

HFRP/ENV/2021-22/23

Date: 15.09.2021

To,  
The Member Secretary  
State Pollution Control Board, Odisha  
Parivesh Bhawan  
A/118, Nilakantha Nagar  
Unit- VIII, Bhubaneswar - 751012

**Sub:** Submission of Annual Environmental Statement Report for 2020-21.

Dear Sir,  
We are herewith submitting the Annual Environmental Statement report for the financial year 2020-21 in Form-V

Kindly acknowledge the receipt of this letter.

Thanking you,

Yours truly

A handwritten signature in black ink, appearing to be 'Sumit Mukherjee', written over a circular stamp.

Sumit Mukherjee  
Unit Head  
Hirakud, FRP Plant

CC: The regional office, State Pollution Control Board, Sambalpur

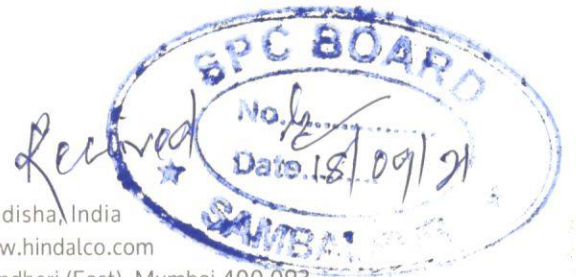
Hindalco Industries Limited

Hirakud FRP: Hirakud - 768 016, District: Sambalpur, Odisha, India

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Form-V  
**Environmental Statement Report**  
for the period  
**1<sup>st</sup> April 2020 to 31<sup>st</sup> March 2021**



**Submitted by**

**Hindalco Industries Limited- Flat Rolled Product (FRP)  
Hirakud Complex, Hirakud  
District: Sambalpur-768016, Odisha**



## INDEX

<b>S. No.</b>	<b>Particular</b>
1.	Environmental Policy
2.	Environmental Statement in Form-V
3.	Photograph of Plantation
4.	ISO 9001 & 14001 and OHSAS 18001 Certified by Lloyd's Register
5.	Awarded for Best Practices Environment in Zinc & Metal Category from Indian Chamber of Commerce
6.	Awarded as on one of the "Most Admired Plants" by ProMFGmedia for Sustainability and Environment initiatives



HINDALCO MANAGEMENT FRAMEWORK  
*excellence by design*

## 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 and practices.

To achieve this, we shall :

- Continue to comply with all applicable legal requirements on environment.
- Continually improve environmental performance by strengthening the Environmental Management System conforming to national/international standards, including setting up and reviewing targets and measuring, monitoring and reporting their progress.
- 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 electricity, coal, water, oil, and raw materials, by promoting efficient technologies and manufacturing process improvements, water conservation programmes, and efficient use of raw materials.
- Adopt energy efficient and cleaner technologies based on techno-economic viability, appropriate to the region in which we operate, and in line with our growth and diversification plans.
- Promote the principles of waste prevention, reduction, reuse, recycling and recovery to minimise waste generation and strengthen the practices for management of wastes.
- Work in partnership with regulatory authorities, relevant suppliers, contractors and all stakeholders, as applicable, to understand and initiate improvement actions.
- Adapt environmental performance over life cycle as an important input to the decision-making processes in the organisation.
- Raise environmental awareness at all levels of our operations, through training and effective communication, participation and consultation.
- Develop and follow appropriate communication system to inform the stakeholders, as applicable, about our environmental commitment and performance.

This policy shall be made available to all employees, suppliers, customers, community and other stakeholders, as appropriate.

A handwritten signature in black ink, reading "Satish Pai".

**Satish Pai**  
Managing Director

19<sup>th</sup> November 2016

**HINDALCO INDUSTRIES LIMITED**

**FORM – V**  
(See rule 14)

**Environmental Statement for the financial year ending the 31<sup>st</sup> March 2021**

**PART-A**

(i)	Name and address of the owner / occupier of the industry operation or process	Sumit Mukherjee, Unit Head, Hindalco Industries Limited- FRP Hirakud Complex, Hirakud District: Sambalpur-768016, Odisha
(ii)	Industry category Primary – (STC Code) Secondary – ( SIC Code)	Rolling Plant
(iii)	Production capacity Units	135000 Tons/Annum of Flat Rolled Product
(iv)	Year of Establishment	2012
(v)	Date of last environmental statement submitted	15-09-2020

**PART-B**

**Water and Raw Material Consumption**

**B-1: Total Water Consumption m<sup>3</sup> / day**

Category	Total Water Consumption (m <sup>3</sup> / day)	
	2019-20	2020-21
Process	51.92	49.24
Cooling	92.64	87.05
Domestic	48.38	58.91

**B-2: Water consumption per unit of the product (m<sup>3</sup>/MT)**

Name of the Product	Process water consumption in Kl per ton of product output	
	During the previous financial year 2019-20	During the current financial year 2020-21
Aluminium Flat Rolled Product	0.79	0.80

**B-3: Raw Material Consumption**

Name of the raw materials	Name of the products	Consumption of raw material per unit of output (MT/MT)	
		During the previous financial year 2019-20	During the current financial year 2020- 21
Aluminium Ingot	Flat Rolled Product	1.50	1.47

**PART-C**

**Pollution discharged to environment / unit of output**  
(Parameter as specified in the consent issued)

**C-1: Water Pollution**

**No discharge from the plant. Treated water is being recycled and reused in the process & gardening within the premises.**

Pollutants Parameters	Prescribed Standard		Quantity of pollutants discharged (mass / day)	Concentration of pollutants in discharges (mass/ volume) No discharge (The treated water quality)		Percentage of variation from prescribed standards with reasons
	STP	ETP		STP	ETP	
	STP	ETP	Not Applicable (No discharge)	STP	ETP	None
pH	6.5-9.0	6.5-9.0		7.40	7.54	
TSS (mg/l)	100	100		8.55	8.00	
BOD (mg/l)	30	30		9.14	6.54	
COD (mg/l)	--	250		37.21	24.12	
O & G (mg/l)	--	10		<1.4	1.42	
Fecal Coliform (MPN/100ml)	1000	--		313.1	--	
TDS (mg/l)	--	2100		--	85.40	
Fluoride (mg/l)	--	1.5		--	0.17	
Chromium Hexavalent (as Cr <sup>+6</sup> ) (mg/l)	--	0.1		--	<0.01	
Cyanide (as CN) (mg/l)	--	0.2		--	<0.01	
Free Ammonium (as NH <sub>3</sub> ) (mg/l)	--	5.0		--	0.15	



**C-2: Air Pollution (Stack Emission)**

Pollutants parameters	Prescribed Standard		Quantity of pollutants discharged (mass / day) Kg/day	Concentration of pollutants in discharges (mass/ volume) mg/Nm <sup>3</sup>	Percentage of variation from prescribed standards with reasons
PM	HRM Stack	50 mg/Nm <sup>3</sup>	9.98 Kg/Day	12.14 mg/Nm <sup>3</sup>	--
	HFM Stack	50 mg/Nm <sup>3</sup>	7.54 kg/Day	10.42 mg/Nm <sup>3</sup>	--
	CRM Stack	50 mg/Nm <sup>3</sup>	14.29 Kg/Day	8.92 mg/Nm <sup>3</sup>	--

**PART-D****Hazardous Wastes**

(As specified under Hazardous waste (Management &amp; Handling) Rules, 2016)

**D-1: From Process (Generation)**

Hazardous Waste		Total Quantity in Tons	
Name	Category of Schedule-I	During the previous financial year 2019-20	During the current financial year 2020-21
Waste Fullers Earth (Contaminated with Oil)	4.5	60.42 Tons	75.60 Tons
Used Oil	5.1	30.40 Tons	50.90 Tons
Waste Oil	5.2	207.54 Tons	142.63 Tons
Waste Filter Paper and Other waste Contaminated with Oil	5.2	22.12 Tons	23.26 Tons
Discarded Containers	33.1	23.13 Tons	22.65 Tons
Oil Soaked Jute/Cloth/Gloves	33.3	10.20 Tons	38.29 Tons

**D-2: From Pollution Control Facilities (Generation)**

Hazardous Waste		Total Quantity in Tons	
Name	Category of Schedule-I	During the previous financial year 2019-20	During the current financial year 2020-21
Chemical Sludge from ETP	35.3	149.36 Tons	110.25 Tons
Oil and Grease Skimming Residue from ETP	35.4	86.15 Tons	20.21 Tons

**PART-E  
Solid Wastes**

**E-1: Generation from Process**

Name	Total Quantity in (MT)	
	During the previous financial year 2019-20	During the current financial year 2020-21
Run Around Aluminum (RAA)	45378	41842

**E-2: Generation from Pollution Control Facilities**

Name	Total Quantity in (MT)	
	During the previous financial year 2019-20	During the current financial year 2020-21
	None	None

**E-3: Quantity Recycled/ Reutilized within the Unit**

Name	Total Quantity in (MT)	
	During the previous financial year 2019-20	During the current financial year 2020-21
Run Around Aluminum (RAA)	45378	41842

**E-4: Quantity Sold**

Name	Total Quantity in (MT)	
	During the previous financial year 2019-20	During the current financial year 2020-21
Run Around Aluminum (RAA)	None	None

**E-5: Quantity Disposed**

Name	Total Quantity in (MT)	
	During the previous financial year 2019-20	During the current financial year 2020-21
Run Around Aluminum (RAA)	None	None



**PART-F**

Please specify the characterizations (in terms of composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories.

**F-1: Hazardous Wastes (HW)**

Description		Physical Status	Chemical Composition	Source of Generation	Disposal Practice
Name of HW	Category of Schedule-I				
Waste Fullers Earth	4.5	Solid	Grey Powder Contaminated with Oil & with Metal Dust	Oil Filtration Unit of Rolling Mills	To authorized CHWTSDF*
Used Oil	5.1	Liquid (Oily)	Contaminated Oil with Metal Dust	Various Machine Center & Vacuum distillation Unit	To Authorized Re-processor
Waste Oil	5.2	Liquid (Oily)	Contaminated Oil with Water & Metal Dust	Tramp Oil Unit & Vacuum Distillation Unit	To Authorized Re-processor
Waste Filter Paper and Other waste Contaminated with Oil	5.2	Solid	Contaminated with Oil	Oil & Coolant Filtration Units of Rolling Mills	To authorized CHWTSDF*
Discarded Containers	33.1	Solid	Contaminated with Oil	Various Machine Centre after using of Oil	To authorized re-user
Oil Soaked Jute/Cloth/ Gloves	33.3	Solid	Contaminated Oil	Handling of Oil & Hazardous Waste	To Authorized Cement Plant for Co-processing
Chemical Sludge from ETP	35.3	Semi Solid	Chemical – Lime, Alum, Poly Contaminated with Oil & Aluminium Dust	Effluent Treatment Plant	To authorized CHWTSDF*
Oil and Grease Skimming Residue from ETP	35.4	Semi Solid	Contaminated with Oil & Aluminium Dust	Effluent Treatment Plant	To Authorized Re-processor

\*CHWTSDF - Common Hazardous Waste Treatment Storage and Disposal Facilities

**F-2: Solid Wastes**

Description	Physical Status	Chemical Composition	Source of Generation	Disposal Practice
Rejected aluminum scrap	Solid	Aluminum	Rolling Process Trimming	Sent to Smelter plant for recycling

**PART-G**

**Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production**

<b>G-1: Cost Estimation of Pollution Control</b>		
<b>Description</b>	<b>Expenditure during 2019-20</b>	<b>Expenditure during 2020-21</b>
1. Water & Air Pollution	Rs. 70,67,147	Rs. 74,02,478
2. Solid & Hazardous Waste Management	Rs. 67,82,522	Rs. 58,01,505
3. Green Belt Development	Rs. 15,27,299	Rs. 9,45,543
4. Environmental Training and event	Rs. 53,172	Rs. 20,700
5. Environment Monitoring	Rs. 37,35,352	Rs. 20,80,592
<b>Total</b>	<b>Rs. 191,65,493</b>	<b>Rs. 191,65,493</b>
<b>G-2: Total Production cost</b>	Rs. 302,89,20,077	Rs. 263,78,189,73
<b>G-3: Percentage expenditure on pollution control of total production cost</b>	0.63 %	0.62 %

**PART-H**

**Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution**

<b>H-1: Air &amp; Water Pollution</b>			
<b>Description</b>	<b>Purpose</b>	<b>Estimation Cost</b>	<b>Year of Installation</b>
Installation of addition Facilities at ETP	To Treat the Waste water generated from upcoming Degreasing Line	165 Lakhs	2021--22
<b>H-2: Waste Management</b>			
<b>Description</b>	<b>Purpose</b>	<b>Estimation Cost</b>	<b>Year of Installation</b>
Installation of Additional Filter Press at our ETP	To reduce the Moisture in ETP Sludge	5 Lakhs	2021--22
Installation of Bio-composter near Canteen	To convert our bio-degradable waste into manure	10 Lakhs	2021--22
<b>H-3: Greenbelt Development</b>			
<b>Description</b>	<b>Purpose</b>	<b>Estimation Cost</b>	<b>Year of Installation</b>
Plantation	Plantation inside and outside of the plant	5 Lakhs	2021--22

**PART-I**

<b>Any other particulars for improving the quality of environment</b>
<ul style="list-style-type: none"><li>• We have planted 3120 nos. sapling at our premises as well as outside of plant including School</li><li>• We have installed Side Stream Filter at Cooling Tower.</li></ul>



“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”

Annexure



Plantation in Sainik School, Gosala Chipilma Road Sambalpur



“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”

Annexure



Plantation in Sainik School, Gosala Chipilma Road Sambalpur



“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”

Annexure



Free Seedling Distribution



“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”

Annexure



Plantation inside the Plant Premises



# Certificate of Approval

This is to certify that the Management System of:

## Hindalco Industries Limited

Hirakud-FRP Plant, District Sambalpur, Hirakud, Odisha - 768016, India.

has been approved by Lloyd's Register to the following standards:

**ISO 14001:2015, ISO 9001:2015, OHSAS 18001:2007**

Approval number(s): ISO 14001 – 0060528, ISO 9001 – 0060529, OHSAS 18001 – 0060530

**The scope of this approval is applicable to:**

Manufacturing and supply of unalloyed and alloyed aluminium flat rolled products (plate coils and sheets).

This certificate is a continuation of a previous approval from another certification body as follows:

Previous original ISO 14001 approval on 29 June 2015 Bureau Veritas certificate number IND18.8735/U

Previous original ISO 9001 approval on 29 June 2015 Bureau Veritas certificate number IND18.8735/U

Previous original OHSAS 18001 approval 29 June 2015 Bureau Veritas certificate number IND18.8735/U



**Luis Cunha**

Area Operations Manager - SAMEA

Issued by: Lloyd's Register Quality Assurance Limited



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INDIAN CHAMBER OF COMMERCE

*Environment Excellence Awards 2020*

*Certificate of Merit  
for Zinc & Metal Sector*

*This is to certify that*

*Hindalco Industries Limited  
Flat Rolled Product*

*was adjudged the*

***RUNNER UP***

*in Large Enterprise Category*

**Dr. Rajeev Singh**  
Director General  
Indian Chamber of Commerce

9 January 2021, Kolkata





The screenshot shows a mobile website interface. At the top left is a hamburger menu icon and the ProMFGmedia logo. Below the logo is a navigation bar with the text "LEARN HOW TO MANAGE SUSTAINABILITY IN AN IDEAL ENVIRONMENT" and a "Home" link. The main content area features a large banner with the text "MOST ADMIRED PLANTS" and a photograph of an industrial facility. Below the banner, the text reads: "This Plant Year of... Most Admired Plants", "Hindalco Industries Limited", "Unit: Hiralco FRP", "#Hindalco #AdityaBirlaGroup", and "#MostAdmiredPlants #Metals".

**Hiralco FRP** has been selected as one of the **"Most Admired Plants"** by ProMFGmedia for Sustainability and Environment initiatives.