

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

**MCDR inspection REPORT
Ranchi regional office**

Mine file No : BIH/GLA/BX/205/RRO

Mine code : 07BHR32015

- (i) Name of the Inspecting : **G004**) **OM PRAKASH GOPAL**
Officer and ID No.
- (ii) Designation : Regional Mining Geologist
- (iii) Accompanying mine : Sh. Vasudev Gangopadhyay, Sh. Vidya Sagar Singh
Official with
Designation
- (iv) Date of Inspection : 02/03/2020
- (v) Prev.inspection date : 06/09/2019

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SHRENGDAG (402.67)**
- (b) **Registration NO.** : **IBM/935/2011**
- (c) **Category** : **A Other than Fully Mech.**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **JHARKHAND**
- District : **GUMLA**
- Village : **SHRENGDAG, TUIMU, ETC**
- Taluka : **BISHUNPUR**
- Post office : **SARANGO**
- Pin Code :
- FAX No. : **06526-224118**
- E-mail :
- Phone : **06526-224016, 224112 & 224**
- (f) **Police Station** :
- (g) **First opening date** : **25/05/1976**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **VILL-SHRENDAG**
BISHNUPUR
DIST-GUMLA
3. (a) **Lease Number** : **BHR0247**
- (b) **Lease area** : **155.8**
- (c) **Period of lease** :
- (d) **Date of Expiry** : **31/03/2030**
4. **Mineral worked** : **BAUXITE** **Main**

5. Name and Address of the

Lessee : HINDALCO INDUSTRIES Ltd.
M/s HINDALCO INDUSTRIES
Ltd. AT & PO - COURT ROAD,
LOHARDAGA LOHARDAGA
JHARKHAND
Phone:06526-224016 & 224112
FAX :06526-224118

Owner : S.S.KOTHARI
M/s HINDALCO INDUSTRIES
Ltd., CENTURY BHAWAN,Dr.
ANNIE BESANT Rd. MUMBAI
(SUBURBAN) MAHARASHTRA
Phone: 022- 24227586
FAX : 022- 24308491

Agent : B.K.JHA
M/s HINDALCO INDUSTRIES
Ltd. COURT ROAD PO& DIST -
LOHARDAGA (JHK) LOHARDAGA
JHARKHAND
Phone: Mob- 941708929, 06526-224112/224015
FAX : 06526-224118

Mining Engineer

Name : VIDYA SAGAR SINGH,Full Time
Qualification : B.Sc.(MINING)
Appointment/ : 01/07/2017
Termination date

Geologist

Name : ONKAR NATH TIWARI,Full Time
Qualification : M. Sc. (Geology)
Appointment/ : 22/05/2018
Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	26/05/1992
Plan/Scheme of Mining	:	Renewal under rule 24 MCR1960	08/11/2004
	:	Mining Scheme rule 12 MCDR1988	08/04/2011
	:	FMCP under 23C(1)	09/05/2013
	:	MP modif under MCR 1960	23/05/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No exploration proposal	Exploration not done	-
1b	Exploration over lease area for geological axis 1 or 2	No exploration proposal	Exploration not done	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No such proposal	NA	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal	Exploration not done	-
1e	Balance reserve as on 01/04/20	Reserves as on 1/1/2016 : 1688500 tonnes	-	-
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Serendog Plateau is situated at an altitude of 1030msl to 1070msl. The plateau is bounded with steep mesocarpments of laterite overlying on Chota Nagpur Granite Gneiss. Plateau surface is covered with laterite profile of variable thickness.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Two pits (Kechki and Tuimu 2 pits)	Two pits (Kechki and Tuimu 3 pits)	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	It was proposed to develop one bench each in soil, OB and bauxite.	Separate benches are developed as per proposal.	-

2c	Stripping ratio or ore to OB ratio	0.50 ton/m3	0.40 ton/m3	-
2d	Quantity of topsoil generation in m3	407866cum	NA	-
2e	Quantity of overburden generation in m3	512690 cum	582631 cum	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	-

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two	-
3b	Quantity of ROM mineral production proposed	134414 Cum	106429 Cum	-
3c	Recovery of sailable/usable mineral from ROM production	80%	80%	==
3d	Quantity of mineral reject generation	26883 Cum (quarry waste)	11416 Cum (quarry waste)	-
3e	Grade of mineral rejects generation and threshold value declared.	Not mentioned	-	-
3f	Quantity of sub grade mineral generation.	There is no proposal for production of subgrade mineral	No production of subgrade mineral	-
3g	Grade of sub grade mineral generation	NA	NA	-
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	-

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such proposal	Not done	-
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	-
3k	Provision of mining machineries in mineral benches	There is Proposal for deployment of mining machenaries in mineral benches.	Mining Machenaries deployed as per proposall	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	-
3m	Total area covered under excavation/pits	6.16 Ha	5.95 Ha	-
3n	Ore to OB ratio for the pit/mine during the year.	0.50 ton/m3	0.40 ton/m3	-
3o	Total area put in use under different heads at the end of year	Aser approved Mining Plan, Area put to use under different heads at the end of plan period (2019-20): Under pits: 104.52 ha, Roads : 2.92 ha and infrastructure : 0.62 ha	-	-
3p	Production of ROM mineral during the last five year period as applicable	2014-15 253610 MT 2015-16 259173MT 2016-17 259729 MT 2017-18 257604 MT 2018-19 258074 MT	2014-15 253610 MT 2015-16 259173MT 2016-17 258487 MT 2017-18 236504 MT 2018-19 255430 MT	-

3q	General remarks - of inspecting officers on method of mining etc.	-	-	A category OTFM mine. Mining operations are being done by Shovel dumper combination. Sizing, sorting and loading is by mannul means.
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposal for concurrenet backfilling of soil and OB in mined out area.	Concurrenet backfilling of mined out area as proposed	-
4b	Location of topsoil, OB and mineral reject dumps	No proposal of external dumping	No external dumping	-
4c	Number of dumps within lease area and outside of lease area	None	None	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No proposal of external dumping	-	-
4e	Number of active and alive dumps.	None	None	-
4f	Number of dead dumps.	None	None	-
4g	Number of dumps established.	None	None	-
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposal	-	-
4i	Length of Retaining wall or garland drain all along dumps	No such proposal	-	-
4j	Number of settling ponds	None	-	-

4k	Specific comments of inspecting officer on waste dump management	-	-	There is no proposal for external dumping. Generated OB and top soil are backfilled in mined out area thus mined out area are being reclaimed simultaneously.
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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.	Full extraction	Full extraction	-
5b	Area under backfilling of mined out area	7.08 ha	6.52 ha	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use	Concurrent use .	-
5d	Total area fully reclaimed and rehabilitated	7.08 Ha	6.52 Ha (reclaimed). After backfilling and leveling reclaimed area handed over to Rayats for cultivation purpose as per Rayat's demand.	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	After backfilling and leveling reclaimed area handed over to Rayats for cultivation purpose as per Rayat's demand.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	-	Yes	--
6b	Area available for rehabilitation (ha) .	7.08 ha	6.52 Ha (reclaimed) .	After backfilling and leveling reclaimed area handed over to Rayats for cultivation purpose as per Rayat's demand.
6c	afforestation done (ha).	0.61 ha	-	-
6d	No. of saplings planted during the year	1525	1500	-
6e	Cumulative no .of plants	NA	-	-
6f	Any other method of rehabilitation	None	None	After backfilling and leveling reclaimed area handed over to Rayats for cultivation purpose as per Rayat's demand.
6g	Cost incurred on watch and care during the year	3616250	-	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	7.08 ha	6.52 ha	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	7.08 ha	6.52 ha	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	0.61 ha	-	-

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	-
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	-	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal	-	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	NIL	NIL	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposal	-	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	-	Quarterly monitoring done	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	-

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM dispatch	ROM dispatch after manual sorting	-

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No such proposal	Grade wise sorting not done	-
7c	Different grade of mineral sorted out at mines.	No such proposal	Grade wise sorting not done	-
7d	Any beneficiation process at mines .	No such proposal	Not done	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	For the purpose of mineral conservation low grade ,material are blended with high grade material depending upon plants requirements.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Seperate removal and utilisation of top soil for carpetting over backfilled area	Seperate removal and utilisation of top soil for carpetting over backfilled area is in practice	-
8b	Concurrent use or storage of topsoil	Concurrent use.	Concurrent use.	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No such proposal for external dumping	Waste rocks utilised for backfilling over mined out area.	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	concurrent backfilling of generated OB	Concurrent backfilling as per proposal	-

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Phased Restoration, reclamation and rehabilitation .	Phased Restoration and reclamation of mined out area is in practice	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposal for platation of 1525 saplings	1500 saplings	-
8g	Survival rate	70%	50%	-
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	-
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	-

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR for the year 2018-19 submitted on 19/6/2019.	Details are dually filled up	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer Vidya Sagar Singh, Geologist Onkar nath Tiwari	Mining Engineer and Geologist are appointed	-
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under pits: 7.170 ha Reclaimed area: 240.8 ha Dumps: NIL ha	Details given in AR appears to be correct	-
9d	Scrutiny of Annual return on afforestation	1600 saplings planted inside the lease area.	Afforestation done.Quantium of saplings reported could not be verified.	-

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Reject generation not reported	There is no reject generation.	-
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock: NIL	ROM Stock: NIL	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex mine Price is reported at Rs. 1037/tonnes	Exmine price appears to be correct.	-
9h	Scrutiny of Annual return on fixed assets	Total Fixed Assets: Rs. 598030798	-	-

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

Date :

(OM PRAKASH GOPAL)

Indian Bureau of Mines