# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT AND REGULATION DIVISION

#### Review and updation of Mining Plan REPORT

#### Ranchi regional office

Mine file No: BIH/LHD/BX/207/RRO Mine code: 07BHR33003

(i) Name of the Inspecting : K001 ) B.L. KISKU

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine : Tapas Gachchayat, AGM & Mr. Gauri Shanker, Geologist

Official with Designation

(iv) Date of Inspection : 12/10/2023

(v) Prev.inspection date : 26/12/2018

PART-I : GENERAL INFORMATION

1. (a) Mine Name : BAGRU HILL(75.41HCT.)

(b) Registration NO. : IBM/935/2011

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : JHARKHAND
District : LOHARDAGA

Village : BAGRU & BHUSAR

Taluka : LOHARDAGA
Post office : LOHARDAGA

Pin Code

FAX No. : 06526- 224049

E-mail : bijesh.jha@adityabirla.com Phone : 06526- 224161 & 224025

(f) Police Station : KISKO

(g) First opening date : 23/01/1944

(h) Weekly day of rest : FRI

2. Address for : VILL-BAGRU

correspondance BAGRU

DIST-LOHARDAGA,

3. (a) Lease Number : BHR0264 (b) Lease area : 75.41

(b) Lease area • 73.11

(c) Period of lease :

(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 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 : RAJ KUMAR SINHA, Full Time

Qualification : B.E. (Mining)

Appointment/ : Termination date

Mining Engineer

Name : VIDYA SAGAR SINGH, Full Time

Qualification : B.Sc.(MINING)

Appointment/: Termination date

Geologist

Name : Gauri Shankar Prasad, Full Time

Qualification : M.Sc. (Geology)

Appointment/: Termination date

6. Date of approval of Mining : Exist Plan/Scheme of Mining Mining

25/02/1994 : Existing rule 11 MCDR1988 Mining Scheme rule 12 MCDR1988 30/06/2000 Renewal under rule 24 MCR1960 03/05/2005 Modif.of approved Mining Plan 09/11/2010 Mining Scheme rule 12 MCDR1988 21/12/2011 FMCP under 23C(1) 23/05/2013 Mining Scheme rule 12 MCDR1988 16/04/2015 MP review under 17(1) MCR 2016 14/02/2019

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

# Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Mine is closed due to statutory clearances. Mining operation stopped as per letter no. 429/M, dated 09.09.2014 from DMO, Lohardaga.
1b	Exploration over lease area for geological axis 1 or 2	Nil	Nil	Mining operation is stopped for want of statutory clearances.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	N.A.	N.A.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	N.A.	N.A.	Nil
1e	Balance reserve as on 01/04/20	In the approved scheme of mining for the period from 2015-16 to 2018-19, the reserve position is as under: Proved (111) - 433511 MT and remaining resources (211) - 240930 MT.	The mine was not under operation during the year 2014-15 to 2016-17 as per letter dated 9/9/2014 from DMO, Lohardaga. Hence the balance reserve as on 01/10/2018 for Bauxite is as under:  Proved (111) - 433511 MT and remaining resources (211) - 240930 MT.	Nil
1f	General remarks of inspecting officers on geology, exploration etc	Not applicable.	Not applicable.	Mine is not working since Oct., 2018 for statutory clearances.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Not applicable.	Not applicable as mine is closed.	Nil

2b	Separate benches in topsoil, overburden and minerals (Rule 15)		Not applicable.	Nil.
2c	Stripping ratio or ore to OB ratio	1:2.18	Nil	Nil
2d	Quantity of topsoil generation in m3	78585 cum.	Nil	Nil
2e	Quantity of overburden generation in m3	Nil	Nil	Mine is closed since Oct, 2018.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	N.A.	N.A.	Mine is closed due to statutory clearance.

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Quarry-1	Not applicable.	Mine is closed since Oct, 2018.
3b	Quantity of ROM mineral production proposed	76242 MT	Nil	Nil
3с	Recovery of sailable/usable mineral from ROM production	100 MT	Not applicable.	Mine is closed since Oct., 2018
3d	Quantity of mineral reject generation	N.A.	N.A.	Nil
3e	Grade of mineral rejects generation and threshold value declared.	N.A.	N.A.	Nil
3f	Quantity of sub grade mineral generation.	N.A.	N.A.	Nil
3g	Grade of sub grade mineral generation	N.A.	N.A.	Mine is closed since Oct., 2018

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized.	Not working since Oct., 2018	Not working since Oct., 2018
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Nil	N.A.	Nil
3j	Provision of drilling and blasting in mineral benches	100 mm dia drilled by Crawler Mounted Drill [under 106(2)(b) of Regulation, 1961].	Not applicable.	Mine is closed due to statutory clearance.
3k	Provision of mining machineries in mineral benches	Provision of deployment of machinreries i.e., excavators, dumpers, DTH drill machine, compressor and dumpers etc. were proposed in previous mining plan.	Provision of deployment of machinreries i.e., excavators, dumpers, DTH drill machine, compressor and dumpers etc. were practiced in mine as per approved documents.	Mine is closed since, Oct., 2018.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	excavators, dumpers, DTH	Provision of deployment of machinreries i.e., excavators, dumpers, DTH drill machine, compressor and dumpers etc. were practiced in mine as per approved documents.	Mine is closed since, Oct., 2018.
3m	Total area covered under excavation/pits	2.61 ha. (As per previous plan).	N.A.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	1:2.18 (Prev. Plan).	N.A.	Nil

Remarks

30	Total area put in use under different heads at the end of year	from 2015-16 to 2018-19, the area	Mine is not operantional since Oct., 2018. Present land use pattern in forest and non forest area under different heads are:- Quarries inccluding reclaimed area-51.9 ha (20.04 ha Quarry, 1.80 ha Reservoir + 31.86 ha Reclaimed area), road-2.62 ha, Stabilised O.B dump 2.64 ha, top soil dump-1.10 ha, infrastucture-0.61 ha, township-1.0 ha.	Mine is closed due to statutory clearances.
3р	Production of ROM mineral during the last five year period as applicable	2018-19 - 79420 MT, 2019-20 - 81166 MT, 2020-21 - 81506 MT, 2021-22 - 80330 MT, 2022-23 - 76242 MT.	2018-19 - Nil, 2019-20 -Nil, 2020-21 - Nil, 2021-22 - Nil, 2022-23 - Nil.	Mine is closed since October, 2018.
3q	General remarks of inspecting officers on method of mining etc.	Not applicable.	Not applicable.	Mine is not under operantion since Oct., 2018-15. Fully mechanised method of mining has been carried out in the mine.

Propasals Actual work

Solid Waste Management - Dumping:

Sl.No.

Item

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	The OB consists of soil, morrum, hard laterite and quarry waste and lithomerge and mineral rejects are proposed to be utilised for backfilling over the mined out areas. The soil removed during the mining will be utilised for rehabilitation by spreading over backfilled areas.		Nil
4b	Location of topsoil, OB and mineral reject dumps	N.A.	N.A.	Nil
4c	Number of dumps within lease area and outside of lease area	N.A.	There are four stabilised OB dumps in the lease area. Out of four OB dumps, two are soil dumps and other two dumps already stabilised with plantation.	There are four stabilised OB dumps in the lease area. Out of four OB dumps, two are soil dumps and other two dumps already stabilised with plantation.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	All OB generated during the mining will be backfilled in mined out areas concurrently.	Not applicable as mine is closed since Oct., 2018.	Not applicable due to non operational status of the mine.
4e	Number of active and alive dumps.	N.A.	N.A.	Not applicable as mine is closed since Oct., 2018.
4f	Number of dead dumps.	N.A.	N.A.	Not applicable as mine is closed since Oct., 2018.

<b>4</b> g	Number of dumps established.	N.A.	There are four stabilised OB dumps in the lease area. Out of which two are soil dumps which will be removed and reclaimed during plan period and other two dumps already stabilised with plantation.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	N.A.	Not applicable as the waste generated during the mining were already backfilled in mined out areas concurrently.	Nil.
4i	Length of Retaining wall or garland drain all along dumps	Not applicable.	Not applicable.	Nil
<b>4</b> j	Number of settling ponds	Not applicable.	Not applicable.	Three numbers of water ponds in the lease area coveing 2.423 ha.
4k	Specific comments of inspecting officer on waste dump management	Not applicable.	Not applicable.	Mine is not working since Oct., 2018 due to statutory clearances.

# 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.	N.A.	N.A.	Mine is not working since Oct., 2018.
5b	Area under backfilling of mined out area	backfilled during Plan period 2014-	No backfilling was done under Plan period 2014-15 to 2018-19 due to non operational status of the mine. Total backfilled area as on date was 32.05 ha.	Nil

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	removed during the miningwere proposed to utilised	No restoration or rehabilitation over backfilled areas during Plan period 2014-15 to 2018-19 due to non operational status of the mine.	Nil
5d	Total area fully reclaimed and rehabilitated	6.81 ha was proposed to be backfilled concurrently in the previous approved mining plan.	Not applicable.	No reclamation and rehabilitation has been done as the mine was not under operation since Oct., 2018.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	N.A.	N.A.	Nil

# Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
ба	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	N.A.	Yes.	Nil
6b	Area available for rehabilitation (ha) .	N.A.	Nil	Mine is closed since Oct., 2018.
6c	afforestation done (ha).	N.A.	As on date of inspection, it was reported that 32.05 ha area have been covered under afforestation. Presently mine is not working.	Mine is closed since Oct., 2018.
6d	No. of saplings planted during the year	N.A.	N.A.	3000 saplings were proposed to be planted during last plan period, which could not been planted due to mine was closed.

6е	Cumulative no .of plants	N.A.	83715 trees.	Nil
6f	Any other method of rehabilitation	N.A.	N.A.	Nil
6g	Cost incurred on watch and care during the year	N.A.	N.A.	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	N.A.	N.A.	Quarry-1 is available and will be backfiiled.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	The mine was not under operation.	The mine was not under operation.	The mine is not under operation since Oct., 2018.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	N.A.	N.A.	3000 nos. of saplings covering an area of 1.20 hects. could not been planted due to closure of mine.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	N.A.	Three Water Reservoirs in the area of 2.42 ha. have already made in previous plan period.	Total backfilled area as on date of inspection was 32.05 ha. No backfilling was done under Plan period 2014-15 to 2018-19 due to mine was closed.
61	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	N.A.	Plantation.	Nil.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	N.A.	N.A.	Nil

6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	N.A.	N.A.	Total rehabilitated area is 2.42 hects.
60	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	N.A.	Plantation.	3000 nos. of saplings covering an area of 1.20 hects. could not been planted due to closure of mine.
бр	Compliance of environmental monitoring (core zone and buffer zone)	Noise	Quarterly monitoring of Air, Water & Noise is done.	Quarterly monitoring of Air, Water & Noise in core zone and buffer zone is done.
бq	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	N.A.	N.A.	Compliance of PMCP is done sincerely by the lessee. Mine was closed since October, 2018.

## Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	N.A.	Nil	Nil. Mine is closed due to statutory clearance.
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	N.A.	Nil	Nil
7c	Different grade of mineral sorted out at mines.	N.A.	N.A.	Nil.
7d	Any beneficiation process at mines .	N.A.	N.A.	Nil. Mine is closed due to statutory clearance.

7e General remarks N.A. N.A. of inspecting officer on Mineral conservation and beneficiation

Mine is closed due to statutory clearance.

#### Environment:

issues

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	N.A.	Continuous Spreading over backfilled area.	Nil
8b	Concurrent use or storage of topsoil	N.A.	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	N.A.	Concurrent Backfilling.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	N.A.	N.A.	O.B., Waste Rock and Rejects were used in concurrent Backfilling.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	N.A.	N.A.	3000 saplings were proposed to be planted during last plan period, which could not been planted due to mine was closed.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	N.A.	N.A.	Nil
8g	Survival rate	N.A.	80%	Nil

8h	Water sprinkling on roads to control airborne dust	N.A.	Regular sprinkling with Water tanker	Regular sprinkling with Water tanker on haul road to contrl the airborne dust.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	N.A.	N.A.	Mine is closed due to statutory clearance.

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Annual Return submitted 2021-22 & 2022-23 showing nil production.	Monthly and Annual Returns are submitted timely.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Return is dully filled in all aspects.	1. Shri Raj Kumar Sinha, Manager, 2. Shri Vidya Sagar Singh, Mining Engineer and 3. Gauri Shankar Prasad, Geologist.	Above all mine officials are present during inspection.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	furnished as below:- (i) Already	Land use pattern furnished appears correct: - (i) Already exploited and abandoned by opencast mining -46.05 hects., (ii) Covered under current (O-C) Workings - 0.018 hects., (iii) Reclaimed- rehabilitated - 32.05 hects., (iv) Used for waste disposal - 0.078 hects., (v) Occupied by plant, buildings, residential, welfare buildings and roads - 5.06 hects.,	Nil
9d	Scrutiny of Annual return on afforestation	Given as nil.	No plantation work done as mine was closed.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	N.A.	No work.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	N.A.	Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	N.A.	Nil. Mine was closed.	Nil

9h	Scrutiny of Annual return on fixed assets	` '	(a) Industrial Building: Rs. 14223629/- (b) Residential Building: Rs. 1192983/- (c) Plant and Machinery including transport equipment - Rs. 146106925/- (d) Capitalised Expenditure such as exploration, development, major overhaul and repair to machinery etc Rs. 35680763/-	TOTAL = Value of Fixed Assets - Rs. 197204300/- it appears to be correct.
9k	Scrutiny of Annual return on mining machineries		Air Compressor - 1 no capacity - 450.00 cum/min Electrical.	Air Compressor is seen during inspection.

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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: (B.L. KISKU)

Indian Bureau of Mines