# MCDR-MiFLOFE/21/2023-JBP-IBM\_RO\_JBP INDIAN BUREAU OF MINES

#### MINERALS DEVELOPMENT AND REGULATION DIVISION

1/24299/2024

#### MCDR inspection REPORT

#### Jabalpur regional office

Mine file No : MP/JBP/IRON ORE-20 Mine code : 30MPR18022

(i) Name of the Inspecting : GQ07 ) RAGHUBIR SHARAN GARG

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompanying mine : Shri Varun Kumar Gautam, Authorised Signatory and Man

Official with Designation

(iv) Date of Inspection : 21-DEC-23
(v) Prev.inspection date : 04-MAR-20

PART-I : GENERAL INFORMATION

1. (a) Mine Name : GHUGHARIKALA

(b) Registration NO. : IBM/766/2011

(c) Category : A Fully Mechanized

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : JABALPUR

Village :

Taluka : SIHORA

Post office : TIKARIYA

Pin Code : 483334

FAX No. : 7622403496

E-mail : -amckatni@ rediffmail.com

Phone : 07632-403495

(f) Police Station :

(g) First opening date : 08-JUN-18

(h) Weekly day of rest : SUN

2. Address for :

correspondance

3. (a) Lease Number :

(e) Mineral worked : IRON ORE Main

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(f) Name and Address of the

Lessee : ANAND MINING CORPN. LTD.

PATHAK WARD KATNI MADHYA

PRADESH
Phone:N. A.
FAX :N. A.

Owner : ANAND MINING CORPN. LTD.

PATHAK WARD KATNI MADHYA

PRADESH
Phone: N. A.
FAX : N. A.

Agent : HARSH KAPOOR

PATHAK WARD KATNI

JABALPUR MADHYA PRADESH

Phone: FAX :

(g) Date of approval of Mining  $\,$ : 1. For grant of ML Mining Plan approved on 26/12/2016

Plan/Scheme of Mining 2. Review of Mining Plan approved on 16/07/2021

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

# Exploration :

Sl.No.	Item	Proposals	Actual work	F	Remarks
1a	Backlog of previous year	No backlog	Not Applicable		-
1b	Exploration over lease area for geological axis 1 or 2	Entire mineralised area have already explored under G2 level at the time of approval of RMP approved on 16/07/2021. To convert entire mineralised area into G1 level 21 no of core boreholes were proposed against year 2021-22.		already	Based on additional exploration Geological study report has not been submitted by the lessee. Violation of rule 12 (4B) has been pointed out vide letter dated 05/01/2024.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed	NA		-
1d	Balance area to be explored to bring Geological axis in 1 or 2	Entire mineralised 8.26hect area was proven under G1 level. For conversion of mineralised area in to G1 level 21 boreholes were proposed against 2021- 22.	Proposed borehole been carried out approved propose accordingly mineralised area proven under G1 l UNFC.	as per al and entire a have	
1e	Balance reserve as on 01/04/20	Reserves as on 01/04/2023 122-2444572 tone 222-512258 tone	Reserves as on 01/04/2023 122-2472714 tone 222-512258 tone		Re-easement of reserves is required based on additional exploration.

1f	General remarks of inspecting officers on geology, exploration etc	The iron ore belongs to lora group of rocks belonging to Bijawar series. The rocks constitute of micaceous/schistose haematite and found in association with quartzite. Ore Occurs as banded haematite quartzite hydrated ore and bacciated ore. Area is in two blocks, north and south block. Mineralised area had already proven under G1 level of
		UNFC.

# Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposal of working in both the blocks.	As per proposal mining operation carried out in both the blocks.	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in overburden and in mineral proposed. Soil is not there.	As per approved proposal.	_
2c	Stripping ratio or ore to OB ratio	1:0.11	1:0.62	-
2d	Quantity of topsoil generation in m3	Not proposed	NA	-
2e	Quantity of overburden generation in m3	5918cum	91260cum	-

2f	General remarks
	of inspecting
	officers on
	development of
	pit w.r.t. type
	of deposit etc

Mechanized mining is done using shovel tipper etc. Waste soil is scrapped and removed. Mining is done in benches upto 5mtr. T he development in t both the blocks were proposed and accordingly development in both the blocks carried out. Mineral of south block was found inferior grade resulting excess OB generated.

# Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	Two pits	Two pits	_
3b	Quantity of ROM mineral production proposed	159806 tone	145346.25 tone	-
3с	Recovery of sailable/usable mineral from ROM production	90%	85%	Patches of low- grade iron ore encountered in South block resulting recovery percentage decreased and quantity of OB/ Mine waste drastically increased during the year.
3d	Quantity of mineral reject generation	Not proposed	NA	-
3e	Grade of mineral rejects generation and threshold value declared.	Not proposed	NA	-
3f	Quantity of sub grade mineral generation.	Not proposed	NA	-

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3g	Grade of sub grade mineral generation	Not proposed	Screening
3h	Manual / Mechanised method adopted for segregating from ROM	proposed	NA
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	
3ј	Provision of drilling and blasting in mineral benches	Not proposed.	NA
3k	Provision of mining machineries in mineral benches	Proposed	As per proposal
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed	As per proposal
3m	Total area covered under excavation/pits		2.614hect -
3n	Ore to OB ratio for the pit/mine during the year.	1:0.11	1:0.62
30	Total area put in use under different heads at the end of year	5.11hect(at the end of 2025-26)	4.057hect -
3p	Production of ROM mineral during the last five year period as applicable	18-19 115965 19-20 126009 20-21 54094.5 21-22 163080 22-23 159806	18-19 0 19-20 98661 20-21 54266 21-22 149435 22-23 145346

3q General remarks of inspecting officers on method of mining etc.

Mechanized mining is done by bench formation using hydraulic shovel, tipper, doze r etc.

### Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	OB waste dumping	Done for ob waste	
4b	Location of topsoil, OB and mineral reject dumps	Barrier/dumps	Used in barrier for bund.	-
4c	Number of dumps within lease area and outside of lease area	dump in each	As per proposal	Certain part of the OB waste utilized in formation of bund around the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Within UPL	As per proposal.	-
4e	Number of active and alive dumps.	Two	Two	-
4f	Number of dead dumps.	Nil	None	-
4g	Number of dumps established.	Nil	NA	-
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed	NA	-
4i	Length of Retaining wall or garland drain all along dumps	Not proposed	NA	-
4ј	Number of settling ponds	Not proposed	NA	-
4k	Specific comments of inspecting officer on waste dump management			Adopted mine waste management is observed as per approved proposal.

Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not proposed.	NA	-
5b	Area under backfilling of mined out area	Not proposed.	NA	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed.	NA	-
5d	Total area fully reclaimed and rehabilitated	Not proposed	NA	No backfilling planned
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Area under mining is not matured for backfilling and reclamation.

## Progressive Mine Closure Plan:

Sl.No.	Item	Proposals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Submitted.	-
6b	Area available for rehabilitation (ha) .	Not proposed	NA	-
6c	afforestation done (ha).	Not proposed	NA	-
6d	No. of saplings planted during the year	250 saplings over an area of 2000sqm	232	-
6e	Cumulative no .of plants	500 saplings over an area of 4000sqm	232	-
6f	Any other method of rehabilitation	Not proposed.	NA	-
6g	Cost incurred on	Not proposed	Not maintained by the	-
	watch and care		during the year	

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6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Not proposed	NA	Part of pit has not reached upto ultimate depth.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	Na.	_
6ј	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	Not proposed	NA	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	NA	-
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	NA	-
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed	NA	250 no. of saplings were proposed over an area of 2000sqm as a greenbelt. Such plantation was seen during mine inspection.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not proposed	NA	250 no. of saplings were proposed over an area of 2000sqm as a greenbelt. Such plantation was seen during mine inspection.

60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed.	NA	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed.	Records of periodical environmental monitoring data were verified during inspection.	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Disposal of OB/Mine waste either for making of bund around the lease area or dumping on earmark dump, plantation on barrier zone as a green belt environmental monitoring are being done as per approved proposal. There is no proposal about backfilling, reclamation and rehabilitation of mined out area as pit is not matured for reclamation and rehabilitation.

## Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	159806 tone	ROM dispatch-Nil Grade wise mineral sorting within lease area (i) Lumps (a) 45% to below 51% Fe- 29431.060 tone (b) 51% to below 55% Fe- 952.050 tone (ii) Fines (a) 45% to below 51% Fe- 6761.77 tone (b) 51% to below 55% Fe- 108201.37 tone	_

7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanized screening and sizing	As per proposal	-
7c	Different grade of mineral sorted out at mines.	The proposed output size of lump ore is 0-5mm,5mm to 20mm, 20mm to 40mm and 40mm to 100mm	As per approved proposal	_
7d	Any beneficiation process at mines .	lease area	As stated above.	
7e	General remarks			The mined ROM is
	of inspecting officer on Mineral conservation and beneficiation issues			sent to beneficiation plant/buyers from the mines.(sponge iron/cement plants)

### Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	NA	There is no soil in the proposed site of working.
8b	Concurrent use or storage of topsoil	Not proposed	NA	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed dump for Overburden/ mine waste.	As per approved document	-

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8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed.	NA	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	NA	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	250 saplings	232 saplings	-
8g	Survival rate	80%	80%	-
8h	Water sprinkling on roads to control airborne dust	Proposed .	Water sprinkling evidenced during site inspection.	-

8i	General remarks
	of inspecting
	officer on
	aesthetic beauty
	in and around
	mines area

Mining lease is located between cluster of mining leases. Number of mines are operation in the area resulting land degradation due to mining as well as OB/ mine waste/ tailings dumps in the area. As corrective measures of plantations saplings have been carried out in the area but growth of these sapling are too less in compression to the growth of dumps and pits. Mine is also not reached in reclamation and rehabilitation stage resulting aesthetic beauty of the area needs  $% \left\{ 1,2,\ldots ,n\right\} =0$ fast improvement

## Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Return	Monthly Returns upto Nov,2023 and AR upto 2022-23 found submitted though online.	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Mining Engineer-None Geologist-Shri Vivekanand Mishra	Notice of appointment of Shri Prayachh Kumar Tiwari, BE (Mining Eng.) is appointed as a Mining Engineer and Shri Umakant Soni, MSc Geology, as a Mining Geologist received.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Lease area (surface area) utilization as at the end of year (hectares):  (i) Already exploited and aband by (O-C) mining 0.000  (ii) Covered under current (O-C) Workings 2.614  (iii) Reclaimed-rehabilitated 0.000  (iv) Used for waste disposal 0.940  (v) Occupied by plant, buildings, and roads etc. 0.200  (vi) Used for any other purpose (specify) plantation 0.303  (vii) Work done under PMCP during the year 0.0	
9d	Scrutiny of Annual return on afforestation		232 saplings	Ok
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	Mineral reject quantity -Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	ROM Stock-Nil Graded stock Lump Open. stock Prod. Desp. from mine Clos. stock at mine (a) 45% to below 51% Fe 572.350 29431.06 29431.060 572.350 (b) 51% to below 55% Fe 0.000 952.050 952.050 0.000 Fines (a) 45% to below 51% Fe 0.000 6761.770 6761.770 0.000 (b) 51% to below 55% Fe 100.000 108201.370 108201.370	OK

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	A. Av. Sale value and Ex Mine price both are reported as same as given below- Lump Ex-mine price (â-Tonn) (a) 45% to below 51% Fe 544.66 (b) 51% to below 55% Fe 1203.85 Fines (a) 45% to below 51% Fe 550.00 (b) 51% to below 55% Fe 499.29 B. Cost of production Rs. 475.33	For the calculation of cost of production DMF amount is taken as only Rs.10/- per tone against royalty of Rs. 99/99 per ton which appears incorrect. This discrepancy has been pointed out through violation of rule45(7) vide letter dated 05/01/2024
9h	Scrutiny of Annual return on fixed assets	Given	Value of Fixed Assets* (â 0)	Matter discussed with lessee during inspection and he ensure about furnishing of actual figure in AR of coming year.  OK
9k	Scrutiny of Annual return on mining machineries	Given	Type of mach. Capacity of Mach. Unit of Mech No. of mach. BACK HOE 1.100 CUM 2 F.END LOADER 1.700 CUM 1 DOZER 410.000 HP 1 DUMPER 20.000 TONNE 6	

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# Details of violations observed during current inspection and compliance position of violation pointed out

Violation	n observed	Show Couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on
MCDR17 Rule 31(4)	05-JAN-24		
Rule 45(7)	05-JAN-24		
MCDR17 Rule 12(4)	05-JAN-24		

Date :

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