

HFRP/ENV/2020-21/024

Date: 15-09-2020

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 2019-20.

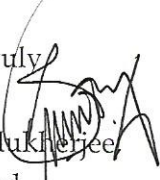
Dear Sir,

We are herewith submitting the Annual Environmental Statement Report for the financial year 2019-20 in Form-V.

Kindly acknowledge the receipt of the same.

Thanking you

Yours Truly


Sumit Mukherjee

Unit Head,
Hindalco Industries Ltd,
FRP Plant, Hirakud

CC: The Regional Office, State Pollution Control Board, Sambalpur



Hindalco Industries Limited

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

T: +91 663 6625 100 | E: hindalco@adityabirla.com | W: www.hindalco.com

Registered Office: Ahura Centre, 1st Floor, B-Wing, Mahakali Caves Road, Andheri (East), Mumbai 400 093

Tel: +91 22 6691 7000 | Fax: + 91 222 6691 7001

Corporate ID No.: L27020MH1958PLC011238



Form-V
Environmental Statement Report
for the period
1st April 2019 to 31st March 2020



Submitted by

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

INDEX

S. No.	Particular
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.	Award of "Certificate of Merit- Challenge Category" for Sustainable Practices from Frost & Sullivan
6.	Award of "Safety System Excellence" from FICCI
7.	Award of "Non-Ferrous Best Performance Award- Fabrication Plant" from The Indian Institute of Metals

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.



Satish Pai
Managing Director

19th November 2016

FORM – V

(See rule 14)

Environmental Statement for the financial year ending the 31st March 2020**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	07-09-2019

PART-B**Water and Raw Material Consumption****B-1: Total Water Consumption m³ / day**

Category	Total Water Consumption (m ³ / day)	
	2018-19	2019-20
Process	50.02	51.92
Cooling	87.83	92.64
Domestic	41.41	48.38

B-2: Water consumption per unit of the product (m³/MT)

Name of the Product	Process water consumption in Kl per ton of product output	
	During the previous financial year 2018-19	During the current financial year 2019-20
Aluminium Flat Rolled Product	0.79	0.78

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 2018-19	During the current financial year 2018- 19
Aluminium Ingot	Flat Rolled Product	1.59	1.50

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	
pH	6.5-9.0	6.5-9.0	Not Applicable (No discharge)	7.13	7.26	None
TSS (mg/l)	100	100		10.81	4.87	
BOD (mg/l)	30	30		7.98	2.29	
COD (mg/l)	--	250		33.50	6.33	
O & G (mg/l)	--	10		<1.4	1.67	
Fecal Coliform (MPN/100ml)	1000	--		399.17	--	
TDS (mg/l)	--	2100		--	32.92	
Fluoride (mg/l)	--	1.5		--	0.22	
Chromium Hexavalent (as Cr ⁺⁶) (mg/l)	--	0.1		--	<0.01	
Cyanide (as CN) (mg/l)	--	0.2		--	<0.01	
Free Ammonium (as NH ₃) (mg/l)	--	5.0		--	0.44	

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 ³	Percentage of variation from prescribed standards with reasons
	HRM Stack	50 mg/Nm ³			
PM	HRM Stack	50 mg/Nm ³	9.60 Kg/Day	9.67 mg/Nm ³	--
	HFM Stack	50 mg/Nm ³	7.85 kg/Day	10.25 mg/Nm ³	--
	CRM Stack	50 mg/Nm ³	15.58 Kg/Day	9.67 mg/Nm ³	--

PART-D**Hazardous Wastes**

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

D-1: From Process (Generation)

Hazardous Waste		Total Quantity in Tons	
Name	Category of Schedule-I	During previous financial year 2018-19	During current financial year 2019-20
Waste Fullers Earth (Contaminated with Oil)	4.5	59.94 Tons	60.42 Tons
Used Oil	5.1	37.30 KL (Approx. 32.53 Tons)	30.40 Tons
Waste Oil	5.2	43.672 Tons	207.54 Tons
Waste Filter Paper and Other waste Contaminated with Oil	5.2	50.95 Tons	22.12 Tons
Discarded Containers	33.1	906 Nos. (Approx.16.42 Tons)	23.13 Tons
Oil Soaked Jute/Cloth/Gloves	33.3	-----	10.20 Tons

D-2: From Pollution Control Facilities (Generation)

Hazardous Waste		Total Quantity in Tons	
Name	Category of Schedule-I	During previous financial year 2018-19	During current financial year 2019-20
Chemical Sludge from ETP	35.3	177.95 Tons	149.36 Tons
Oil and Grease Skimming Residue from ETP	35.4	230.38 Tons	86.15 Tons

PART-E
Solid Wastes

E-1: Generation from Process

Name	Total Quantity in (MT)	
	During the previous financial year 2018-19	During the current financial year 2019-20
Rejected aluminum scrap	48460	45378

E-2: Generation from Pollution Control Facilities

Name	Total Quantity in (MT)	
	During the previous financial year 2018-19	During the current financial year 2019-20
	None	None

E-3: Quantity Recycled/ Reutilized within the Unit

Name	Total Quantity in (MT)	
	During the previous financial year 2018-19	During the current financial year 2019-20
Rejected aluminum scrap	48460	45378

E-4: Quantity Sold

Name	Total Quantity in (MT)	
	During the previous financial year 2018-19	During the current financial year 2019-20
Rejected aluminum scrap	None	None

E-5: Quantity Disposed

Name	Total Quantity in (MT)	
	During the previous financial year 2018-19	During the current financial year 2019-20
Rejected aluminum scrap	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

G-1: Cost Estimation of Pollution Control		
Description	Expenditure during 2018-19	Expenditure during 2019-20
1. Water & Air Pollution	Rs. 65,24,699	Rs. 70,67,147
2. Solid & Hazardous Waste Management	Rs. 1,97,07,064	Rs. 67,82,522
3. Green Belt Development	Rs. 14,01,457	Rs. 15,27,299
4. Environmental Training and event	Rs. 39,971	Rs. 53,172
5. Environment Monitoring	Rs. 7,76,978	Rs. 37,35,352
Total	Rs. 284,50,169	Rs. 191,65,493
G-2: Total Production cost	Rs. 239,10,40,495	Rs. 302,89,20,077
G-3: Percentage expenditure on pollution control of total production cost	1.19 %	0.63 %

PART-H

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

H-1: Air & Water Pollution			
Description	Purpose	Estimation Cost	Year of Installation
Upgradation of ETP integrated RO	To Optimize the Waste Water Treatment	150 Lakhs	2020--21
Staircase for all stacks	To easy & safe access for Stack monitoring	75 Lakhs	2020—21
H-2: Waste Management			
Description	Purpose	Estimation Cost	Year of Installation
Construction of Waste Storage Yard	To Segregate and storage of Solid Waste	35 Lakhs	2020--21
H-3: Greenbelt Development			
Description	Purpose	Estimation Cost	Year of Installation
Plantation	Plantation inside and outside of the plant	5 Lakhs	2019--21

PART-I

Any other particulars for improving the quality of environment
<ul style="list-style-type: none">We have planted 3464 nos. sapling at our premises as well as outside of plant including SchoolWe have installed Filter Press at ETP.

“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”



Plantation in the Greater Sambalpur Colony

“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”



Plantation in Sainik School, Gosala Chipilma Road Sambalpur

“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”



Plantation near Kalpatru Seba Ashram, Hirakud Sambalpur

“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”



Plantation near Kalpatru Seba Ashram, Hirakud Sambalpur

“PHOTOGRAPHS OF PLANTATION AND SEEDING DISTRIBUTION”



Plantation inside the Plant Premises



Free Seedling Distribution

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



001

FROST & SULLIVAN

teri



SUSTAINABILITY
4.0 AWARDS

PURPOSE PARTNERSHIP PLANET PEOPLE



2019

FROST & SULLIVAN



Sustainability 4.0 Awards

Certificate of Merit - Challengers Category

Presented to

Hindalco Industries Limited

Hirakud FRP

A handwritten signature in black ink, appearing to read "Aroop Zutshi", is positioned above a horizontal line.

Aroop Zutshi
GLOBAL PRESIDENT &
MANAGING PARTNER

A handwritten signature in black ink, appearing to read "Ajay Mathur", is positioned above a horizontal line.

Dr. Ajay Mathur
DIRECTOR GENERAL
TERI

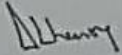


**8th FICCI SAFETY SYSTEMS EXCELLENCE AWARDS
FOR INDUSTRY 2019**

Certificate of Appreciation for Good Practices in Safety Systems

Presented to

Hindalco Industries Limited
Hirakud FRP


Dilip Chenoy
Secretary General

September 26, 2019 - New Delhi



IIM

Metallurgy
Materials Engineering

IIM Non-Ferrous Best Performance Award
2018-19

SECONDARY PROCESSING / FABRICATION PLANTS

Winner: Hindalco Industries Ltd., HIRAKUD, FRP

In recognition of best quality services & thin-gauge tight tolerance products offered, focussing on higher plateau in terms of capability, high-technology & high quality assurance, low cost and profitability in terms of Rs./MT; & also emphasizing on environmental performances during the year under review.

Secretary General

14th November, 2019

Hotel Samudra [KTDC] & Hotel Uday Samudra,
Kovalam, Thiruvanthapuram

President