# MCDR-MiFLOMn/19/2023-JBP-IBM\_RO\_JBP INDIAN BUREAU OF MINES

## MINERALS DEVELOPMENT AND REGULATION DIVISION

## Nagpur regional office

MCDR INSPECTION REPORT

Mine file No : MP/BGT/MN-61/NGP Mine code : 40MPR01065

(i) Name of the Inspecting : GQO4 ) RAGHUBIR SHARAN GARG

Officer and ID No.

(ii) Designation : Assistant Controller Mine

(iii) Accompaning mine : Shri Sandesh Jain, Partner along with Shri Sanket Patil

Official with mining Engineer and Mines Manager

Designation

(iv) Date of Inspection : 14-SEP-23
(v) Prev.inspection date : 10-MAR-22

PART-I : GENERAL INFORMATION

1. (a) Mine Name : SELWA ( 4.096 HA.)

(b) Registration NO. :

(c) Category : A Manual
(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : BALAGHAT

Village : SELWA

Taluka : KATANGI

Post office : SELWA

Pin Code : 481445

FAX No. :
E-mail:mmkatni@gmail.com
Phone : 09893102223

(f) Police Station :

(g) First opening date :

(h) Weekly day of rest SUN

Address for correspondence:
 SHRI Sandesh Jain, Partner &
 Nominated Owner, M/s Metals &

Minerals, MIG-II-14,

Housing Board Colony Katni (MP) 483001

3. (a) Lease Number : MPR2545
(b) Lease area : 4.91
(c) Period of lease : 20

(d) Date of Expiry : 22-MAR-29

4. Mineral worked : MANGANESE ORE Main

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5. Name and Address of the

Lessee : SHRI Sandesh Jain, Partner & Nominated Owner

> M/s Metals & Minerals, MIG-II-14, Housing Board Colony Katni(MP) -

483001 Phone: 9893102223

Plan/Scheme of Mining

6. Date of approval of Mining : Modif.of approved Mining Plan 30-AUG-13 16-MAR-15 Mining Sch.rule 12 MCDR88 23/12/2019 Modif.of approved MPLN 27/09/2020 Modif.of approved MPLN

#### PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog of previous year	No backlog	No deviation
1b	Exploration over lease area for geological axis 1 or 2	There were no proposal for additional exploration during the year under review.	Out of 4.906hect lease area 2.3391hect mineralised area had already proved under G1 level whereas remaining 2.56hect of the lease yet to be proven for mineralisation.	In the light of provisions under rule 12(4) of MCDR, 2017 violation pointed out to ascertain mineralisation of remaining pert of the lease area. A fresh mining plan of the lease area has been submitted by the lessee for approval which is in process in which there are proposal of three borehole drilling for the purpose of exploration of remaining part of the lease area.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed and there is no proposed expenditure.	Not applicable.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed	Not applicable.	-
1e	Balance reserve as on 01/04/20	As on 01/04/2023 122-25071MT 222-32760	As on 01/04/2023 122-23803MT 222-32760MT	A new mining plan is under process of approval. Reserves have been taken from the plan under process of approval.

1f	General remarks
	of inspecting
	officers on
	geology,
	exploration etc

In the light of provisions under rule 12(4) of MCDR, 2017 violation pointed out to ascertain mineralization of remaining pert of the lease area. A fresh mining plan of the lease area has been submitted by the lessee for approval which is in process, in which there are proposal of three borehole drilling for the purpose of exploration of remaining part of the lease area.

#### Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed to develop the pit towards East of lease with 5 m bench height	Development work done as per proposal.	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	benches in top	Separate benches in top soil, OB and mineral .	
2c	Stripping ratio or ore to OB ratio	1:7.56	1:4.45	Less development resulting low stripping ratio, Violation for this observation pointed out through violation of rule 11(1) of MCD Rules, 2017.
2d	Quantity of topsoil generation in m3	Nil	Reportedly not generated, Lateritic soil generated which is counted into overburden waste.	-

2e	Quantity of overburden generation in m3	55941cum	24500cum	Deviation pointed out through violation of rule 11(1) vide letter dated 25/09/2023
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			There is less production against approved proposal as a result pit development is also in lower side.

## Exploitation:

1.No.	Item	Proposals	Actual work	Remarks
1.110.	100111		Metaul work	TCMGT NO
3a	Number of pit proposed for production	One pit	One pit	No deviation
3b	Quantity of ROM mineral production proposed	7342MT	5495MT	Deviation pointed out through violation of rule 11(1) of MCDR,2017
3c	Recovery of sailable/usable mineral from ROM production	80% from ROM ore	As per proposal	No deviation.
3d	Quantity of mineral reject generation	Not proposed	Not applicable	No deviation
3e	Grade of mineral rejects generation and threshold value declared.	There is no proposal	Not applicable as there is no mineral reject generation.	No deviation.
3f	Quantity of sub grade mineral generation.	There is no proposal for sub grade mineral generation.	There is no sub grade mineral generation in the mine.	No deviation.
3g	Grade of sub grade mineral generation	Not proposed.	Not applicable as there is no sub grade mineral generated from the mine.	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Manual	Manual segregation are in practice.

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed.	Not carried out.		No deviation.
3ј	Provision of drilling and blasting in mineral benches	Yes, Proposedwith Jack Hammers & Wagon	Drilling and blast: for extraction of mineral are in prac	_	No deviation.
3k	Provision of mining machineries in mineral benches	Drill Yes Excavator with 2.6cum bucket capacity-1 No, Dumper 24tonne capacity 2 No.	Yes as per proposal Excavator with 2.60 bucket capacity-1 Nounder 24tonne capa 2 No.	cum No,	Mining operation on the date of inspection was found closed. Pit was found waterlogged. However reportedly as per proposal excavation of mineral are carried out with the use of machineries as proposed.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	5 to 6mtr, suitable	Yes, suitable		
3m	Total area covered under excavation/pits	2.060 ha	2.0ha		
3n	Ore to OB ratio for the pit/mine during the year.	1:7.56	1:4.45		
30	Total area put in use under different heads at the end of year	4.7737 ha	4.7737 ha		
3p	Production of ROM mineral during the last five year period as applicable		2018-19 - 5650 T 2019-20 - 00 T 2020-21 - 2460 T 2021-22- 6600T 2022-23-5495T		_
			9	2021-22- 2022-23-	
3q	General remarks of inspecting officers on method of mining				

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ing form the proposed quantity.

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land ing form the proposed quantity. Violation pointed out for the same.

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#### Solid Waste Management - Dumping:

Sl.No.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposed.	Done	
4b	Location of topsoil, OB and mineral reject dumps	Eastern part of the lease area	On eastern part of the lease area upto BP. No.4	-
4c	Number of dumps within lease area and outside of lease area	01	01	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Eastern part of the lease area	Eastern part of the lease area uoto BP.No.4	-
4e	Number of active and alive dumps.	01	01	
4 f	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.	Not Proposed	Garland drain around the dump were seen	
4i	Length of Retaining wall or garland drain all along dumps	Not proposed	about 200m	
4j	Number of settling ponds	Nil	Nil	-
4 k	Specific			The dumps were
	comments of inspecting officer on waste dump management			proposed to be used for reclamation & rehabilitation of mined out pit after mining.

### Solid Waste Management - Backfilling:

Sl.No.	Item	Proposals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Backfilling proposed after full extraction of mineral	As per approved proposals, Backfilling was not done in 7.5m barrier zone	Proposed backfilling of degraded statutory barrier zone not carried out. Deviation pointed out through violation of rule 11(1) vide letter dated 25/09/2023.
5b	Area under backfilling of mined out area	0.588hect	0.25hect	For deviation violation of rule 11(1) pointed out.
5c	Concurrent useof topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed concurrent as well as separate dumping	Reportedly entire soil generated during mining operation utilised for simultaneous topping over backfilled area. External dump of top soil was not seen during inspection.	
5d	Total area fully reclaimed and rehabilitated	Not proposed except degraded statutory barrier zone	A small part of degraded statutory barrier zone were found reclaimed by mine waste and top soil generated during mining-operation.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			As per approved proposals, complete Backfilling of degraded statutory barrier zone was not found. For the deviation violation of rule 11(1) pointed out vide letter dated 25/09/2023.

#### Progressive Mine Clousre 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	Nil	

6c	afforestation done (ha).	0.009 НА	0.009 HA
6d	No. of saplings planted during the year	10 Nos	100nos
6e	Cumulative no .of plants	30	200 -
6f	Any other method of rehabilitation	Not proposed	Not applicable
6g	Cost incurred on watch and care during the year	Not proposed	Not maintained
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Not proposed	Not applicable
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed	Not applicable -
6ј	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area	Not proposed	Not applicable
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Not applicable
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	Not applicable.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	10No. of saplings plantation	100 no, of saplings plantation

6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.009hect	0.009hect	
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed	Not applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Record of environmental monitoring data w.r.t. air, water, noice were seen during inspection.	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			As per approved proposal reclamation of degraded statutory barrier zone was supposed to backfilled and top soil was also supposed to be spread over it but work is still to be completed.  Deviation pointed out through violation of rule 11(1) of MCDR, 2017

## Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral dispatch - 7392T Grade wise Mineral dispatch -Not proposed	RMO Mineral dispatch - Nil Grade wise total mineral dispatch-2951.28T Upto 25%-1668.84T, ,25 to 35%-982.44T and 35 to 46%-300.68	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Manual	As proposed manual	
7c	Different grade of mineral sorted out at mines.	Not proposed	Grade wise sorting Upto 25%- 25 to 35%- and 35 to 46%-	

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7d	Any beneficiation process at mines	Not proposed	Not in practice except manual sorting.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			There is no issue related with mineral conservation. entire mineral produce have a market and hence there is no issue on this aspect.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	against the year under review there was no proposal for separate removal and after it	Record in this regard were not found maintained. However there was no issue related with generation & utilisation of top soil were noticed. entire topsoil generated from the mine were reportedly utilised in reclamation of degraded statutory barrier zone.	
8b	Concurrent use or storage of topsoil	Against the year there was no proposal.	Actual record were not maintained. However any issue related with top soil generation and utilisation was noticed. Reportedly entire top soil generated from mining were reportedly utilised simultaneously for reclamation of degraded land.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate disposal of overburden & mine waste proposed.	As per proposal overburden & mine waste utilised for backfilling of degraded statutory barrier zone. Dumping is not proposed. There is nomineral reject generation so separate dumping of reject not arise.	

8d Use of Proposed Entire OB & mine waste

	overburden, waste rock, rejects and fines dumps for restoring the land to its original use	rioposed	generated during mining operation during the year under review were utilised for restoring the land. External dumping of OB & mine waste not done during the year as reported by the lessee. There is a huge dump covering an area between BP NO. 3, BP.No 4 and BP. NO. 5 which was as a result of rehandling of old OB Dumps as proposed in approved mining plan.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Degraded statutory barrier zone was proposed for reclamation	Upto certain extent reclamation of degraded statutory barrier zone have carried out by the lessee but still it is not completed as proposed.	Violation for the deviation pointed out.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation proposed	Plantation carried out.	
8g	Survival rate	80%	40%	advise for the betterment of survival of plantation rendered during inspection.
8h	Water sprinkling on roads to control airborne dust	Proposed	Evidence of water sprinkling were noticed during inspection of the mine.	

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

Presently this is only working mine in the area . Mining operation in the mine is also not carried out upto full capacity. There is only one one pit of about 150mx125m and a dump spread over an area of 100mX75m with about 10m height are there within lease area. There is agriculture land almost around the lease area. There are no. of big trees within as well as out side of the lease area. So general beauty of the area is still not bad. There are no. of very old pits at a distance of about 200m.

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#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Monthly Returns upto August,2023 and AR for 2022-23 already received.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Name of Mining Engineer and Geologist given in the AR.	

depreciation cost at different part of the AR.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	(i) Already exploited & abandoned by opencast (O/C) mining 0 (ii) Covered under current (O/C) Workings 2.06 (iii) Reclaimed/Rehabilitated 0.382 (iv) Used for waste disposal 2.28 (v) Occupied by plant, buildings, residential, welfare buildings and roads 0.161 (vi) Used for any other purpose (specify) MINERAL STORAGE 0.256 (vii) Work done under progressive mine closure plan during the year 0.664	
9d	Scrutiny of Annual return on afforestation	Given	Plantation 100 Survival rate 80%	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	Mineral reject generation -Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	ROM Stock-2415.000T Graded Ore Stock (MnO2 content) Less than 25%-1060MT 25 to 35% 708.52MT & Plus 35%-213.3MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Grade wise Ex Mine Price and Sale Value (MnO2 content) Upto 25%-5585/21 25 to 35%-10076/57 and 35 to 46%-23119.25 Cost of Production -Rs. 8976.65	1. Cost of explosive consumption indicated as nil is not acceptable.2. Beneficiation cost has been considered as Nil 3. There are different figures w.r.t. Overhead expenses and

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9h	Scrutiny of Annual return on fixed assets	Given	Fixed Assets -Rs. 4221068/-	On lower side considering capacity and no. of machineries deployed.
9k	Scrutiny of Annual return on mining machineries	Given	Shovel 1.84cum 1(8.75cum) DUMPER 2(15MT)	Capacity of both the machineries are less than the proposed one. However looking the actual production w.r.t. proposed one given machineries are quite sufficient to achieve the production achieved.

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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 or
Rule 11(1)	25-SEP-23	
MCDR17 Rule 12(3)	25-SEP-23	
Rule 45(7)	25-SEP-23	

Date 06/10/023

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