

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

Review and updation of Mining Plan REPORT

Ranchi regional office

Mine file No : JHK/LOH/BX/248/RRO

Mine code : 07JHK12009

- (i) Name of the Inspecting : P002) PHILLIP HAPADGARA
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Prateek Kumar, Agent & Shri Tapas Gachhayat, Geo
Official with
Designation
- (iv) Date of Inspection : 31/08/2023
- (v) Prev.inspection date : 20/01/2020

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : HISRI EXTENSION (19.58 H)
- (b) **Registration NO.** : IBM/935/2011
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : JHARKHAND
- District : LOHARDAGA
- Village : HISRI
- Taluka : LOHARDAGA
- Post office :
- Pin Code :
- FAX No. : 033-22883964
- E-mail : N.A.
- Phone : 06526-295526/27, 294611,
- (f) **Police Station** : KISKO
- (g) **First opening date** : 10/10/1951
- (h) **Weekly day of rest** : FRI
2. **Address for correspondance** : VILL.- HISRI,
P.O.- BAGRU HILL,
DISTT.- LOHARDAGA (JHK)
3. (a) **Lease Number** : BHR0266
- (b) **Lease area** : 14.55
- (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.
 AT - COURT ROAD,
 LOHARDAGA, LOHARDAGA
 JHARKHAND
 Phone:06526-22401112, 224446 & 224016.
 FAX :06526-224112 & 224445

Owner : A.K AGRAWAL
 M/S HINDALCO INDUSTRIES
 LTD. CENTURY BHAWAN, 3rd
 FLOOR, Dr. ANNIE BASANT
 ROAD, WORLY, MUMBAI (MH
 KOLKATA WEST BENGAL
 Phone:
 FAX :

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

Mining Engineer

Name : TARINI GAUTAM, Full Time
 Qualification : B. Tech. (Mining)
 Appointment/ : 08/05/2021
 Termination date

Geologist

Name : BASUDEV GANGOPADHYAY, Full Time
 Qualification : M.TECH (APPLIED GEOLOGY), I.S.M. DHANBAD
 Appointment/ : 01/11/2017
 Termination date

Manager

Name : AJAY KUMAR PANDEY
 Qualification : B.E. (MINING), ISM, DHANBAD
 Appointment/ : 28/08/2014
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	13/01/1994
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	18/12/1995
		Renewal under rule 24 MCR1960	20/05/2006
		Mining Scheme rule 12 MCDR1988	06/10/2010
		Modif.of approved Mining Plan	06/10/2010
		FMCP under 23C(1)	05/08/2014
		MP modif under MCR 1960	23/12/2015
		MP review under 17(1) MCR 2016	19/03/2020

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	nil	nil	lease is explored upto G1 level
1b	Exploration over lease area for geological axis 1 or 2	no such proposal	nil	lease is explored upto G1 level
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NA	nil	nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	no such proposal	nil	lease is explored upto G1 level
1e	Balance reserve as on 01/04/20	717463 Tonne (111)	717479 Tonne (111)	nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	entire potential area is explored up to G1 level.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Quarry -1	Quarry -1	nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Soil & Morrum- 1 Laterite-2mtr OB - 2 H- 3.97 Ore-2 H - 4.9mtr	Soil &Morrum- 1 H-1.5mtr OB - 2 H-2.5 mtr Ore-2 H - 3.5 mtr	separated benches maintained in topsoil, overburden and mineral.
2c	Stripping ratio or ore to OB ratio	1:0.63	1:0.90	nil
2d	Quantity of topsoil generation in m3	13239.00 cum	27071.92 cum	topsoil generation is more as thickness is more than expected.
2e	Quantity of overburden generation in m3	62634 cum	89772.64 cum	thickness of overburden is more than expected and Lean ore body.

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	Separate benches maintained in top soil, overburden and mineral. Generation of topsoil and overburden is more than expected.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	One	nil
3b	Quantity of ROM mineral production proposed	49341.79 (Cum)	49154.22 (Cum)	nil
3c	Recovery of sailable/usable mineral from ROM production	99177 T	98800 T	nil
3d	Quantity of mineral reject generation	5482 cum	nil	no reject generation during the year.
3e	Grade of mineral rejects generation and threshold value declared.	Al2O3 < 30 %	nil	no reject generation
3f	Quantity of sub grade mineral generation.	no such proposal	nil	nil
3g	Grade of sub grade mineral generation	NA	nil	nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized (shovel-2 Dumper-3 Air Compressor-1 Crusher-2)	Mechanized (shovel-2 Dumper-3 Air Compressor-1 Crusher-2)	nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	no such proposal	nil	nl

3j	Provision of drilling and blasting in mineral benches	100 mm dia drilled	100 mm dia drilled by Crawler Mounted Drill	nil
3k	Provision of mining machineries in mineral benches	HEMM	HEMM	nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Soil & Morrum-1 Laterite-2 OB - 2 H- 3.97 mtr Ore-2 H - 4.9mtr	Soil - 1 H-1.5mtr OB - 2 H-2.5 mtr Ore-2 H - 3.5 mtr	height of benches in overburden and mineral suitable for method of mining
3m	Total area covered under excavation/pits	8.31 Ha (including reclaimed area)	7.43 ha (including reclaimed area)	nil
3n	Ore to OB ratio for the pit/mine during the year.	1:0.63	1:0.90	nil
3o	Total area put in use under different heads at the end of year	8.43 Ha	7.63 Ha	nil
3p	Production of ROM mineral during the last five year period as applicable	2016-17 : 99316 T 2017-18: 99904 T 2018-19: 99026 T 2019-20: 99458 T 2022-23: 99014 T	2016-17: 98608 T 2017-18: 9001 T 2018-19: 90674 T 2019-20: 22162 T 2022-23: 98998 T	nil
3q	General remarks of inspecting officers on method of mining etc.	-	-	Method of mining is opencast, provision of drilling and blasting and deployment of mining machineries.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No such proposal	nil	nil
4b	Location of topsoil, OB and mineral reject dumps	NA	nil	nil
4c	Number of dumps within lease area and outside of lease area	no such proposal	nil	nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	no such proposal	nil	nil
4e	Number of active and alive dumps.	nil	nil	nil
4f	Number of dead dumps.	nil	nil	nil
4g	Number of dumps established.	nil	nil	nil
4h	Whether Retaining wall or garland drain all along dumps are there.	no such proposal	nil	no dump existed inside lease hence no such proposal made.
4i	Length of Retaining wall or garland drain all along dumps	no such proposal	nil	nil
4j	Number of settling ponds	no such proposal	nil	nil
4k	Specific comments of inspecting officer on waste dump management	-	-	Provision of dump is not on proposal. However, concurrent backfilling of mined out pits is proposal as well as in practice.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Full extraction of mineral before backfilling	As per the proposal	nil
5b	Area under backfilling of mined out area	0.74Ha	0.73 ha	nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use of topsoil	Concurrent use of topsoil	nil
5d	Total area fully reclaimed and rehabilitated	3.75 Ha	5.34Ha	nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Concurrent backfilling of mined out area is in proposal as well as in practice.

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) .	0.74Ha	0.73 ha	nil
6c	afforestation done (ha).	0.71 ha	0.70 ha	
6d	No. of saplings planted during the year	800 nos on backfilled area	2150 nos in total inside lease area	nil
6e	Cumulative no .of plants	-	17321 nos	nil
6f	Any other method of rehabilitation	Nos such proposal	nil	nil

6g	Cost incurred on watch and care during the year	-	Rs: 250320.00/-	nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	81mx61mx8m	81mx61mx8m	nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	no proposal	130x54x4 cum	nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	0.71ha	0.70 ha	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	nil	nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	nil	nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.74 Ha	0.73Ha	nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.74 Ha	0.73Ha	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 quartely	nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	Concurrent backfilling of mined out area is in proposal as well as in practice.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No such proposal	nil	Mined out minerasl are all dispatch
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No such proposal at mine	nil	nil
7c	Different grade of mineral sorted out at mines.	No such proposal at mine	nil	nil
7d	Any beneficiation process at mines	No such proposal at mine	nil	nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	All mined out minerals are dispatched. There is no provision of grade wise mineral sorting at mine and there no beneficiation plant at mine.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Concurrent spreading over backfilled area	Concurrent spreading over backfilled area	nil
8b	Concurrent use or storage of topsoil	Concurrent Backfilling	Concurrent Backfilling	nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No such proposal	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)	NA	NA	nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	800 nos on backfilled area	2150 nos	nil
8g	Survival rate	80%	80%	nil
8h	Water sprinkling on roads to control airborne dust	water Sprinkling by water tanker	water Sprinkling by water tanker	nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	Top of hill is devoid of vegetation whereas sal vegetation on slope.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Timely submission of returns	Timely submission of returns	nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Raj Sinha Geologist-Shri Basudev Gangopadhyay	Information found correct	nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited and abandoned by opencast (O-C) mining: 6.718 ha, Covered under current (O-C) Workings: 0.72 ha, Reclaimed-rehabilitated: 5.342ha, utility: 0.2ha,	Information seems to be correct	nil
9d	Scrutiny of Annual return on afforestation	2150 nos	Information seems to be correct	nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	nil	No reject generated during the year	No reject generated during the year
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock: 0T, Closing Stock: 0T, Production: 98800 T	Information found correct	nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of production: Rs.1266.69/-	Information seems to be correct	nil
9h	Scrutiny of Annual return on fixed assets	Rs. 197204300/-	Information seems to be correct	nil

9k Scrutiny of Shovel (0.9 Information seems to be nil
Annual return on cum): 1 nos, correct
mining Shovel(1.7
machineries cum): 1nos,
 Dumper (25 T):
 3 nos,
 Air compressor
 (450 cum/min):
 1 nos,

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on

Date :

(PHILLIP HAPADGARA)

Indian Bureau of Mines