

MCDR INSPECTION REPORT

General

Date of Inspection: 30/08/2024

Sl. No.	Particulars	Details
1.	Name of the Mines	Shrengdag Bauxite Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	155.81 Ha Non-Forest -GM Waste Land-7.23, Agricultural Land-144.87 and Others -3.71 Forest -Nil
3.	Mine code	07BHR32015
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/935/2011
5	Name of the lessee, Address, Phone, email and fax number	M/s Hindalco Industries Limited Court Road , P.O. :-Lohardaga District:-Lohardaga State:- Jharkhand PIN:-835 302 Phone No.:- 06526-224015, 224016, 224446. Fax No.06526-24112
6	Village	Shrengdag, Kechki and Tuimu, Thana-Ghaghra, Bishunpur and Senha
7	Taluka/Mandal	Ghaghra, Bishunpur and Senha
8	District	Gumla & Lohardaga
9	Pin code	835302
10	State	Jharkhand
11	Post Office	Sarango
12	Nearest Police Station	Shrengdag
13	Nearest Railway station	Lohardaga
14	Date of Grant of Mining Lease	10/10/1974
15	Date of Execution	16/10/1974
16	Date of Opening of Mine	18/10/1974
17	Date of First Renewal, if applicable and its period & expiry	09.10.2003 (1st Renewal application made). Supplementary lease deed executed up to 31-03-2030.
18	Date of second Renewal, if applicable and its period & expiry	NA
19	Date of submission of renewal application if Mining operations are continuing under deemed extension	NA
20	Name of the Nominated Owner with Address, phone, email ,fax number and date of appointment	Shri K. N. Bhandari 5, New Power House Road, Sector-7, Jodhpur-342004,

		Rajasthan Date of appointment:- 10 th Nov 2015
21	Name of the Mine Agent with Address, phone email, fax number and date appointment in mines.	Shri Prateek Kumar, Court Road Lohardaga, Hindalco Complex – 835302, Date of appointment: - 04.08.2022
22	Name of the Mines Manager with Address, Phone, email, fax number and date of appointment	Shri Shambhu Sharan Vasistha, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 9431106589 Date of Appointment -01-07-2020
23	Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines.	Shri Ashish Kumar Mahanta, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 7070104080 Date of appointment:- 26 th April 2022
24	Whether Geologist and Mining Engineer appointed in Mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Complied Shri Abhishek Kumar, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 6289559708 Date of Appointment -01-11-2023
25	Name and designation of the accompanying officers during the inspection.	Shri Shambhu Saran Vasishtha Mines Manager Shri Chandan kumar Geologist
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	09/11/2023
27	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Approval letter no. RAN/LOH/BXT/MMP-7/2023-24 09/11/2023
28	Mineral(s) granted in lease and proved for mining	Bauxite
29	Method of Mining (Opencast, Underground)	Opencast
30	Category (Fully Mechanized, Others or Manual)	A(OTFM)
31	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	Nil	Nil
1b	Exploration over lease area for Geological axis 1 or 2.	No such proposal	Nil	Nil

1c	Exploration Agency & Expenditure in lakh Rupee during the year	NA	NA	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No such proposal	Nil	155 ha area is explored under G1 and G2
1e	Balance reserves as on 01.04.2024...	934766 T	866,013 T	Nil
1f	General remarks of inspecting officer on geology, exploration etc.	Mineralized area of 155 ha is explored under G1 and G2		

Development

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t lease area	Pit 1 & 2	Pit 1 & 2	quarry in the proposed area
2b	Separate benches in top soil, overburden and mineral (Rule 15)	Top soil & Morrum-2 B Laterite-1 B Bauxite-1B	Top soil & Morrum-2 B Laterite-1 B Bauxite-1B	We maintain Separate benches of top Soil and OB
2c	Stripping ratio or ore to OB ratio	1:3.6	1:2.6	Nil
2d	Quantity of topsoil generation in m ³	104740	22194	nil
2e	Quantity of overburden generation in m ³	105184	47779.68	nil
2f	General remarks of inspecting officer on development etc.	Separate benches are maintained in OB and in mineral.		

Exploitation

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
3a	Number of pits proposal for production	2 Nos.	2 Nos.	Nil
3b	Quantity of ROM mineral production proposed	28454.55 T	26810 T	Nil

3c	Recovery of salable/usable mineral from ROM production	80%	80 %	Nil	
3d	Quantity of mineral reject generation	7113.71T	5362T	Nil	
3e	Grade of mineral reject generation and threshold value declared	$Al_2O_3 \leq 30.00$	24.00	Nil	
3f	Quantity of sub-grade mineral generation	Nil	Nil	Nil	
3g	Grade of sub-grade mineral generation	NA	NA	Nil	
3h	Manual/Mechanized method adopted for segregating from ROM	Manual	Manual	Nil	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	NA	Nil	Nil	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	Drilling and blasting is being done in mineral benches	
3k	Provision of mining machineries in mineral benches	Yes	Yes	Fully Mechanized	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	As per the proposal	6m bench height is maintained.	
3m	Total area covered under excavation/pits	16.95 ha (cumulative)	3.896 ha	Nil	
3n	Ore to OB ratio for the pit/mine during the year	1:3.6	1:2.6	Nil	
3o	Total area put in use under different heads at the end of year	19.22 ha	18.51 ha	Nil	
3p	Production of ROM mineral during last five-year period, as applicable	2018-19	258074 T	2018-19	255430T
		2019-20	258976 T	2019-20	210915T
		2020-21	258176T	2020-21	128814T
		2021-22	257288 T	2021-22	120200T
		2022-23	258367T	2022-23	110300T
		2023-24	28454.84T	2023-24	26810T

3q	General remarks of inspecting officer on method of mining etc.	Method of mining is opencast. Drilling and blasting is in practice in mineral and deploying of excavator and dumper. Separate benched are maintained for OB and Ore and 6m Bench height is maintained.
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Solid Waste Management-Dumping

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
4a.	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	No such proposal	Nil	Simultaneous backfilling is in practice
4b	Location of topsoil, & OB & mineral reject dumps	No such proposal	Nil	There is no top soil dump
4c	Number of dumps within lease area and outside lease area	NA	Nil	Concurrent backfilling is done.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	No such proposal	Nil	Nil
4e	Number of active & alive dumps	NA	Nil	Nil
4f	Number of dead dumps	NA	Nil	Nil
4g	Number of dumps stabilized	NA	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	No such proposal	Nil	No dump in the mine as OB is used for backfilling of mined-out pit
4i	Length of Retaining wall or garland drain all along dump	NA	Nil	Nil
4j	Number of settling ponds	NA	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	Concurrent backfilling is in practice and hence no dump exists in the mine.		

Solid Waste Management-Backfilling

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	full extraction of mineral from mined out area before starting backfilling	As per the proposal	Nil .

5b	Area under backfilling of mined out area	1.21Ha	1.11 Ha	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent use of topsoil for restoration	As per the proposal	Nil
5d	Total area fully reclaimed & rehabilitated	1.21 Ha	1.11 Ha	Cultivating land by soil spreading
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Concurrent backfilling of mined out pit is in practice followed by spreading of top soil over backfilled area.		

Progressive Mine Closure Plan

S.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly-Rule 23E (2). Details should be given in the format as given in Annexure-20	Yes	Yes	nil
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (ha)	1.21 Ha	1.11 Ha	Further backfilling is in progress on the remaining area
	ii) No. of sapling planted during the year	No such proposal on mined out benches	Nil	Plantation proposed over safety zone.
	iii) Cumulative no. of plants	NA	Nil	Nil
	iv) Any other specific method of rehabilitation	Spreading of top-soil over backfilled area	As per proposal	Nil
	v) Cost incurred on watch & care during the year	NA	Nil	Nil
6c	Compliance on reclamation and rehabilitation by back filling			
	i) Voids available for backfilling	1.21 Ha	1.11 Ha	Nil
	ii) Void filled by waste/tailings	1.21 Ha	1.11 Ha	Nil

	iii) Afforestation on the backfilled area	No such proposal	Nil	Plantation proposed over safety zone.
	iv) Rehabilitation by making water reservoir	No such proposal	Nil	Nil
	v) Any other specific means	Concurrent backfilling of mined-out pit and spreading of top-soil over backfilled area	As per proposal	Nil
6d	Compliance of Rehabilitation of waste land within lease			
	i) Afforestation	1168 No	5000 nos.	Nil
	ii) Area rehabilitated (ha)	0.467 ha	1.8 ha	Nil
	iii) Method of rehabilitation	Plantation	Plantation	Nil
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly	Quarterly	Parameters are within limit
6f	General remarks of inspecting & progressive closure operations.	Mined-out pits were concurrently backfilled by waster/OB followed by spreading of top-soil over backfilled area. Plantation were done over safety zone.		

Mineral Conservation

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No such proposal	All mineral above threshold is dispatched	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	All mineral above threshold are dispatched	All mineral above threshold are dispatched	nil
7d	Any beneficiation process at mines	No such proposal	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	All mineral above threshold is dispatched from the mine		


Environment

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Concurrent spreading over backfill area	As per the proposal	Concurrent spreading of top soil over backfilled area is in practice
8b	Concurrent use or storage of topsoil	Concurrent use	As per the proposal	Nil
8c	Separate dumps for overburden, waste rock rejects and fines (Rule 33)	No such proposal	Nil	Waste is used for backfilling of mined out pit
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent Backfilling	As per the proposal	Waste is used for backfilling of mined out pit
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Simultaneously concurrent backfilling and reclamation	Simultaneously concurrent backfilling and reclamation	concurrent backfilling and reclamation is in practice
8f	Baseline information on existence of plantation & additional plantation done (Rule 42)	-	355299 within lease area	nil
8g	Survival rate	70%	80%	Nil
8h	Water sprinkling on roads to control airborne dust	Provision of Water tanker is kept in provision to control airborne dust	As per the proposal	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area.	Mine is located at top of plateau devoid of major vegetation however slope of plateau having vegetation of mainly sal tree.		

Compliance of Rule 45

Sl.No	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Return submitted (2023-24)	Complied timely
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining engineer: Sri. Dillu Singh	Information found to be correct

		Geologist: Sri. Rajarshi Majumdar	
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: 261.67 ha, Covered under current (O-C) Workings: 3.89 ha Reclaimed-rehabilitated: 258.89 ha Occupied by plant, buildings, residential, welfare buildings and roads: 14.65 ha Work done under progressive mine closure plan during the year: 1.11 ha	information seems to be in order
9d	Scrutiny of Annual return on afforestation	Plantation within the lease area: 5000nos, survival: 80%, Total no. of trees at the end of the year: 355299 nos	information seems to be correct
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	no mineral reject generated during the reporting year
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening stock: 0T, closing stock: 0T, production: 26810 T	information seems to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.	Cost of production: Rs. 3976.22 per tonne.	information seems to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 44994337/-	information seems to be correct
9i	Scrutiny of Annual return on mining machineries	Dumper (25t): 4 Nos., Shovel (Hydraulic) (1.8 Cum): 2nos. , Shovel (Hydraulic) (0.8 Cum): 1nos. Air compressor (400cu/min): 4nos.	information seems to be correct


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