

MCDR inspection REPORT

Jabalpur regional office

Mine file No : MP/JBP/MANG-14

Mine code : 40MPR18004

- (i) Name of the Inspecting : **G007**) **RAGHUBIR SHARAN GARG**
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Brijendra Singh Chauhan, representative of the
Official with
Designation
- (iv) Date of Inspection : 20-DEC-23
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANSAKRA (8.00 HA)**
- (b) **Registration NO.** : **IBM/6507/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : JABALPUR
Village : MANSAKRA
Taluka : SIHORA
Post office : SIHORA
Pin Code :
FAX No. : 0755-4273629
E-mail : -shivalikaminerals074@gmai
Phone : 9425602395
- (f) Police Station : SIHORA
- (g) First opening date : 29-JAN-07
- (h) Weekly day of rest : SUN
2. Address for : M/S SHIVALIKA MINERALS,
correspondance Prop. JAI KUMAR SINGH, 101,
D.K.TOWER, J.K.ROAD, BHOPAL (M.P.)
3. (a) Lease Number : MPR2312
- (b) Lease area : 8
- (c) Period of lease : 20
- (d) Date of Expiry : 10-DEC-26
4. Mineral worked : MANGANESE ORE Main

I/24375/2024

5. Name and Address of the

Lessee : SHIVALIKA MINERALS
PROP.JAI KUMAR SINGH 101,
D.K.TOWER, J.K.ROAD,
BHOPAL M.P. BHOPAL MADHYA
PRADESH
Phone:NA
FAX :NA

Owner : SHIVALIKA MINERALS
PROP. JAI KUMAR SINGH 101,
D.K.TOWER, J.K.ROAD,,
BHOPAL M.P. BHOPAL MADHYA
PRADESH
Phone: NA
FAX : NA

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	31-OCT-06
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	04-FEB-13
	:	Mining Scheme rule 12 MCDR1988	08-JUN-16
	:	MP review under 17(1) MCR 2016	20-JUL-21

I/24375/2024

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	08 Bore holes each of 50 deep were proposed against year 2021-22	Exploration work not carried out.	Deviation pointed out through violation of rule 11(1) vide letter dated 05/01/2024.
1b	Exploration over lease area for geological axis 1 or 2	There was proposal for conversion of mineralised area into G1level through five boreholes as a additional exploration .	Not carried out.	Violation of rule 12(3) 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	6.90 hect mineralised area into G1 level.	Not carried out	As stated in earlier violation pointed out.
1e	Balance reserve as on 01/04/20	AS ON 01/04/2023 111-0 122-681598 222-232898	AS ON 01/04/2023 111-0 122-777293 222-232898	Unit in tones
1f	General remarks of inspecting officers on geology, exploration etc			ML area belongs to Maha Kaushal Region in Jabalpur district . Mineralization of the manganese ore is associated with iron ore and lateritic soil.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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I/24375/2024

2a	Location of development w.r.t.lease area	It was proposed to work in the southern side of the ml area and advance towards central part of ML area.	Development was reportedly carried out as per the proposal given. However on the date of inspection mining operation on pits lies near norther lease boundary line was observed.	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed	Separate benches in overburden and mineral were observed.	
2c	Stripping ratio or ore to OB ratio	1:0.03 (considering production of laterite and iron ore)	1:0.75 (considering only production of Manganese ore)	Production details of laterite and iron ore not available)
2d	Quantity of topsoil generation in m3	Not proposed	NA	
2e	Quantity of overburden generation in m3	6665cum	1000cum	-
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development and production both are too less than the proposed one. However approved method of mine development is most suitable for the deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One pit	One pit	-
3b	Quantity of ROM mineral production proposed	49989 tone	1325 tone	Very less production in comparison of proposed one. Deviation pointed out through violation of rule 11(1) of MCDR vide letter dated 05/01/2024

I/24375/2024

3c	Recovery of sailable/usable mineral from ROM production	25% MANGANESE, IRON 50% AND LATERITE 15% AS PER APPROVED MINING PLAN	Reportedly as per proposal	
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	-
3g	Grade of sub grade mineral generation	Not proposed.	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised method was proposed for segregation.	Manual sorting are in practice at present including year under review.	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	NA	-
3j	Provision of drilling and blasting in mineral benches	Proposed	Occasional drilling and blasting is required as mining operations are not been carried out on full scale during the year under review.	-
3k	Provision of mining machineries in mineral benches	Proposed, Hydraulic Shovel of 1cum bucket capacity, wagon drill , rock breaker and dumper combination	Labour oriented mining operation carried out.	Mining operation on full scale not carried out during the year under review.

I/24375/2024

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed 6.0m bench height.	Bench height of about 3.0m was seen during inspection. As mining operation on full scale are yet to be commenced so present bench height seen in the mins are most suitable considering manual labour oriented mining operation.	manual mining in place of fully mechanized mining proposal.
3m	Total area covered under excavation/pits	4.10 HECT	4.10 HECT	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.03	1:0.75(considering only production of Manganese ore)	Production details of laterite and iron ore not available)
3o	Total area put in use under different heads at the end of year	5.12 HECT	5.12 HECT	-
3p	Production of ROM mineral during the last five year period as applicable	2018-19=34992 2019-20=53508 2020-21=43776 2021-22=49131 2022-23=49989 2020-21=14592	2018-19=250 2019-20=0 2020-21=1100 2021-22=2100 2022-23=1325	Unit in tones.
3q	General remarks of inspecting officers on method of mining etc.			Mining operation are not being carried out on full scale. Manual sorting of mineral is carried out in place of mechanized screening. Occasional drilling and blasting reportedly carried out otherwise digging of mineral carried out by deploying shovel/rock breaker.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
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I/24375/2024

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not proposed as there is no soil in the area under mining operation envisaged.	NA	-
4b	Location of topsoil, OB and mineral reject dumps	Not proposed	NA	-
4c	Number of dumps within lease area and outside of lease area	One dump (on Southern 7.5m barrier zone.	As per proposal.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of UPL on Southern 7.5m barrier zone.	As per proposal.	-
4e	Number of active and alive dumps.	One dump	One dump	-
4f	Number of dead dumps.	Not proposed	NA	-
4g	Number of dumps established.	Not proposed.	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	-
4j	Number of settling ponds	Not proposed	NA	-
4k	Specific comments of inspecting officer on waste dump management			Level of mining is very low in comparison to the approved proposal., resulting generation of very low quantity of mine waste. Mine waste generated during mining had disposed on earmarked location with proper care.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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I/24375/2024

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 envisaged	NA	-
		as there is no soil in the proposed site of working.		
5d	Total area fully reclaimed and rehabilitated	Not proposed	NA	Mine is not reached in a stage of reclamation rehabilitation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Mine is not reached in a stage of reclamation and rehabilitation, resulting external dumping is in a practice that too as per approved proposal.

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	20	20	-
6e	Cumulative no .of plants	40	400	Total plantation carried out so far.

I/24375/2024

6f	Any other method of rehabilitation	Not proposed	NA	-
6g	Cost incurred on watch and care during the year	Not proposed	Not available.	*
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Not proposed as there was no voids available for reclamation and rehabilitation .	NA	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Not proposed.	NA	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Not proposed.	NA	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed.	NA	-
6l	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	Plantation of 20 saplings on waste land.	20 saplings planted on waste land.	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed	0.02hect	Plantation of 20 saplings over an area of 200squ.m carrier out by the lessee.

I/24375/2024

6o	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.	Record of periodical environmental monitoring found maintained.	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliances are acceptable. At present except waste land rehabilitation & periodical Environment monitoring there is no PMCP proposal for implementation those were found ok.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	49998 tone	4297.78 tone below 25% Mn	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	-
7c	Different grade of mineral sorted out at mines.	16-24% Mn	As per proposal	-
7d	Any beneficiation process at mines .	Not proposed	NA	Only dressing, sizing and sorting is carried out at mine head.

I/24375/2024

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	There is no issue related with conservation of manganese ore. There are huge stocks of Iron ore and laterite minerals produced during mining of manganese ore which are not added in mining lease.
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Environment:

Sl.No.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	NA	There is no soil available in area selected for exploitation of manganese ore.
8b	Concurrent use or storage of topsoil	Not proposed	NA	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dump of overburden waste proposed.	As per approved proposals.	There is no generation of mineral reject envisaged. However, as per proposal iron ore and laterite both had generated during mining of manganese ore which have stacked separately .
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	-

I/24375/2024

8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	plantation of 20 saplings.	As per proposal.	-
8g	Survival rate	80%	80%	-
8h	Water sprinkling on roads to control airborne dust	Proposed.	As per proposal.	Very low level of mining operations are in practice.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			In region there are two adjoining leases in and around a hillock. In both the mines level of mining are not prominent. Hillock is having good no. of trees. Nearby area is also with full greenary. So aesthetic beauty is already very good and so far there is no much more damage caused by the mining activities in recent past to the aesthetic beauty.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Returns	Monthly returns up to Nov,2023 and Annual Return for the year 2022-23 found submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Debashish Behera, Mining Engineer and Bhanu Pratap Singh Geologist.	-

I/24375/2024

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 abandoned by opencast (O-C) mining 4.120 (ii) Covered under current (O-C) Workings 0.020 (iii) Reclaimed-rehabilitated 0.000 (iv) Used for waste disposal 0.000 (v) Occupied by plant, buildings, residential, welfare buildings and roads 0.250 (vi) Used for any other purpose (specify) 0.000 (vii) Work done under progressive mine closure plan during the year 0.090	On Annual return indicated area 4.12 hect against already exploited and abandoned by opencast is incorrect. Deficiencies has been pointed out through violation of rule 45(7) vide letter dated, Similarly deficiencies observed about lease area utilized for dumping and mineral stacks were noticed and these deficiencies have also been pointed out through V/L vide letter dated 05/01/2024.
9d	Scrutiny of Annual return on afforestation	Given	20	OK
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	Mineral reject quantity -Nil	Ok
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	ROM Stock-Nil Grade wise Ore- Below 25% Mn-34184.629 tone	OK
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Av. Sale value and Ex Mine Price both are-Rs. 800/- per tone Cost of production Rs. 2495/60	There are anomaly about reported Av. sale value and cost of production. Av. sale value is much much less than the reported cost of production. Above anomaly has been pointed out through violation of rule 45(7) of MCD Rule, 2017 vide letter dated 05/01/2024.

I/24375/2024

9h	Scrutiny of Annual return on fixed assets	Given	Value of Fixed Assets* (. 0)	Indicated fixed assets is incorrect. This deficiency has been also pointed out through violation letter dated 05/01/2024.
9k	Scrutiny of Annual return on mining machineries	Given	Type of machinery Capacity of each type of mach. Unit (in which capacity is reported) No. of machinery BACK HOE 1.100 CUM 1 DUMPER 24.000 TONNE 2	OK

I/24375/2024

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance	Rule NO.	Issued on	Compliance
MCDR17 Rule 11(1)	05-JAN-24				
MCDR17 Rule 12(3)	05-JAN-24				
MCDR17 Rule 31(4)	05-JAN-24				
MCDR17 Rule 34(1)	05-JAN-24				
MCDR17 Rule 45(7)	05-JAN-24				

Date :**(RAGHUBIR SHARAN GARG)**

Indian Bureau of Mines