acceptable" render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under "permissible" limit in the absence of alternative source above which the sources will have to be rejected.  
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Authorized Signatory  
  
 (Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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 GSTIN :- 09AAJFF5925G1Z

## Test Report for Ground Water Quality

ULR- TC82412100000048



Report No. PCS/GWQ/02/2020 Lab Reference No. PCS/HIL/01/2020 Issue No. 12/01/20

1. Name of Proponent: M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).  
 2. Type of Industry: Aluminium Industry  
 3. Weather Condition: Clear Sky  
 4. Sampling Location: Gopal Hotel  
 5. Quantity of Sample: 2 Litre Water Sample Collected in Bottle  
 6. Method of Sampling: As per Standard Method  
 7. Sampling Done by: Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari  
 8. Date of Sampling: 09/12/2020- 10/12/2020  
 9. Sample Receipt in Lab: 11/12/2020  
 10. Date of Testing: 12/12/2020 -22/12/2020

Sl. No.	Parameters	Unit	Reference Method*	Gopal Hotel	BIS Standard IS 10500: 2012	
					Requirement (Acceptable limit)	Permissible limit in the absence of alternative source
1.	pH	-	4500H+ B	7.89	6.5 - 8.5	NR**
2.	TDS	mg/l	2540 C	548	500	2000
3.	Hardness as CaCO <sub>3</sub>	mg/l	2340 C	308	200	600
4.	Alkalinity	mg/l	2320 B	160	200	600
5.	Chloride as Cl	mg/l	4500-Cl,B	37.9	250	1000
6.	Sulphate as SO <sub>4</sub>	mg/l	4500-SO <sub>4</sub>	32.4	200	400
7.	Fluoride as F	mg/l	4500-F,C	0.42	1.0	1.5
8.	Calcium as Ca	mg/l	3500-Ca,	124.0	75	200
9.	Magnesium as Mg	mg/l	3500-Mg,E	44.6	30	100
10.	Sodium as Na	mg/l	3500-Na,D	40.0	-	-
11.	Potassium as K	mg/l	3500-K,D	31.0	-	-
12.	Nitrate as NO <sub>3</sub>	mg/l	4500-B	4.08	45	NR**
13.	Copper as Cu	mg/l	3111-Cu- B	0.004	0.05	1.5
14.	Chromium as Cr	mg/l	3111- Cr-B	<0.05	0.05	NR**
15.	Cadmium as Cd	mg/l	3111-Cd- B	<0.008	0.003	NR**
16.	Iron as Fe	mg/l	3111- Fe-B	0.22	0.3	NR**
17.	Nickel as Ni	mg/l	3111-Ni- B	0.014	0.02	NR**
18.	Lead as Pb	mg/l	3111-Pb- B	0.007	0.01	NR**
19.	Zinc as Zn	mg/l	3111- Zn-B	1.22	5	15
20.	Arsenic as As	mg/l	3111- As-B	<0.01	0.1	0.5
21.	Residual Free Chlorine	mg/l	4500-Cl,B	0.1	0.2	1.0

\*As per APHA/AWWA; 22nd Ed. (2012) \*\* NR= No relaxation.

Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.

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Authorized Signatory

*(Signature)*  
 (Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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 Tel: 0522- 4002545, Mobile: 0941551881  
 GSTIN - 09AAJFP5925G1Z

## Test Report for Ground Water Quality

Report No. PCS/GWQ/02/2020	Lab Reference No. PCS/HIL/01/2020	Issue 12/01/20
1.Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).	
2.Type of Industry:	Aluminium Industry	
3. Weather Condition:	Clear Sky	
4. Sampling Location:	<b>Gopal Hotel</b>	
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle	
6.Method of Sampling:	As per Standard Method	
7.Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr.Abhishek Tiwari	
8.Date of Sampling:	09/12/2020- 10/12/2020	
9.Sample Receipt in Lab:	11/12/2020	
10.Date of Testing:	12/12/2020 -22/12/2020	

Sl. No.	Parameters	Unit	Reference Method*	Gopal Hotel	BIS Standard IS 10500: 2012 Requirement (Acceptable limit)	Permissible limit in the absence of alternative source
22	Colour	Hazen	2120 B	Clear	5	15
23	Odour	-	2150 A	Odourless	Agreeable	Agreeable
24	Taste	-	-	Agreeable	Agreeable	Agreeable
25	Turbidity	NTU	2130 B	0.5	1	5
26	Manganese ( as Mn)	mg/l	3111-Mn, D	0.06	0.1	0.3
27	Mercury as Hg	mg/l	3500-Hg,B	<0.01	0.001	NR**
28	Total Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	
29	Fecal Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	

\*As per APHA/AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.  
 Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.

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(Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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 GSTIN :- 09AAJFP5925G12

ULR- TC824121000000049

## Test Report for Ground Water Quality



Report No.	Lab Reference No.	Issue
PCS/GWQ/03/2020	PCS/HIL/01/2020	12/01/2020
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).	
2. Type of Industry:	Aluminium Industry	
3. Weather Condition:	Clear Sky	
4. Sampling Location:	<b>Bijpur More</b>	
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle	
6. Method of Sampling:	As per Standard Method	
7. Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari	
8. Date of Sampling:	09/12/2020- 10/12/2020	
9. Sample Receipt in Lab:	11/12/2020	
10. Date of Testing:	12/12/2020 -22/12/2020	

Sl. No.	Parameters	Unit	Reference Method*	Bijpur More	BIS Standard IS 10500:2012 Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
1.	pH	-	4500H+ B	8.09	6.5 - 8.5	NR**
2.	TDS	mg/l	2540 C	381	500	2000
3.	Hardness as CaCO <sub>3</sub>	mg/l	2340 C	124	200	600
4.	Alkalinity	mg/l	2320 B	112	200	600
5.	Chloride as Cl	mg/l	4500-Cl,B	19.9	250	1000
6.	Sulphate as SO <sub>4</sub>	mg/l	4500-SO <sub>4</sub>	5.2	200	400
7.	Fluoride as F	mg/l	4500-F,C	<0.1	1.0	1.5
8.	Calcium as Ca	mg/l	3500-Ca	64.0	75	200
9.	Magnesium as Mg	mg/l	3500-Mg,E	26.2	30	100
10.	Sodium as Na	mg/l	3500-Na,D	12.0	-	-
11.	Potassium as K	mg/l	3500-K,D	7.0	-	-
12.	Nitrate as NO <sub>3</sub>	mg/l	4500-B	3.21	45	NR**
13.	Copper as Cu	mg/l	3111-Cu- B	0.005	0.05	1.5
14.	Chromium as Cr	mg/l	3111- Cr-B	<0.05	0.05	NR**
15.	Cadmium as Cd	mg/l	3111-Cd- B	<0.008	0.003	NR**
16.	Iron as Fe	mg/l	3111- Fe-B	0.21	0.3	NR**
17.	Nickel as Ni	mg/l	3111-Ni- B	0.011	0.02	NR**
18.	Lead as Pb	mg/l	3111-Pb- B	0.006	0.01	NR**
19.	Zinc as Zn	mg/l	3111- Zn-B	1.28	5	15
20.	Arsenic as As	mg/l	3111- As-B	<0.01	0.1	0.5
21.	Residual Free Chlorine	mg/l	4500-Cl,B	0.1	0.2	1.0

\*As per APHA/AWWA: 22nd Ed. (2012) \*\* NR- No relaxation,  
 Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.  
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Authorized Signatory  
  
 (Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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## Test Report for Ground Water Quality

Report No. PCS/GWQ/03/2020	Lab Reference No. PCS/HIL/01/2020	Issue 1 12/01/20
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).	
2. Type of Industry:	Aluminium Industry	
3. Weather Condition:	Clear Sky	
4. Sampling Location:	Bijpur More	
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle	
6. Method of Sampling:	As per Standard Method	
7. Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari	
8. Date of Sampling:	09/12/2020 - 10/12/2020	
9. Sample Receipt in Lab:	11/12/2020	
10. Date of Testing:	12/12/2020 - 22/12/2020	

Sl. No.	Parameters	Unit	Reference Method*	Bijpur More	BIS Standard IS 10500: 2012	
					Requirement (Acceptable limit)	Permissible limit in the absence of alternative source
22	Colour	Hazen	2120 B	Clear	5	15
23	Odour	-	2150 A	Odourless	Agreeable	Agreeable
24	Taste	-	-	Agreeable	Agreeable	Agreeable
25	Turbidity	NTU	2130 B	0.4	1	5
26	Manganese ( as Mn)	mg/l	3111-Mn, D	0.02	0.1	0.3
27	Mercury as Hg	mg/l	3500-Hg, B	<0.01	0.001	NR**
28	Total Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	
29	Fecal Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	

\*As per APHA/AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.

Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.

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Authorized Signatory

*(Signature)*  
 (Dr. Divya Misra)  
 Managing Director

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GSTIN :- 09AAJFP5925G1Z

ULR- TC82412100000050

### Test Report for Ground Water Quality



Report No.		Lab Reference No.		Issue		
PCS/GWQ/04/2020		PCS/HIL/01/2020		12/01/		
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).					
2. Type of Industry:	Aluminium Industry					
3. Weather Condition:	Clear Sky					
4. Sampling Location:	Shiva Park					
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle					
6. Method of Sampling:	As per Standard Method					
7. Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari					
8. Date of Sampling:	09/12/2020- 10/12/2020					
9. Sample Receipt in Lab:	11/12/2020					
10. Date of Testing:	12/12/2020 -22/12/2020					
Sl. No.	Parameters	Unit	Reference Method*	Shiva Park	BIS Standard IS 10500: 2012 Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
1.	pH	-	4500H+ B	7.90	6.5 - 8.5	NR**
2.	TDS	mg/l	2540 C	120	500	2000
3.	Hardness as CaCO <sub>3</sub>	mg/l	2340 C	268	200	600
4.	Alkalinity	mg/l	2320 B	392	200	600
5.	Chloride as Cl	mg/l	4500-Cl,B	78.9	250	1000
6.	Sulphate as SO <sub>4</sub>	mg/l	4500-SO <sub>4</sub>	16.2	200	400
7.	Fluoride as F	mg/l	4500-F,C	0.7	1.0	1.5
8.	Calcium as Ca	mg/l	3500-Ca	136.0	75	200
9.	Magnesium as Mg	mg/l	3500-Mg,E	32.0	30	100
10.	Sodium as Na	mg/l	3500-Na,D	45.0	-	-
11.	Potassium as K	mg/l	3500-K,D	12.0	-	-
12.	Nitrate as NO <sub>3</sub>	mg/l	4500-B	3.32	45	NR**
13.	Copper as Cu	mg/l	3111-Cu- B	0.006	0.05	1.5
14.	Chromium as Cr	mg/l	3111- Cr-B	<0.05	0.05	NR**
15.	Cadmium as Cd	mg/l	3111-Cd- B	<0.008	0.003	NR**
16.	Iron as Fe	mg/l	3111- Fe-B	0.16	0.3	NR**
17.	Nickel as Ni	mg/l	3111-Ni- B	0.013	0.02	NR**
18.	Lead as Pb	mg/l	3111-Pb- B	0.007	0.01	NR**
19.	Zinc as Zn	mg/l	3111- Zn-B	1.32	5	15
20.	Arsenic as As	mg/l	3111- As-B	<0.01	0.1	0.5
21.	Residual Free Chlorine	mg/l	4500-Cl,B	0.1	0.2	1.0

\*As per APHA/AWWA; 22nd Ed. (2012) \*\* NR= No relaxation,

Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.

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Authorized Signatory

(Dr. Divya Misra)  
Managing Director

"End of this Test Report"

#### Services Available

Environmental Monitoring, Preparation of EIA/EMP, Baseline data generation for Air, Water, Soil, Noise & Meteorology  
Environmental and Safety Audit reports, Commissioning, Erection, Operation and Maintenance of STP/ETP, Clearances from  
Ground Water Board, Compliance of E.C., NOC from UPPCR, MoEF



## Prakriti Consultants Service!

An Approved Laboratory From MoEF - CC & Uttar Pradesh Pollution Control Board  
(An ISO 14001:2015, ISO 9001:2015 and ISO 45001:2018 Certified Organization)  
Address: 12, Vishnupuri, Church Road, Aliganj, Lucknow-22601  
E-mail: prakriti\_md@rediffmail.co  
Tel: 0522- 4002545, Mobile: 0941551881  
GSTIN :- 09AAJFP5925G1Z

### Test Report for Ground Water Quality

Report No.	Lab Reference No.	Issue I
PCS/GWQ/04/2020	PCS/HIL/01/2020	12/01/20
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonebhadra (UP).	
2. Type of Industry:	Aluminium Industry	
3. Weather Condition:	Clear Sky	
4. Sampling Location:	<b>Shiva Park</b>	
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle	
6. Method of Sampling:	As per Standard Method	
7. Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari	
8. Date of Sampling:	09/12/2020- 10/12/2020	
9. Sample Receipt in Lab:	11/12/2020	
10. Date of Testing:	12/12/2020 --22/12/2020	

Sl. No.	Parameters	Unit	Reference Method*	Shiva Park	BIS Standard IS 10500: 2012 Requirement (Acceptable limit)	Permissible limit in the absence of alternative source
22	Colour	Hazen	2120 B	Clear	5	15
23	Odour	-	2150 A	Odourless	Agreeable	Agreeable
24	Taste	-	-	Agreeable	Agreeable	Agreeable
25	Turbidity	NTU	2130 B	0.3	1	5
26	Manganese ( as Mn)	mg/l	3111-Mn, D	0.01	0.1	0.3
27	Mercury as Hg	mg/l	3500-Hg,B	<0.01	0.001	NR**
28	Total Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	
29	Fecal Coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	

\*As per APHA/AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.

Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.

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Authorized Signatory

(Dr. Divya Misra)  
Managing Director

"End of this Test Report"

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Ground Water Board, Compliance of E.C., NOC from UP PCB, MoEF





# Prakriti Consultants Services

An Approved Laboratory From MoEF & Uttar Pradesh Pollution Control Board, ISO 17025:2017 Accredited by NABL  
 (An ISO 14001:2015, ISO 9001:2015 and ISO 45001:2018 Certified Organization)  
 Address: 12, Vishnupuri, Church Road, Aliganj, Lucknow-226024  
 E-mail: prakriti\_md@rediffmail.com  
 Tel: 0522-4002545, Mobile: 09415518818,  
 GSTIN - 09AAJFP5925G1Z.Y

Test Report for Ground Water Quality Report (Borewell)						
URL- TC82411900002479						
Report No. PCS/GWQ/05/2020		Lab Reference No. PCS/HIL/01/2020			Issue Date 08/01/2021	
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).					
2. Type of Industry:	Aluminum Industry					
3. Weather Condition:	Clear Sky					
4. Sampling Location:	ABIC Near Gupta Hotel					
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle					
6. Method of Sampling:	As per Standard Method					
7. Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari					
8. Date of Sampling:	09/12/2020- 10/12/2020					
9. Sample Receipt in Lab:	11/12/2020					
10. Date of Testing:	12/12/2020 -22/01/2021					
Sl. No.	Parameters	Unit	Reference Method*	ABIC Near Gupta Hotel	BIS Standard IS 10500: 2012	
					Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
1.	pH	-	4500H+ B	7.66	6.5 - 8.5	NR**
2.	TDS	mg/l	2540 C	346	500	2000
3.	Hardness as CaCO <sub>3</sub>	mg/l	2340 C	218	200	600
4.	Alkalinity	mg/l	2320 B	216	200	600
5.	Chloride as Cl	mg/l	4500-Cl,B	53.9	250	1000
6.	Sulphate as SO <sub>4</sub>	mg/l	4500-SO <sub>4</sub>	56.9	200	400
7.	Fluoride as F	mg/l	4500-F,C	0.9	1.0	1.5
8.	Calcium as Ca	mg/l	3500-Ca	72.0	75	200
9.	Magnesium as Mg	mg/l	3500-Mg,F	34.9	30	100
10.	Sodium as Na	mg/l	3500-Na,D	45.0	-	-
11.	Potassium as K	mg/l	3500-K,D	20.0	-	-
12.	Nitrate as NO <sub>3</sub>	mg/l	4500-B	24.2	45	NR**
13.	Copper as Cu	mg/l	3500-Cu, B	0.014	0.05	1.5
14.	Chromium as Cr	mg/l	3500-Cr, B	0.068	0.05	NR**
15.	Cadmium as Cd	mg/l	3500-Cd, B	<0.002	0.003	NR**
16.	Iron as Fe	mg/l	3500-Fe,D	0.25	0.3	NR**
17.	Nickel as Ni	mg/l	3500-Ni, D	0.008	0.02	NR**
18.	Lead as Pb	mg/l	3500-Pb,B	<0.002	0.01	NR**
19.	Zinc as Zn	mg/l	3500-Zn, D	4.156	5	15
20.	Arsenic as As	mg/l	3500-As,B	<0.002	0.1	0.5
21.	Residual Free Chlorine	mg/l	4500-Cl,B	<0.018	0.2	1.0

\*As per APHA-AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.  
 Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.

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Authorized Signatory

(Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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 Environmental Monitoring, Preparation of EIA/EMP, Baseline data generation for Air, Water, Soil, Noise & Meteorology,  
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E-mail: prakriti\_md@rediffmail.com  
Tel: 0522-4002545, Mobile: 09415518818,  
GSTIN: 09AAJFP5925G1Z7

### Test Report for Ground Water Quality Report (Borewell)

Report No.	Lab Reference No.	Issue Date				
PCS/GWQ/05/2020	PCS/HIL/01/2020	08/01/2021				
1. Name of Proponent: M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).						
2. Type of Industry: Aluminum Industry						
3. Weather Condition: Clear Sky						
4. Sampling Location: <b>ABIC Near Gupta Hotel</b>						
5. Quantity of Sample: 2 Litre Water Sample Collected in Bottle						
6. Method of Sampling: As per Standard Method						
7. Sampling Done by: Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari						
8. Date of Sampling: 09/12/2020- 10/12/2020						
9. Sample Receipt in Lab: 11/12/2020						
10. Date of Testing: 12/12/2020 -22/01/2021						
Sl. No.	Parameters	Unit	Reference Method*	ABIC Near Gupta Hotel	BIS Standard IS 10500: 2012	
					Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
22	Colour	Hazen	2120 B	Clear	5	15
23	Odour	-	2150 A	Odourless	Agreeable	Agreeable
24	Taste	-	-	Agreeable	Agreeable	Agreeable
25	Turbidity	NTU	2130 B	2.2	1	5
26	Manganese ( as Mn)	mg/l	3500-Mn, D	0.086	0.1	0.3
27	Mercury as Hg	mg/l	3500-Hg, B	<0.001	0.001	NR**
28	Total coliforms	MPN/100ml	9221	Absent	Should be absent in any	
29	Faecal coliforms	MPN/100ml	9221	Absent	100/ml sample	

\*As per APHA/AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.  
Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.  
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5. No deviation as per the Standard Method.

Authorized Signatory

*(Signature)*  
(Dr. Divya Misra)  
Managing Director

"End of this Test Report"

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 E-mail: prakriti\_md@rediffmail.com  
 Tel: 0522-4002545, Mobile: 09415518818,  
 GSTIN : 09AAJFP5925G1ZY

URL- TC82411900002480

## Test Report for Ground Water Quality (Borewell)



Report No.	Lab Reference No.	Issue Date
PCS/GWQ/06/2020	PCS/HIL/01/2020	08/01/2021
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).	
2. Type of Industry:	Aluminum Industry	
3. Weather Condition:	Clear Sky	
4. Sampling Location:	Gandhi Park	
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle	
6. Method of Sampling:	As per Standard Method	
7. Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari	
8. Date of Sampling:	09/12/2020- 10/12/2020	
9. Sample Receipt in Lab:	11/12/2020	
10. Date of Testing:	12/12/2020 -22/01/2021	

Sl. No.	Parameters	Unit	Reference Method*	Gandhi Park	BIS Standard IS 10500: 2012	
					Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
1.	pH	-	4500H+ B	7.61	6.5 - 8.5	NR**
2.	TDS	mg/l	2540 C	312	500	2000
3.	Hardness as CaCO <sub>3</sub>	mg/l	2340 C	208	200	600
4.	Alkalinity	mg/l	2320 B	206	200	600
5.	Chloride as Cl	mg/l	4500-Cl,B	57.9	250	1000
6.	Sulphate as SO <sub>4</sub>	mg/l	4500-SO <sub>4</sub>	60.0	200	400
7.	Fluoride as F	mg/l	4500-F,C	0.8	1.0	1.5
8.	Calcium as Ca	mg/l	3500-Ca,	80.0	75	200
9.	Magnesium as Mg	mg/l	3500-Mg,E	31.0	30	100
10.	Sodium as Na	mg/l	3500-Na,D	48.0	-	-
11.	Potassium as K	mg/l	3500-K,D	16.0	-	-
12.	Nitrate as NO <sub>3</sub>	mg/l	4500-B	22.0	45	NR**
13.	Copper as Cu	mg/l	3500-Cu, B	0.014	0.05	1.5
14.	Chromium as Cr	mg/l	3500-Cr, B	0.074	0.05	NR**
15.	Cadmium as Cd	mg/l	3500-Cd, B	<0.002	0.003	NR**
16.	Iron as Fe	mg/l	3500-Fe, D	0.22	0.3	NR**
17.	Nickel as Ni	mg/l	3500-Ni, D	0.015	0.02	NR**
18.	Lead as Pb	mg/l	3500-Pb, B	<.0002	0.01	NR**
19.	Zinc as Zn	mg/l	3500-Zn, D	4.168	5	15
20.	Arsenic as As	mg/l	3500-As, B	<0.002	0.1	0.5
21.	Residual Free Chlorine	mg/l	4500-Cl, B	<0.018	0.2	1.0

\*As per APHA/AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.  
 Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.  
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Authorized Signatory

(Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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 GSTIN - 09AAJFP5925G1ZY

## Test Report for Ground Water Quality (Borewell)

Report No.	Lab Reference No.	Issue Date				
PCS/GWQ/06/2020	PCS/HIL/01/2020	08/01/2021				
1. Name of Proponent:	M/s Hindalco Industries Limited, PO- Renukoot, Dist- Sonbhadra (UP).					
2. Type of Industry:	Aluminum Industry					
3. Weather Condition:	Clear Sky					
4. Sampling Location:	Gandhi Park					
5. Quantity of Sample:	2 Litre Water Sample Collected in Bottle					
6. Method of Sampling:	As per Standard Method					
7. Sampling Done by:	Mr. Asheesh Kushwaha, Mr. Shubham Pandey & Mr. Abhishek Tiwari					
8. Date of Sampling:	09/12/2020- 10/12/2020					
9. Sample Receipt in Lab:	11/12/2020					
10. Date of Testing:	12/12/2020 -22/01/2021					
Sl. No.	Parameters	Unit	Reference Method*	Gandhi Park	BIS Standard IS 10500: 2012 Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
22	Colour	Hazen	2120 B	Clear	5	15
23	Odour	-	2150 A	Odourless	Agreeable	Agreeable
24	Taste	-	-	Agreeable	Agreeable	Agreeable
25	Turbidity	NTU	2130 B	2.6	1	5
26	Manganese ( as Mn)	mg/l	3500-Mn, D	0.092	0.1	0.3
27	Mercury as Hg	mg/l	3500-Hg,B	<0.001	0.001	NR**
28	Total coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	
29	Faecal coliforms	MPN/100ml	9221	Absent	Should be absent in any 100/ml sample	

\*As per APHA/AWWA, 22nd Ed. (2012) \*\* NR= No relaxation.  
 Note: It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible' limit in the absence of alternative source above which the sources will have to be rejected.  
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(Dr. Divya Misra)  
 Managing Director

"End of this Test Report"

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 Ground Water Board, Compliance of E.C., NOC from UPPCB, MoEF

*Caringly yours*



Date: 30<sup>th</sup> Apr 2021.

To,

HINDALCO INDUSTRIES LTD  
AHURA CENTRE, B WING, MAHAKALI CAVES  
ROAD, ANDHERI, ANDHERI EAST, MAHARASHTRA,  
MUMBAI-400093

Dear Sir/Madam,

**Sub: Held Cover Note**

Thank you for your Premium amounting to Rs 1,30,813/- vide RTGS towards insurance premium of Public Liability Act Policy. Subject to Realization of RTGS Transaction.

We hereby confirm to hold you covered under Public Liability Act Policy. As per quote submitted to you.

Renewal of Policy No: OG-21-1919-3304-00000016

Premium: Rs 1,30,813/-

Policy Period: From 01.05.2021 to 30.04.2022

Thanking you and assuring you of the best of our services, always.

Yours Sincerely,

For Bajaj Allianz General Insurance Co. Ltd.

Authorized Signatory



*Caringly yours*



Date: 30<sup>th</sup> Apr 2021.

To,

HINDALCO INDUSTRIES LTD  
AHURA CENTRE, B WING, MAHAKALI CAVES  
ROAD, ANDHERI, ANDHERI EAST, MAHARASHTRA,  
MUMBAI-400093

Dear Sir/Madam,

**Sub: Held Cover Note**

Thank you for your Premium amounting to Rs 4,18,923/- vide RTGS towards insurance premium of Public Liability Policy. Subject to Realization of RTGS Transaction.

We hereby confirm to hold you covered under Public Liability Policy. As per quote submitted to you.

Renewal of Policy No: OG-21-1919-3301-00000007

Premium: Rs 4,18,923/-

Policy Period: From 01.05.2021 to 30.04.2022

Thanking you and assuring you of the best of our services, always.

Yours Sincerely,

For Bajaj Allianz General Insurance Co. Ltd.

Authorized Signatory





d/c  
April 24, 2021

The Member Secretary,  
U.P. Pollution Control Board,  
T.C. 12 - V, Vibhuti Khand,  
Compt'nagar,  
LUCKNOW

**Sub: Progress Report under Section 21 / 22 of the Air (Prevention and Control Of Pollution) Act 1981 for the quarter (January '21 to March '21).**

1. The Industry is operating by maintaining all installed air pollution control system effectively and are in compliance for emission norms under EP Rules 1986.
  - a) Please find attached Ambient Air Monitoring reports for four locations monitored by an approved laboratory on quarterly basis as Annexure - I.
  - b) Stack emission monitoring is being done by an approved laboratory on quarterly basis as Annexure - II.
  - c) Calibration of installed OCEMS at our main process stacks (22 nos.) done by jointly with CEM & an approved laboratory on quarterly basis. The online emission data is being transmitted to CPCB server regularly. Please find attached Calibration report as Annexure - III.
  - d) Please find attached compliance report on recommendation of core committee constituted by Hon'ble NGT as Annexure - IV.
  - e) Ash generation and utilization for the quarter January '21 to March '21 as ment on below.

Month	Jan-21	Feb-21	Mar-21
Generation (MT)	20804.512	1962.287	14788.936
Utilization (MT)	18748.538	8057.766	11413.12

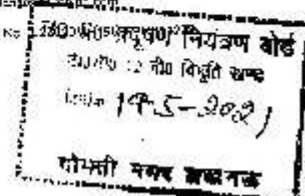
**HINDALCO INDUSTRIES LIMITED**  
Bansal Road  
P.O. Bansal  
Dist. Gonda (U.P.)  
Lucknow-226007, 226017 &  
Fax: 0512-266252, 0512-266100

**J. DISTRICT OFFICE**  
Aluna Centre, 1<sup>st</sup> floor, B-4/5-g  
Kacharai Canal Road,  
Ardhanari, Varanasi-221003  
Telephone: 0512-26611230  
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Corporate Identity No.





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April 24, 2021

The Member Secretary  
U.P. Pollution Control Board  
Floor 12 - V. Mohan Khand,  
Gomtinagar  
LUCKNOW

Sub: Progress Report under Section 25 / 26 of the Water (Prevention and Control of Pollution) Act 1974 for the quarter (January'21 to March'21).

1) The Industrial Effluent Treatment Plant and the Domestic Effluent Treatment Plant were operated continuously during the quarter January 21 to March'21. The Details are as follows

a) The Quantity of treated Effluent Recycled & Reused in KL / Day.

Month	January'21	February'21	March'21
	6219	3956	1921

b) The treated Effluent discharged into Murchhwa Nallah in KL / Day.

Month	January'21	February'21	March'21
	0	0	0

c) The Quantity of treated Domestic Recycled & Reused in KL / Day

Month	January'21	February'21	March'21
	4546	3303	6466

d) The Treated Domestic discharged into Murchhwa Nallah in KL / Day.

Month	January'21	February'21	March'21
	5300	5927	2985

e) The analysis of the treated industrial effluent and Sewage Effluent during the quarter done by approved laboratory is attached as Annexure -

INDUSTRIAL EFFLUENT TREATMENT PLANT  
Sector 12, Gomtinagar  
LUCKNOW-226017  
Dist. Etawah-201111  
Telephone: +91-522-222101, 2512427  
Fax: 512416 222101, 2512427

U.P. STATEMENT OF THE  
Pollution Control Board  
Mahatma Gandhi Road,  
Lucknow-226001. Telephone: 420 120  
Telex: 312 6571 USC  
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uppcb@upcb.org

श्री १० प्रदूषण नियंत्रण बोर्ड  
दोस्रो 12 वीं विद्युत नगर  
दिनांक 19-5-2021  
गोवर्द्धी नगर कार्यालय



**WORK ZONE MONITORING RESULT (OCTOBER ' 2020 TO MARCH ' 2021)**

<b>Sl. No</b>	<b>Location</b>	<b>Date</b>	<b>PM (<math>\mu\text{gm}/\text{m}^3</math>)</b>	<b>Total Fluoride (<math>\mu\text{gm}/\text{m}^3</math>)</b>
1	Center of Line- I (Plant-I)	05.10.2020	388.32	284.28
2	Roof Top Line- I (Plant-I)	05.10.2020	326.56	277.43
3	Center of Line- IX (Plant-II)	12.10.2020	297.27	229.24
4	Roof Top Line- IX (Plant-II)	12.10.2020	264.66	228.00
5	Center of Line- XI (Plant-II)	27.10.2020	345.39	203.36
6	Roof Top Line- XI (Plant-II)	27.10.2020	238.96	233.23
7	Caster	21.10.2020	271.97	-
8	Davy Cold Mill	08.10.2020	298.06	-
9	Center of Line- III (Plant-I)	03.12.2020	400.82	273.67
10	Roof Top Line- III (Plant-I)	03.12.2020	352.23	269.70
11	Center of Line- V (Plant-II)	08.12.2020	308.43	246.58
12	Roof Top Line- V (Plant-II)	08.12.2020	223.12	238.50
13	Center of Line- VII (Plant-II)	10.12.2020	340.21	237.42
14	Roof Top Line- VII (Plant-II)	10.12.2020	259.14	267.49
15	Caster	16.12.2020	277.82	-
16	Davy Cold Mill	22.12.2020	353.59	-
17	Center of Line- III (Plant-I)	04.02.2021	368.06	277.59
18	Roof Top Line- III (Plant-I)	04.02.2021	345.47	271.82
19	Center of Line- V (Plant-II)	06.02.2021	315.90	253.17
20	Roof Top Line- V (Plant-II)	06.02.2021	259.55	252.71
21	Center of Line- VII (Plant-II)	15.02.2021	366.38	234.62
22	Roof Top Line- VII (Plant-II)	15.02.2021	280.48	275.25
23	Caster	21.02.2021	278.31	-
24	Davy Cold Mill	22.02.2021	353.59	-

: 2:

Sl. No	Location	Date	PM ( $\mu\text{gm}/\text{m}^3$ )	Total Fluoride ( $\mu\text{gm}/\text{m}^3$ )
25	Center of Line- II (Plant-I)	10.11.2020	391.41	259.91
26	Roof Top Line- II (Plant-I)	10.11.2020	341.10	284.12
27	Center of Line- IV (Plant-II)	16.11.2020	307.19	232.24
28	Roof Top Line- IV (Plant-II)	16.11.2020	278.05	248.64
29	Center of Line- VI (Plant-II)	24.11.2020	347.99	211.18
30	Roof Top Line- VI (Plant-II)	24.11.2020	310.81	231.39
31	Caster	09.11.2020	257.18	-
32	Davy Cold Mill	18.11.2020	327.75	-
33	Center of Line- I (Plant-I)	11.01.2021	417.43	250.85
34	Roof Top Line- I (Plant-I)	11.01.2021	283.21	260.24
35	Center of Line- VII (Plant-II)	13. 01.2021	280.42	228.75
36	Roof Top Line- VII (Plant-II)	13. 01.2021	247.12	234.06
37	Center of Line- IX (Plant-II)	15. 01.2021	342.30	258.58
38	Roof Top Line- IX (Plant-II)	15. 01.2021	295.56	259.88
39	Caster	06. 01.2021	264.21	-
40	Davy Cold Mill	12. 01.2021	369.72	-
41	Center of Line- I (Plant-I)	11.03.2021	433.40	258.46
42	Roof Top Line- I (Plant-I)	11. 03.2021	330.96	270.45
43	Center of Line- VII (Plant-II)	18. 03.2021	281.26	248.13
44	Roof Top Line- VII (Plant-II)	18. 03.2021	267.79	233.43
45	Center of Line- IX(Plant-II)	30. 03.2021	330.87	251.77
46	Roof Top Line- IX (Plant-II)	30. 03.2021	310.16	256.44
47	Caster	13. 03.2021	265.17	-
48	Davy Cold Mill	20. 03.2021	365.69	-

**Results of Noise Monitoring Around  
Hindalco Industries Limited, Renukoot**

**Date Of Noise Monitoring: February 15, 2021  
In side Factory Premises**

Sl. No.	Location	Frequency	Noise Level dB (A) (Day Time 4:30 P.M)	Noise Level dB (A) (Night Time 4:00 A.M)
1.	Plant – II ( Main Gate )	Quarterly	70.1 – 72.6	68.2 – 72.0
2.	Plant – I ( Canteen )	---do---	74.8 – 76.8	69.4 – 73.4
3.	Pot Line – II	---do---	76.5 – 78.7	67.9 – 68.9
4.	Pot Line – VII	---do---	71.8 – 73.6	63.2 – 65.9
5.	Pot Line – XI	---do---	72.8 – 76.9	64.2 – 66.5
6.	Alumina Plant ( Ball Mill )	---do---	68.0 – 72.0	65.3 – 67.0
7.	Work Shop	---do---	68.9 – 73.9	61.5 – 64.1
8.	Remelt Shop	---do---	73.9 – 76.8	62.1 – 63.9
9.	Plant – II ( Main Gate )	Quarterly	70.7 – 72.6	67.8 – 72.9
10.	Plant – I ( Canteen )	---do---	75.4 – 77.8	68.8 – 70.9
11.	Pot Line – II	---do---	74.1 – 76.9	60.5 – 62.1
12.	Pot Line – VIII	---do---	73.9 – 76.6	65.2 – 67.9

**Results of Noise Monitoring Around  
Hindalco Industries Limited, Renukoot**

**Date Of Noise Monitoring: February 15, 2021  
Out side Factory Premises**

Sl. No.	Location	Frequency	Noise Level dB (A) (Day Time 4:30 P.M)	Noise Level dB (A) (Night Time 4:00 A.M)
1.	Guest House	Quarterly	61.8 – 65.6	55.2 – 57.9
2.	Rimjhim Vatika ( Admn. Colony)	---do---	69.1 – 70.9	54.9 – 56.6
3.	Hindalco Hospital	---do---	65.3 – 67.7	53.5 – 55.9
4.	Renukeshwar Mandir	---do---	68.2 – 72.5	51.2 – 54.3
5.	Mitali Club	---do---	68.0 – 70.2	52.5 – 55.8
6.	Plant – II Colony	---do---	65.1 – 68.6	56.7 – 57.9
7.	Aditya Birla Public School	---do---	65.8 – 67.8	57.6 – 58.3
8.	Plant –II Colony	---do---	69.9 – 71.5	51.3 – 54.6
9.	Kalyan Bhavan Plant - II	---do---	64.9 – 67.8	55.7 – 58.3
10.	Kalyan Mandap	---do---	66.9 – 69.8	52.7 – 53.9
11.	Hindalco Primary School Unit -II	---do---	67.4– 68.9	57.2 – 59.5
12.	Near Gurudwara	---do---	69.4 – 75.6	58.9 – 60.4

**Results of Noise Monitoring Around  
Hindalco Industries Limited, Renukoot**

**Date Of Noise Monitoring: November 18, 2020  
In side Factory Premises**

Sl. No.	Location	Frequency	Noise Level dB (A) (Day Time 4:30 P.M)	Noise Level dB (A) (Night Time 4:00 A.M)
1.	Plant – I ( Main Gate )	Quarterly	70.06 – 72.18	61.21 – 64.29
2.	Plant – II (Canteen)	---do---	73.01 – 81.01	63.10 – 64.10
3.	Pot Line – III	---do---	76.11 – 78.00	66.10 – 68.12
4.	Pot Line – VI	---do---	74.01 – 78.03	69.30 – 71.01
5.	Cast House	---do---	68.01 – 71.03	58.03 – 61.02
6.	Alumina Plant Near Calciner	---do---	70.00 – 73.00	52.04 – 59.12
7.	Central Lab	---do---	72.24 – 74.35	66.70 – 69.15
8.	Extrusion Press # 1	---do---	79.05 – 82.39	74.20 – 76.19
9.	Plant – I ( Main Gate )	Quarterly	70.06 – 72.18	61.21 – 64.29
10.	Plant – II (Canteen)	---do---	73.01 – 81.01	63.10 – 64.10
11.	Pot Line – III	---do---	76.11 – 78.00	66.10 – 68.12
12.	Pot Line – VI	---do---	74.01 – 78.03	69.30 – 71.01

**Results of Noise Monitoring Around  
Hindalco Industries Limited, Renukoot**

**Date of Noise Monitoring: November 18, 2020  
Outside Factory Premises**

Sl. No.	Location	Frequency	Noise Level dB (A) (Day Time 4:30 P.M)	Noise Level dB (A) (Night Time 4:00 A.M)
1.	Guest House	Quarterly	68.3 – 71.3	58.0 – 66.0
2.	Rimjhim Vatika ( Admn. Colony)	---do---	62.0 – 65.0	52.0 – 55.0
3.	Hindalco Hospital	---do---	66.5 – 69.2	52.6 – 53.2
4.	Renukeshwar Mandir	---do---	70.5 – 70.5	60.2 – 66.3
5.	Mitali Club	---do---	70.2 – 71.0	56.5 – 58.5
6.	Plant – II Colony	---do---	70.5 – 76.5	54.5 – 57.5
7.	Aditya Birla Public School	---do---	68.4 – 74.4	53.4 – 55.4
8.	Plant –II Colony	---do---	69.6 – 74.6	51.6 – 52.6
9.	Kalyan Bhavan Plant - II	---do---	66.6 – 70.6	50.6 – 53.6
10.	Kalyan Mandap	---do---	69.3 – 72.3	55.3 – 58.3
11.	Hindalco Primary School Unit -II	---do---	71.3 – 74.3	54.3 – 56.3
12.	Near Gurudwara	---do---	67.7 – 69.7	61.7 – 63.7

## Annexure -VII

S.NO.	ITEM	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
1	CAPACITY OF THERMAL POWER PLANT STATION (MW)	84MW	84MW	84MW	84MW	84MW	84MW
	TOTAL POWER GENERATED (MWH)	31101.89	19387.14	23989.14	27490.71	8056.08	28323.48
2	Coal Consumption						
<b>ASH GENERATION (TONNES)</b>							
3	FLY ASH( ASH SILO)	10729.096	9478.068	10945.713	16758.659	6057.768	11856.118
	FLY ASH (WET DEASING)	0.000	0.000	57.751	0.000	0.000	0.000
	<b>TOTAL FLY ASH</b>	10729.096	9478.068	11003.464	16758.659	6057.768	11856.118
4	BOTTOM ASH	2627.572	2240.500	2734.927	4045.853	1504.519	2932.812
5	<b>TOTAL ASH GENERATED</b>	13356.668	11718.568	13738.391	20804.512	7562.287	14788.930
<b>A FLY ASH UTILISATION (TONNES)</b>							
6	ASH POND DYKE RAISING	-	-	-	-	-	-
7	CEMENT INDUSTRY	10729.096	9432.444	10945.714	16749.536	6057.768	11416.120
8	FLY ASH From old dyke						
9	BRICK MAKING						
10	<b>Green area devlopment behind Disposal area</b>						
11	AGRICULTURE (IN MUD LAKE AREA)	-	-	-	-	-	-
12	ROAD EMBANKMENTS	-	-			-	-
13	OTHERS (Low land building construction)	-	-	-	-	-	-
14	<b>TOTAL A</b>	10729.096	9432.444	10945.714	16749.536	6057.77	11416.120
<b>B ASH DISPOSAL (TONNES)</b>							
15	MINE BACK FILLING	-	-	-	-	-	-
16	ASH POND*	2627.572	2286.124	2792.677	4054.976	1504.519	3372.810
17	OTHERS (NEATLY STACKED & PROTECTED)						
18	<b>TOTAL B(TOTAL ASH)</b>	2627.572	2286.124	2792.677	4054.976	1504.519	3372.810
19	<b>TOTAL A&amp;B</b>	13356.668	11718.568	13738.391	20804.512	7562.287	14788.930
20	FLY ASH SEND TO ASH DYKE	0.000	45.624	57.750	9.123	0.000	439.998
21	BOTTOM ASH SEND TO ASH DYKE	-	-	-	-	-	-
22	BOTTOM ASH SEND TO CEMENT PLANT	3812.1	0	0	0	0	0
23	<b>TOTAL ASH UTILIZATION</b>	14541.196	9432.444	10945.714	16749.536	6057.768	11416.120