

MCDR INSPECTION REPORT

General

Date of Inspection: 28/ 08 / 2024

Sl. No.	Particulars	Details
1.	Name of the Mines	Shrengdag-B Bauxite Mine
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	140.06 Ha Non-Forest -GM Waste Land-2.05 Ha, Agricultural Land-75.84 Ha Forest -62.17 Ha
3.	Mine code	07JHK12010
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
7	Taluka/Mandal	Bishunpur
8	District	Gumla
9	Pin code	835231
10	State	Jharkhand
11	Post Office	Bishunpur
12	Nearest Police Station	Bishunpur
13	Nearest Railway station	Lohardaga
14	Date of Grant of Mining Lease	04.10.1948
15	Date of Execution	04.10.1948 (for 30 years period)
16	Date of Opening of Mine	18.10.1974
17	Date of First Renewal, if applicable and its period & expiry	10.08.1978 for 30 years up to 03-10-2008.
18	Date of second Renewal, if applicable and its period & expiry	05.10.2007 (2nd Renewal Applied)
19	Date of submission of renewal application if Mining operations are continuing under deemed extension	05.10.2007 (2nd Renewal Applied) Supplementary lease deed executed up to 31-03-2030
20	Name of the Nominated Owner with Address, phone, email ,fax number and date of appointment	Sri A.K.Agarwala, Aditya Birla Centre, 5th Floor, S. K. Ahire Marg, Worli, Mumbai - 400030, Maharashtra Email: ak.agarwala@adityabirla.com Phone No. 022- 62660631/66626666 Date of appointment: 10.11.2015
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 Akhilesh Sinha, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 9430732477 Date of Appointment -03-04-2021

23	Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines.	Shri Akhilesh Sinha, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 9430732477 Date of Appointment -03-04-2021
24	Whether Geologist and Mining Engineer appointed in Mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Complied Shri Narayan Pramanik, Court Road Lohardaga, Hindalco Complex – 835302, Mobile No. 7091778398 Date of Appointment -21-05-2022
25	Name and designation of the accompanying officers during the inspection.	Shri Akhilesh Kumar Sinha Mines Manager
26	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	11-09-2020
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/GUM/BXT/MMP-04/2023-24, dated 07.08.2023
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	75 nos	11 nos	Boreholes are in progress
1b	Exploration over lease area for Geological axis 1 or 2.	31 nos	11 nos	Boreholes are in progress
1c	Exploration Agency & Expenditure in lakh Rupee during the year	NA	United Exploration India Pvt.Ltd.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	22.3 ha	2.75 ha	area to be explored upto G1 or G2
1e	Balance reserves as on 01.04.2024	1740447.87 T	1364263 T	Nil
1f	General remarks of inspecting officer on geology, exploration etc.	11 drill holes have been completed at the time of inspection to explore 22.32 ha and drilling is in progress.		

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	Nil
2b	Separate benches in top soil, overburden and mineral (Rule 15)	Separate benches to be maintained in top soil, overburden and mineral	As per proposal	Nil

2c	Stripping ratio or ore to OB ratio	1:0.38	1:2.42	Due to irregular nature of deposit waste is generated more than expected
2d	Quantity of topsoil generation in m ³	51679.89 cum	41250 cum	Generated top soil is used in backfilling
2e	Quantity of overburden generation in m ³	63702 cum	193292.92 cum	Nil
2f	General remarks of inspecting officer on development etc.	Quarry excavation done on the proposed area, Quantity of topsoil generation is 41250 m ³ the FY and 193292.92m ³ waste generated.		

Exploitation

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
3a	Number of pits proposal for production	2 Nos.	2 Nos.	Quarry 1 and quarry 2
3b	Quantity of ROM mineral production proposed	100000T	79550T	Nil
3c	Recovery of salable/usable mineral from ROM production	60 %	60 %	Nil
3d	Quantity of mineral reject generation	66666.69MT	47730 MT	Nil
3e	Grade of mineral reject generation and threshold value declared	Al ₂ O ₃ ≤ 30.00	25.44	Nil
3f	Quantity of sub-grade mineral generation	Nil	Nil	No subgrade generation in mine
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	No such proposal	Nil	Nil
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	Drilling and blasting is done in mineral benches
3k	Provision of mining machineries in mineral benches	Yes	Yes	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	6m Bench height is kept

3m	Total area covered under excavation/pits	14.35 ha		12.67 ha		Nil
3n	Ore to OB ratio for the pit/mine during the year	1:0.38		1:2.42		Due to irregular nature of deposit waste is generated more than expected
3o	Total area put in use under different heads at the end of year	15.57 ha		15.47 ha		nil
3p	Production of ROM mineral during last five-year period, as applicable	2018-19	99815 T	2018-19	73190 T	
		2019-20	99263 T	2019-20	Nil	
		2020-21	97198 T	2020-21	Nil	
		2021-22	97318 T	2021-22	24750 T	
		2022-23	97318 T	2022-23	82850 T	
		2023-24	100000 T	2023-24	79550 T	
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.				

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	NA	Simultaneously backfilling of mined out pit is in practice
4b	Location of topsoil, & OB & mineral reject dumps	NIL	NA	Nil
4c	Number of dumps within lease area and outside lease area	NIL	NA	Concurrent backfilling is in practice
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NIL	NA	NIL
4e	Number of active & alive dumps	NIL	NA	NIL
4f	Number of dead dumps	NIL	NA	NIL
4g	Number of dumps stabilized	NIL	NA	
4h	Whether Retaining wall or garland drain all along dumps are there	NIL	NA	NIL
4i	Length of Retaining wall or garland drain all along dump	NIL	NA	NIL
4j	Number of settling ponds	NIL	NA	NIL
4k	Specific comments of inspecting officer on waste dump management	Waste removed during development/mining is used for backfilling of mined out pits 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 prior to backfilling	As per the proposal	Nil
5b	Area under backfilling of mined out area	.2 Ha	2.8 Ha	Leveling of previously backfilled area
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Concurrent use of top-soil	As per proposal	Nil
5d	Total area fully reclaimed & rehabilitated	4.08 Ha (Reclamation by backfilling)	2.98 Ha	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Full extraction of mineral prior to backfilling of pit is in practice.		

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)	4.08 ha	2.8 ha	Pit was not fully developed
	ii) Afforestation done (ha)	No such proposal on mined out benches	Nil	No afforestation on backfilled area as the land is to be handed over to rayat for cultivation
	iii) No. of sapling planted during the year	No such proposal on mined out benches	Nil	Nil
	iv) Cumulative no. of plants	No such proposal on mined out benches	Nil	Nil

	v) Any other specific method of rehabilitation	Spreading of top soil over backfilled area	As per proposal	Nil
	vi) 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(LxBxD)	4.08 ha	2.8 Ha (Quarry 1 & 2)	Only 2.8 ha available for backfilling
	ii) Void filled by waste/tailings	4.08 ha	2.8 Ha (Quarry 1 & 2)	Only 2.8 ha available for backfilling
	iii) Afforestation on the backfilled area	No such proposal	Nil	No afforestation on backfilled area as the land is to be handed over to rayat for cultivation
	iv) Rehabilitation by making water reservoir	No such proposal	Nil	Nil
	v) Any other specific means	NA	NA	Nil
6d	Compliance of Rehabilitation of waste land within lease			Nil
	i) Afforestation	2500 nos	2000 nos	Plantation on safety zone
	ii) Area rehabilitated (ha)	1 ha NA	1ha	Nil
	iii) Method of rehabilitation	Plantation	Plantation	Nil
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring of environmental parameters	As per proposal	Parameters are within permissible 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	Nil

			dispatched	
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	Nil	All mineral above threshold is dispatched from the mine
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 backfilled area	As per proposal	Concurrent spreading over backfilled area is in practice
8b	Concurrent use or storage of topsoil	Concurrent use	As per proposal	Nil
8c	Separate dumps for overburden, waste rock rejects and fines (Rule 33)	No such proposal	NA	Waste generated are Used in concurrent backfilling
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	Proposal for Backfilling	As proposed	Used in concurrent backfilling
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Proposal for Simultaneously concurrent backfilling and reclamation	As per proposal	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 42)	2500 numbers	2000 nos	Plantation inside lease area
8g	Survival rate	-	60 %	nil
8h	Water sprinkling on roads to control airborne dust	Proposal of Water sprinkling to control airborne dust	As per proposal	Water sprinkling is done by water tankers.
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)	Monthly and Annual Return submitted (2023-24)

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Sri. Akhilesh Kumar Sinha Geologist: Sri. Narayan Pramanik	Information 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: 20.06 ha, Covered under current (O-C) Workings: 10.42ha Reclaimed-rehabilitated: 12.44 ha, Occupied by plant, buildings, residential, welfare buildings and roads: 2.25ha, Work done under progressive mine closure plan during the year: 2.8ha	information seems to be in order
9d	Scrutiny of Annual return on afforestation	2000 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: 79550 T	information seems to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.	Cost of production: Rs. 1498.04 per tonne.	information seems to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 12022679/-	information seems to be correct
9i	Scrutiny of Annual return on mining machineries	Air Compressor (400cum/Min): 1nos. Dumper (25t): 5 Nos., Shovel (Hydraulic) (1 Cum): 2nos.	information seems to be correct



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