

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

Inspection under SDF for star rating of mines REPORT

Ranchi regional office

Mine file No : JHK/GML/BX/254/RRO

Mine code : 07JHK09003

- (i) Name of the Inspecting : P002) PHILLIP HAPADGARA
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Yogendra Kumar Lilhare, Manager & Shri Preet Ran
Official with
Designation
- (iv) Date of Inspection : 29/08/2023
- (v) Prev.inspection date : 13/02/2021

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : AMTIPANI (190.95 HA.) BXT
- (b) **Registration NO.** : IBM/935/2011
- (c) **Category** : A Fully Mechanised
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : JHARKHAND
- District : GUMLA
- Village : AMTIPANI
- Taluka : BISHNUPUR
- Post office : BISHNUPUR
- Pin Code : 835302
- FAX No. : 06526-224118
- E-mail : bijesh.jha@adityabirla.com
- Phone : 06526-224016/224112
- (f) **Police Station** : BISHUNPUR
- (g) **First opening date** : 15/12/2007
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : VILL.- AMTIPANI, GURDARI & CHIRODIH
P.S.- BISHUNPUR
DISTT.- GUMLA (JHK)
3. (a) **Lease Number** : JHK0158
- (b) **Lease area** : 190.95
- (c) **Period of lease** : 50
- (d) **Date of Expiry** : 12/03/2056
4. **Mineral worked** : BAUXITE Main

5. Name and Address of the

Lessee : HINDALCO INDUSTRIES LTD.,
AT & PO - COURT ROAD,
LOHARDAGA LOHARDAGA
JHARKHAND
Phone:06526- 224015/224112/223113
FAX :06526- 224118

Owner : HINDALCO INDUSTRIES LTD.
HINDALCO INDUSTRIES LTD.
PO/DIST-LOHARDAGA JHARKHAND
LOHARDAGA JHARKHAND
Phone: (06526)- 224016
FAX : (06526)- 224118

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

Mining Engineer

Name : Yogendra Kumar Lilhare, Full Time
Qualification : B.E.(Mining Engineer)
Appointment/ : 11/05/2021
Termination date

Mining Engineer

Name : Anand Mishra, Full Time
Qualification : B.Tech (Mining)
Appointment/ : 01/11/2019 11/05/2021
Termination date

Geologist

Name : SRI AVIJIT MANJHI, Full Time
Qualification : M.Sc(GEOLOGY)
Appointment/ : 01/08/2013
Termination date

Manager

Name : SANJAY KUMAR
Qualification : B.E. (MINING), 1st CLASS MANAGER'S CERTI
Appointment/ : 13/07/2017
Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Fresh under rule 22 MCR1960	12/04/2005
		Modif.of approved Mining Plan	22/07/2011
		Mining Scheme rule 12 MCDR1988	11/08/2015
		MP modif under 17(3) MCR 2016	21/10/2020
		MP modif under 17(3) MCR 2016	03/08/2021
		MP modif under 17(3) MCR 2016	10/04/2023

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	no proposal	Nil	Entire Potential area in explored under G1
1c	Exploration Agencies and Expenditure in lakh rupees during the year	no proposal	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	no proposal	Nil	entire area is explored upto G1 level
1e	Balance reserve as on 01/04/20	3.17 mill T (111)	3.13 mill T (111)	nil
1f	General remarks of inspecting officers on geology, exploration etc	-	-	potential mineralized 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 no - 6A Quarry no - 6B	Quarry no - 6A Quarry no - 6B	nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Topsoil & morrum; 2 Laterite; 1 Bauxite; 1	Topsoil & morrum; 2 Laterite; 1 Bauxite; 1	separated benches are maintained topsoil, overburden and mineral
2c	Stripping ratio or ore to OB ratio	1: 2.42	1: 2.08	nil
2d	Quantity of topsoil generation in m3	145534.29 cum	124395.22 cum	nil
2e	Quantity of overburden generation in m3	363835.73 cum	310988.05 cum	nil

2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	-	-	separate benches are maintained on topsoil, overburden and mineral.
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Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two	Two	nil
3b	Quantity of ROM mineral production proposed	149914.43 T	149200 T	nil
3c	Recovery of sailable/usable mineral from ROM production	80%	80%	nil
3d	Quantity of mineral reject generation	10178.61 T	nil	no mineral reject generated.
3e	Grade of mineral rejects generation and threshold value declared.	Al2O3<30%	NA	nil
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	Manual	Manual	nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	no such proposal	nil	nil
3j	Provision of drilling and blasting in mineral benches	Deep hole blasting (115mm dia) Burden X Spacing (2.5m X 3m)	Deep hole blasting (115mm dia) Burden X Spacing (2.5m X 3m)	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	Proposed maximum bench height is 6m.	as per proposal	nil
3m	Total area covered under excavation/pits	106.16 ha (including active pit, mined out, backfilled and reclaimed)	105.41 ha (including active pit, mined out, backfilled and reclaimed)	nil
3n	Ore to OB ratio for the pit/mine during the year.	1: 2.42	1: 2.08	nil
3o	Total area put in use under different heads at the end of year	106.16 ha (including active pit, mined out, backfilled and reclaimed), utility: 2.9 ha,	105.41 ha (including active pit, mined out, backfilled and reclaimed), utility: 2.9 ha,	nil
3p	Production of ROM mineral during the last five year period as applicable	2018-19 168538 T 2019-20 169731 T 2020-21 297576 T 2021-22 149344 T 2022-23 149914.43 T	2018-19 144670 T 2019-20 59995 T 2020-21 128890 T 2021-22 149000 T 2022-23 149200 T	nil
3q	General remarks of inspecting officers on method of mining etc.	-	-	method of mining is opencast, deployment of mining machinery on benches, provision of drilling and blasting.

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	Backfilled concurrently	nil
4b	Location of topsoil, OB and mineral reject dumps	No such proposal	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.	No such proposal	nil	nil
4f	Number of dead dumps.	NA	nil	nil
4g	Number of dumps established.	NA	nil	nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposal	nil	nil
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	-	-	topsoil and waste generated are used for concurrent backfilling.

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 of mineral	as per proposal	nil

5b	Area under backfilling of mined out area	2.2 ha proposed to be backfilled	7.59 ha	Backfilling of backlog area
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	concurrent use as per proposal of topsoil		nil
5d	Total area fully reclaimed and rehabilitated	74 ha cumulative at end of year rest 13.17 ha area is backfilled but not reclaimed	90.1 ha	nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	90.1 ha mined out area have been backfilled and reclaimed

Progressive Mine Closure 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	backfilled area are reclaimed and return to raiyats for agricultural purpose.
6c	afforestation done (ha).	0.875 ha.	1.25 ha.	nil
6d	No. of saplings planted during the year	1400 nos	2300 nos	nil
6e	Cumulative no .of plants	-	44920 nos	nil
6f	Any other method of rehabilitation	reclaiming bacfilled area by topsoil	Hand over the reclaimed area to the landowner for farming & agriculture	Hand over the reclaimed area to the landowner for farming & agriculture
6g	Cost incurred on watch and care during the year	-	-	cost not estimated.

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	6.73 ha.	6.92 ha.	nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	mined out are backfilled by waste	mined out are backfilled by waste	nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	nil	0.5 ha.	nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	0.67 ha.	0.67 ha.	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	0.875 ha	0.75 ha	nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	no such proposal	nil	nil
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	no such proposal	nil	nil

6p	Compliance of environmental monitoring (core zone and buffer zone)	proposal for monitoring of environmental parameters.	Environmental monitoring of air, noise & water in core & buffer is carried out monthly	nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	-	-	mineout area are backfilled by waste and tosoil spread over backfilled area.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	149914.43 T	149200 T	nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	manual	manual	nil
7c	Different grade of mineral sorted out at mines.	no such proposal	all mined out mineral are dispatched.	nil
7d	Any beneficiation process at mines	no such proposal	NA	nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	-	all mined out minerals are dispatched.

Environment :

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	concurrent use as per proposal over backfilled area		nil

8b	Concurrent use or storage of topsoil	concurrent use of topsoil	as per proposal	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 of mined out are by waste	as per proposal	nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	backfilled in mined-out areas and spreading of topsoil for reclamation.	backfilled in mined-out areas and spreading of topsoil for reclamation.	nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	yes	yes	nil
8g	Survival rate	60%	80%	nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	-	no or little vegetation on flat top whereas slopes are covered with sal trees.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Returns are submitted on time	Returns are submitted on time	nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining engineere: Sri. Y.K Lilhare, Lilhare, Gelogist: sr. Preet Ranjan Kuanr	Mining engineere: Sri. Y.K Lilhare, Gelogist: sr. Preet Ranjan Kuanr	information are found to be correct.
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: 97.81ha, Covered under current (O-C) Workings: 7.68 ha, Reclaimed-rehabilitated: 90.13 ha, utility: 2.9 ha,	information seems to be correct	nil
9d	Scrutiny of Annual return on afforestation	2300 nos. sapling planted during the year	information seems to be correct	nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral reject generation : Nil	no mineral reject generated in the mines	nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock: Nil, Closing stock: Nil, Production: 149200 T	information seems to be correct	nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of Production ; Rs. 1684.91/-	information seems to be correct	nil
9h	Scrutiny of Annual return on fixed assets	Rs. 89091353/-	information seems to be correct	nil

9k Scrutiny of Shovel (1.8 information seems to be nil
Annual return on cum): 3 nos, correct
mining Dumper (25 T):
machineries 8 nos, Drill
(100mm): 2
nos, Loader
(2.5 cum):1
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
MCDR17	Rule 11(1)	12/09/2023	07/05/2024			

Date :

(PHILLIP HAPADGARA)

Indian Bureau of Mines