

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION**

**MCDR inspection REPORT
Ranchi regional office**

Mine file No : BIH/LOH/BX/246/RR0

Mine code : 07JHK12006

- (i) Name of the Inspecting : **S011**) **SALIL SANDIP KUJUR**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Prateek Gupta, AVP
Official with
Designation
- (iv) Date of Inspection : 12/09/2022
- (v) Prev.inspection date : 17/08/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHUSAR & KEKRANG**
- (b) **Registration NO.** : **IBM/935/2011**
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : JHARKHAND
- District : LOHARDAGA
- Village : BHUSAR
- Taluka : BAGRU
- Post office : BAGRU
- Pin Code : 835302
- FAX No. : 06526-24049
- E-mail : bijesh.jha@adityabirla.com
- Phone : 06526-24161
- (f) **Police Station** : KISK0
- (g) **First opening date** : 05/04/1978
- (h) **Weekly day of rest** : FRI
2. **Address for correspondance** : VILL.-BHUSAR & KEKRANG,
P.O.- BAGRU HILL
DISTT.-LOHARDAGA (JHK)
3. (a) **Lease Number** : BHR0265
- (b) **Lease area** : 65.28
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 31/03/2030
4. **Mineral worked** : BAUXITE Main

5. Name and Address of the

Lessee : M/S HINDALCO INDUSTRIES LTD.
COURT ROAD, LOHARDAGA,
LOHARDAGA JHARKHAND
Phone: 06526 - 224012 & 224118
FAX : 06526-224112, 224016 & 0651- 2330782

Owner : A.K. AGRAWAL
M/s HINDAL INDUSTRIES Ltd.,
PO - RENUKOOT, UTTAR
PRADESH- 231217 SONBHADRA
UTTAR PRADESH
Phone: 05446-252084, 2
FAX : 05446-252107

Agent : Prateek Kumar
Hindalco Ind. Ltd. Court
Road Lohardaga LOHARDAGA
JHARKHAND
Phone: 7738368627
FAX :

Mining Engineer

Name : SHRI PRADEEP KUMAR, Full Time
Qualification : B. TECH (MINING)
Appointment/ : 03/09/2013 30/07/2019
Termination date

Mining Engineer

Name : Akhilesh Kumar Sinha, Full Time
Qualification : B.Tech. (Mining)
Appointment/ : 01/08/2019
Termination date

Geologist

Name : VICTOR BASU, Full Time
Qualification : M.Sc(Geology)
Appointment/ : 26/11/2013
Termination date

6. Date of approval of Mining	:	Renewal under rule 24 MCR1960	27/03/1996
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	25/07/2007
	:	Modif.of approved Mining Plan	11/10/2010
	:	Mining Scheme rule 12 MCDR1988	22/12/2011
	:	MP modif under MCR 1960	31/05/2016
	:	MP modif under 17(3) MCR 2016	29/07/2019
	:	MP review under 17(1) MCR 2016	16/10/2020
	:	MP modif under 17(3) MCR 2016	22/04/2022

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	nil	nil	
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	All area is explored as per MEMC rule.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	nil	nil	nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	na	nil	nil
1e	Balance reserve as on 01/04/20	1256640 (Ton) Under III	1496428 (Ton) Under III	nil
1f	General remarks of inspecting officers on geology, exploration etc	nil	nil	All area is explored as per MEMC rule.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	A2	A2	nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Soil-1, H-6mtr O.B.- 2, H-6mtr Ore-2, H-6mtr	Soil-1, H-3.5 mtr O.B.- 2, H-4.5 mtr Ore-2, H-3.5 mtr	Width observed is less than the proposal. Violation issued.
2c	Stripping ratio or ore to OB ratio	1:0.46	1:0.30	nil
2d	Quantity of topsoil generation in m3	15782 m3	15080.47 m3	nil
2e	Quantity of overburden generation in m3	68115 m3	62837.68 m3	nil

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	nil	nil	nil
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	As per mining plan
3b	Quantity of ROM mineral production proposed	139033 (cum)	68405.47 (cum)	Violation issued for less production.
3c	Recovery of sailable/usable mineral from ROM production	279457 (Tonne)	137495 (Tonne)	As per Approved Mining Scheme.
3d	Quantity of mineral reject generation	15448 (Tonne)	20623 (Tonne)	nil
3e	Grade of mineral rejects generation and threshold value declared.	nil	Al2O3 - 27.7%	<30% Al2O3 ≥7% SiO2
3f	Quantity of sub grade mineral generation.	nil	nil	nil
3g	Grade of sub grade mineral generation	nil	nil	nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Shovel Dumper Air Compressor Crusher	Mechanized Shovel Dumper Air Compressor Crusher	nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	nil	nil	nil
3j	Provision of drilling and blasting in mineral benches	Regulation 106(2), 100 mm dia drilled by Crawler Mounted Drill	Regulation 106(2), 100 mm dia drilled by Crawler Mounted Drill	nil

3k	Provision of mining machineries in mineral benches	As per Regulation 1961	As per Regulation 1961	nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Soil- 1, H- 6 mtr O.B.- 2, H- 6 mtr Ore- 2, H- 6 mtr	Soil- 1, H- 3.5 mtr O.B.- 2, H- 4.5 mtr Ore- 2, H- 3.5 mtr	Bench Height is less than 6 mtr.
3m	Total area covered under excavation/pits	2.65 Ha.	1.10 Ha.	Upto Feb. 2022
3n	Ore to OB ratio for the pit/mine during the year.	1:0.24	1:0.30	nil
3o	Total area put in use under different heads at the end of year	59.75 Ha.	56.775 Ha.	nil
3p	Production of ROM mineral during the last five year period as applicable	2017-18 = 278190 2018-19= 278595 2019-20= 279019 2020-21= 278743 2021-22= 279457	2017-18 = 108666 2018-19= 190078 2019-20= 5093 2020-21= 38757 2021-22= 137495	Total Production (Actual)= 480089.00 (Tonne)
3q	General remarks of inspecting officers on method of mining etc.	nil	nil	nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	nil	nil	nil
4b	Location of topsoil, OB and mineral reject dumps	nil	nil	nil

4c	Number of dumps within lease area and outside of lease area	2	2	nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	N 1726 - 1815 E 1372 - 1440 E1656 - 1742E 1086-1193	N 1726 - 1815 E 1372 - 1440 E1656 - 1742E 1086-1193	Two numbers of Stabilized Dumps
4e	Number of active and alive dumps.	nil	nil	nil
4f	Number of dead dumps.	nil	nil	nil
4g	Number of dumps established.	2	2	nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes	nil
4i	Length of Retaining wall or garland drain all along dumps	nil	120m x 90m x 180m x 80m x 1	Stabilized OB dump
4j	Number of settling ponds	1	1	nil
4k	Specific comments of inspecting officer on waste dump management	nil	nil	nil

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	nil	nil	nil
5b	Area under backfilling of mined out area	1.28 Ha.	0.535 Ha.	As per Approved Mining Scheme
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	For Reclamation & Rehabilitation	For Reclamation & Rehabilitation	Plantation

5d	Total area fully reclaimed and rehabilitated	39.215 Ha.	42.593 Ha.	nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	nil	nil	nil

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Yes	nil
6b	Area available for rehabilitation (ha) .	nil	nil	nil
6c	afforestation done (ha).	1.14 Ha.	0.70 Ha.	nil
6d	No. of saplings planted during the year	2850	2970	nil
6e	Cumulative no .of plants	nil	121248	nil
6f	Any other method of rehabilitation	nil	nil	nil
6g	Cost incurred on watch and care during the year	nil	Rs.- 133722.00/-	nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	95m x 92m x 12m (1.14 Ha.)	50m x 30m x 7m (0.535 Ha.)	nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	147m x 77m x 10m 144x38x10m	110m x 30m x 10m 50m x 30m x 7m	nil

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on on backfilled area	1.14 Ha./ 2850	0.535 Ha./2970	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	nil	nil	Already existing one Reservoir.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	nil	nil	nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	1.14 Ha./ 2850	0.535 Ha./ 2970	nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	1.14 Ha.	0.535 Ha.	nil
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Plantation	Plantation	nil
6p	Compliance of environmental monitoring (core zone and buffer zone)	Air, Water, Noise Monitoring	Air, Water, Noise Monitoring done Quaterly	cost Rs.- 1339353/-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	nil	nil	nil

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	nil	nil	Simultaneously blend with high grade.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	nil	nil	nil
7c	Different grade of mineral sorted out at mines.	nil	nil	nil
7d	Any beneficiation process at mines .	nil	nil	nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	nil	nil	nil

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Continous spreading over backfilled area	Continous spreading over backfilled area	nil
8b	Concurrent use or storage of topsoil	nil	nil	nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	nil	nil	nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent Backfilling	Concurrent Backfilling	nil

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	N/A	N/A	nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2850 sapling	2970 sapling	As per approved Mining Scheme.
8g	Survival rate	80%	80%	nil
8h	Water sprinkling on roads to control airborne dust	Regular sprinkling with water tanker	Regular sprinkling with water tanker	nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	nil	nil	nil

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	Submitted on time	nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engg.- Pradeep Kumar Geologist - Victor Basu Manager - Raj Kumar Sinha	nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	59.75 Ha.	61.60 Ha.	nil
9d	Scrutiny of Annual return on afforestation	1.14 Ha./ 2850 plant	0.535 Ha./2970 plant	nil

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	Al2O3- 27.7% 20624.25 tonne	nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	279457 Tone	ROM - 137495 (Tone) Al2O3 - 42.57 SiO2 - 4.10	nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Ex-Mine Price - Rs. = 1164.06	nil
9h	Scrutiny of Annual return on fixed assets	Yes	Rs.= 219099291	nil
9k	Scrutiny of Annual return on mining machineries	Yes	As per approved mining plan	nil

Details of violations observed during current inspection and compliance position of violation pointed out

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	22/09/2022			

Date :
(SALIL SANDIP KUJUR)

Indian Bureau of Mines