



Letter No.: -HIL/ESR/GP-IV/4/ 290

Date: 21.08.2018

The Regional Director,
Ministry of Environment & Forests (MoEF)
Regional Office, Western Region,
Ground Floor, New Secretariate Building,
Civil Line, Nagpur (M.S.)

Sub.: Submission of Environmental Statement Report for the Financial Year 2017-18 of
Gare Palma IV/4 Coal Mine, Banjikhoh, Tamnar, Raigarh (C.G.).

Ref.

1. Environment Clearance No. J-11015/ 183/2010-IA.II (M) Dated: - 16th April 2015.
2. Environment Clearance No. J-11015/ 183/2010-IA.II (M) Dated: - 12th March 2013.

Sir,

With reference to subject matter on referred letter, we are submitting the Environmental Statement Report along with Environmental Monitoring report for Ambient Air & Water during the period of 1st April -2017 to 31st March 2018.

This is for your kind information please.

Thanking you,

Yours faithfully,
For Hindalco Industries Limited,


(Dipesh Bhatia)
Vice President- Mine



Encl. : Environmental Statement Report as Annexure-A.

CC To:

1. The Member Secretary, Chhattisgarh Environment Conservation Board, Housing Board Colony, Kabir Nagar, Raipur Chhattisgarh.
2. Zonal Officer, Central Pollution Control Board, Sahkar Bhawan, 3rd Floor, North T.T. Nagar, Bhopal - 462 003 (M. P.)
3. Regional Officer, Chhattisgarh Environment Conservation Board (CECB), T.V. Tower Road, Raigarh (C.G.)

Hindalco Industries Limited

Gare Palma Mines (IV/4 & IV/5), Vill & Po: Milupara , Tehsil: Tamnar Dist: Raigarh- 496107 , Chhattisgarh
T: +91 7762 228212, Website : www.hindalco.com E mail : hindalco@adityabirla.com
Registered Office : Ahura Centre, 1st Floor, B Wing, Mahakali Caves Road Andheri (East) , Mumbai 400093, India
T: + 912266917000 | Fax: + 912266917001
Corporate ID No: L27020MH1958PLC011238

FORM V
(See rule 14)

Environmental Statement for the financial year 1st April -2017 to 31st March 2018.

PART A

(i)	Name and address of the owner/occupier of the industry operation or process.	Hindalco Industries Limited (Gare Palma IV/4 Coalmine) Village – Banjikhoh, Kondel, Bankheta, Beljor, Daungamahua, Tehsil – Tamnar, Dist – Raigarh – 496007 (C.G.)
(ii)	Industry category Primary – (STC Code) Secondary - (STC Code)	Primary.
(iii)	Production Capacity – Units -	Coal – 1.0 MTPA
(iv)	Year of establishment	Coal Mine transfer to HIL vide vesting order no. 104/16/2015/NA dated 23rd March 2015, the EUP are as follow. 1. CPP (900 MW) , Lapanga, Sambalpur, Odisha 2. CPP (467.5 MW) , Hirakud, Sambalpur, Odisha
(v)	Date of the last environmental statement submitted	15.09.2017

PART B

(1) Water consumption M3/d

(i)	Process	95 M³/day
(ii)	Cooling	
(iii)	Domestic	10 M³/day
	Total	105 M³/day

S.No.	Name of Product	Process water consumption per unit of product output	
		During the Previous financial year	During the current financial year
(1)	Coal	-	105 M³/day

This is a coal mine and there is no processing/cleaning of coal is being done.



(2) Raw material consumption

No.	* Name of Raw material	Name of product	Consumption of raw material per unit	
			During the Previous financial year	During the current financial year
1.	Coal mining	Coal	-	-

Industry may use codes in disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw material used. **This is a Captive coal mine.**

PART C

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

S. No.	Pollution	Quantity of pollutants discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
1	Water	-		None. Water quality analysis Report enclosed as annexure -1
2	Air (ug/m ³)	-	-	None. Air quality monitoring report enclosed as annexure -2

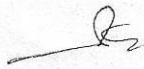
We are providing treated mine seepage water to the nearby villages for drinking, domestic and irrigation purposes etc.

PART D

Hazardous Wastes

(As specified under Hazardous Wastes (Management and Handling Rules 1989))

S. No.	Hazardous Wastes	Total Quantity (kg)	
		During the previous financial year	During the current financial year



PART H

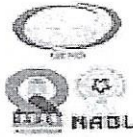
Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.	For strengthening of environmental protection measures like water pollution control measure, water sprinkling, plantation etc. of an expenses Rs. 37, 68, 022.00 have been incurred in this financial year. The expenditure details enclosed as annexure-
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PART I

Any other particulars for improving the quality of the environment	<p>Company have planted about 59000 saplings in mines area. Company have further plan for phase wise plantation in available open place in next coming years. Company is providing safety training to all working staff before assignment of job in V.T. Center that is established by the company. Personal Protective equipment's- Like Nose mask, Helmet. Earmuff etc. have been provided to all workers that are working in mines.</p> <p>To avoid fugitive dust emission water sprinkling on road is being done. Company have provided noise protective equipments – earplug & ear muff for all worker. Under CSR the 261 nos. toilets under Swachh Bharat Mission have been Constructed in nearby villages. The Expenditure detail on CSR is enclosed as annexure -</p>
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Result of Treated Water Quality Analysis
(ETP Treated Water)



GLOBAL ENVIRONMENT & MINING SERVICES
(Consulting Engineers, Mine designers, Geologist & Surveyors)

3rd Main Road, Basaveswara Badavane,
HOSPET - 583201, Dist., Bellary (Karnataka)

Ph : +918394 229433, 651111
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Website : globalmining.in

Effluent Sample Analysis Report

TEST REPORT			
Report No.:	GEMS/TR/17-18/1960		Date: 03.11.2017
Name and Address of Customer	Hindalco Industries Limited, Gare Plasma - 1V/4, Coal Mine, Village - Bankheta, Post - Milupara, Distt. - Raichur (C.G.) 496 107.		
Order / Reference:	N/PO/SRW/1718/0115, dtd. 02.08.2017		
Sample Drawn By	Laboratory	Date of Sampling	16.10.2017
Sample Received On	18.10.2017		
Start of Analysis	18.10.2017	End of Analysis	24.10.2017
Monitoring for	Effluent Water		
Sampling Location	ETP Outlet		
Sampling Procedure	IS: 3025 (Part 1): 1987 RA 2003; APHA 22 nd Ed. 2012, 1060-B, 1-39		
Sample Quantity/Packing	5 L X 1 No. PVC Can 1 L X 1 No. Glass Bottle		

Sr. No.	Parameter	Unit	Result	The Environment (Protection) Rules, 1986 (SCHEDULE-VI) PART-A Inland Surface Water	Method Reference
1	Colour and Odour	Hazen & -	Absent	See 6 of Annexure-I	APHA 22 nd Ed. 2012, 2120-B, 2-6
2	Temperature	°C	27.4	Shall not exceed 5°C above the receiving water temperature	APHA 22 nd Ed. 2012, 2130-B, 2-13
3	pH	-	7.56	5.5 to 9.0	APHA 22 nd Ed. 2012, 4500-H ⁺ -B, 4-92
4	Total Residual Chlorine	mg/Lit	N.D.	1.0	APHA 22 nd Ed. 2012, 4500-Cl-G, 4 - 69
5	Total Suspended Solids	mg/Lit	21	100	APHA 22 nd Ed. 2012, 2540-D, 2-66
6	Dissolved Phosphate (as P)	mg/Lit	N.D.	5.0	APHA 22 nd Ed. 2012, 4500-P-C, 4-153
7	Fluoride (as F)	mg/Lit	0.29	2.0	APHA 22 nd Ed. 2012, 4500-F-B & D, 4-64 & 67
8	Lead (as Pb)	mg/Lit	N.D.	0.1	APHA 22 nd Ed. 2012, 3111-B, 3-18
9	Zinc (as Zn)	mg/Lit	N.D.	5.0	APHA 22 nd Ed. 2012, 3111-B, 3-18
10	Copper (as Cu)	mg/Lit	N.D.	3.0	APHA 22 nd Ed. 2012, 3111-B, 3-18
11	Cadmium (as Cd)	mg/Lit	N.D.	2.0	APHA 22 nd Ed. 2012, 3500-Cd, 3-105



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Report No. 1960 Cont....

Sr. No.	Parameter	Unit	Result	The Environment (Protection) Rules, 1986 (SCHEDULE-VI) PART-A Inland Surface Water	Method Reference
12	Mercury (as Hg)	mg/Lit	N.D.	0.01	APHA 22 nd Ed.2012,3112-B, 3-23
13	Arsenic (as As)	mg/Lit	N.D.	0.2	APHA 22 nd Ed.2012,3114-C, 3-38
14	Selenium (as Se)	mg/Lit	N.D.	0.05	APHA 22 nd Ed.2012,3114-C, 3-38
15	Total Chromium (as Cr)	mg/Lit	N.D.	2.0	APHA 22 nd Ed.2012,3500-Cr-B, 3-69
16	Chemical Oxygen Demand (COD)	mg/Lit	32.4	250	APHA 22 nd Ed.2012, 5520-B, 5-17
17	Biochemical Oxygen Demand (BOD)	mg/Lit	6.8	30	IS 3025 (Part 44):1993, RA 2003
18	Oil & Grease	mg/Lit	N.D.	10	IS 3025 (Part 39):1991, RA 2003, Ed 2.1
19	Phenolic Compounds (as C ₆ H ₅ OH)	mg/Lit	N.D.	1.0	IS 3025 (Part 43):1992, RA 2003

Remarks: N.D.- Not Detected

For Global Environment & Mining Services

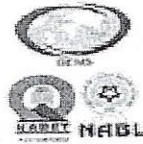
S. N. Gulbana
Chief (Laboratory)



Note:

1. The result refers only to the named sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

Results of Ambient Air Quality Monitoring


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Website : globmining.in

Ambient Air Quality Monitoring Report

TEST REPORT			
Report No.: GEMS/TR/17-18/1952			Date: 03.11.2017
Name and Address of Customer	Hindalco Industries Limited, Gare Plasma - IV/4, Coal Mine, Village - Bankheta, Post - Milupara, Distt. - Raigarh (C.G.) 496 107.		
Order /Reference:	N/PO/SRV/1718/0115, dtd. 02.08.2017		
Sample Drawn By	Laboratory	Date of Sampling	25.10.2017
Sample Received On	27.10.2017		
Start of Analysis	27.10.2017	End of Analysis	01.11.2017
Monitoring for	Ambient Air Quality Monitoring		
Sampling Location	ETP Area, Banjikhoh		
Sampling Procedure	As per method reference		
Sample Quantity/Packing	Filter Paper (PM10 & Hg): 1X1 No., Filter Paper (PM2.5): 1X1 No. SO ₂ : 30mLX1 No. PVC Bottle, NO ₂ : 30mLX1 No. PVC Bottle Rubber Bladder: 1X1 No.		

Meteorological Data/ Environmental Conditions					
Avg. Wind Velocity	Prominent Wind Direction	Relative Humidity (%)		Temperature (°C)	
		Max.	Min.	Max.	Min.
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Location	Near ETP	Duration of Sampling		24 Hours	
Parameter	Unit	Result	NAAQM Standard	Method Reference	
Particulate Matter size less than 10 microns (PM10)	µg/m ³	65	100	IS 5182 (Part 23): 2006 & CPCB Guidelines Vol.-I	
Particulate Matter size less than 2.5 microns (PM2.5)	µg/m ³	27	60	Instrument Manufacturer Operating Instructions.	
Sulphur Dioxide (SO ₂)	µg/m ³	19	80	IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines Vol.-I	
Nitrogen Dioxide (NO ₂)	µg/m ³	24	80	IS 5182 (Part 6): 2006 & CPCB Guidelines Vol.-I	
Carbon Monoxide (CO)*	mg/m ³	2.3	4.0	IS 5182(Part 10):1999, RA 2003	
Arsenic as As	ng/m ³	N.D.	6	EPA Method IO-3.2	
Nickel as Ni	ng/m ³	N.D.	20	EPA Method IO-3.2	
Mercury as Hg	ng/m ³	N.D.	-	EPA Method IO-5	
Cadmium as Cd	ng/m ³	N.D.	-	EPA Method IO-3.2	
Chromium as Cr	ng/m ³	N.D.	-	EPA Method IO-3.2	
Remarks: * Except CO, all results are on the basis of 24 hour sampling., N.D. - Not Detected					

For Global Environment & Mining Services

 S. N. Gulhane
 Chief (Laboratory)


NOTE:

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Plantation Detail of Gare-Palma IV/4 Coal Mines

Sl. No.	Nos. of saplings	Plantation area in Acre	Total Numbers	Survival Rate (Approx.)
1	<i>Neem, Harra, Mahua, , Jamun, Mango, Imlı, Gular, Bargad, Pipal, Ficus sp. Drumstick, Teak, Shivan/Ghamar, Sisham, Sirus, Bamboo, Peltafarm, etc.</i>	Coal mine lease area/OB Dump.	59000 (Approx.)	90%

CSR -Activity Wise Details FY-2017-18

M/s Hindalco Industries Limited , Gare Palma Mines IV/4	
CSR -Activity Wise Details FY-2017-18	
Focus Areas/Project Activities	Summary Costs (Lakhs)
Education	29.82
Health & Sanitation	7.79
Sustainable Livelihood	0.23
Infra-structure	40.96
Social	39.77
Total (Rs.)	118.57



Environmental Expenditure Details
(Financial Year 2017-18)

S. No.	Particulars	Amount (Rs.)
1	Environmental expenses including plantation	497195
2	Environment monitoring expenses	322710
3	Settling pond stone pitching	651072
4	Chemical dosing shed for ETP	151545
5	Truck mounted water tanker for sprinkling	960000
6	Fixed type water sprinklers	35000
7	Dump slope stability report	1150500
	Total Rs.	3768022

