

I/3911/2023

MCDR inspection REPORT

Jabalpur regional office

Mine file No : MP/JBP/MANG-16

Mine code : 40MPR18003

- (i) Name of the Inspecting : G007) RAGHUBIR SHARAN GARG
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Sh. Nirmal Singh Kurweti, Mining Engineer and Shri In
Official with
Designation
- (iv) Date of Inspection : 24-DEC-22
- (v) Prev.inspection date : 16-MAR-20

PART-I : GENERAL INFORMATION

1. (a) Mine Name : KEOLARI (4.03 HA)
- (b) Registration NO. : IBM/4758/2011
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : JABALPUR
Village :
Taluka :
Post office :
Pin Code :
FAX No. : NA
E-mail : shobhamineralsk@gmail.com
Phone : 07614046833, M.Phone 94251!
- (f) Police Station : GOSALPUR
- (g) First opening date : 05-APR-08
- (h) Weekly day of rest : SUN
2. Address for : M/S SHOBHA MINERALS
correspondance : 765/1, NAPIER TOWN,
JABALPUR 482001
3. (a) Lease Number : MPR2192
- (b) Lease area : 4.03
- (c) Period of lease : 20
- (d) Date of Expiry : 18-JUN-27
4. Mineral worked : MANGANESE ORE Main
OCHRE Associated
LATERITE Associated
IRON ORE Associated

I/3911/2023

5. Name and Address of the

Lessee : SHOBHA MINERALS
765- Napier town JABALPUR
MADHYA PRADESH
Phone:NA
FAX :NA

Owner : SHOBHA MINERALS
765- Napier town JABALPUR
MADHYA PRADESH
Phone: NA
FAX : NA

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	10-NOV-05
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	25-AUG-09
	:	Mining Scheme rule 12 MCDR1988	28-MAY-13
	:	MP review under 17(1) MCR 2016	24-MAY-18

I/3911/2023

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	9 boreholes were proposed against 2018-19	Three boreholes were found drilled and fourth borehole was under drilling on the date of inspection. Remaining six boreholes are yet to be completed.	Violation under rule 11(1) pointed out via letter dated 29/12/2022
1b	Exploration over lease area for geological axis 1 or 2	9 boreholes were proposed in the light of carrying out entire lease area under G1 level upto 370mRL	3.04 hect lease area has been proven under General exploration upto 370mRL and rest 0.99hect potential area yet to be explored under detailed exploration. However Three boreholes were found completed upto 350mRL depth by the date of inspection and rest six boreholes were yet to be drilled. Looking the drilled boreholes it appears that entire lease area have proven under G2 level. GSReport is to be submitted after completion of six boholes. Level of exploration would be conformed later on.	Violation under rule 11(1) pointed out via letter dated 29/12/2022

I/3911/2023

1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed	In earlier after pointing out of violation for drilling of proposed boreholes quotation for core drilling was submitted by Engeotech Consultant, Jabalpur and based on work order for core drilling compliance on violation of rule 11(1) were considered in earlier.	As in earlier based on work order for core drilling compliance on violation of the rule were considered and after consideration of compliance on violation of the rule proposed boreholes were not drilled. Again drilling machine were found on mine during inspection inspite of that violation for not carrying out of proposed boreholes was issued on 29/12/2022 and compliance over violation will be recorded only after submission of completion report of boreholes.
1d	Balance area to be explored to bring Geological axis in 1 or 2	0.99hect	Although three holes were found completed upto the date of present inspection but final decision about expolation of balanced area can be made after completion of all the boreholes. Although on prima phasis it appears that entire mineralised area of the lease has proven in to G2 level upto 270mRL	Proposed boreholes had not completed resulting GSR yet to be prepare. Considering 0.99hect area of the lease unexplored, violation of rule 12(4) pointed out vide violation letter dated 29/12/2022.
1e	Balance reserve as on 01/04/20	01/04/2022 Iron 111 74347 211 976280 333 720650 Manganese Ore 111 6391 211 64269 333 50477	Iron 111 142781 211 976280 333 720650 Manganese Ore 111 52607 211 64269 333 50477	Recovery of manganese ore is too less than the proposed one. There is a need to carry out a study about recovery of manganese ore from the deposit.

 Development :

I/3911/2023

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to work in between E100 to E260 & S20 to S100 with bench floor mRLs as 394mRL to 370mRLs as earmarked in VI(D) Plate for the year 2021-22.	Lateral Movement of mine was found reached upto the proposed locations at the end of 2021-22.	Lateral movement almost achieved.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches in Top soil - Nil, Overburden Benches - Nil, Iron & Mn ore - 7 Benches (Height -6mts)	Bench height of 6mts not maintained in Iron & Mn ore benches. Approx. 8 to 10m bench height was observed	Violation under Rule 11(1) of MCDR,2017 was issued for devaition in proposed vs actual bench height
2c	Stripping ratio or ore to OB ratio	Not Proposed	Nil	No overburden or top soil generation proposals were given for 5 yrs plan period.
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	No top soil generation proposals were given for 5 yrs plan period.
2e	Quantity of overburden generation in m3	Not Proposed	Nil	No overburden generation occured.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			There is single working pit centralised located & its dimensions Pit No-1 (170-220m x (145-170m x (10-30m). Iron ore & Mn ore mineralisation was very well seen in working pit. Vertical faces upto 20-22m were seen which is not desirable. Violation under rule 11(1) pointed out vide letter dated 29/12/2022

Exploitation:

I/3911/2023

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One	Production carried out from single Pit-1	No deviation
3b	Quantity of ROM mineral production proposed	1,55508 tonne of Iron Ore & 10603 tonne of Mn ore proposed in 2021-22.	154225 tonnes Iron ore production acheived during the year 2021-22. There is no production reported against Manganese ore during the year.	Production of Manganese ore not reported. Violation for the deviation pointed out
3c	Recovery of sailable/usable mineral from ROM production	90 % recovery of iron ore proposed & 5% recovery of Mn ore proposed	Recovery of iron ore achieved as per the proposals however recovery of manganese ore reporting is nil.	Violation for thee deviation pointed out.
3d	Quantity of mineral reject generation	Not Proposed	Nil	No mineral rejects in the lease area
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	Not applicable	
3f	Quantity of sub grade mineral generation.	Not Proposed	Not applicable	
3g	Grade of sub grade mineral generation	Not Proposed	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Manual dressing, sizing & sorting of Iron, Mn ore proposed	Manual dressing, sizing & sorting of Iron, Mn ore carried out	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Not applicable	
3j	Provision of drilling and blasting in mineral benches	Not Proposed	Not applicable	Iron & Mn ore found as pebbles & fines hence drilling/blasting not proposed

I/3911/2023

3k	Provision of mining machineries in mineral benches	Excavator/Tata , 1.0Cum capacity Loader-Tata TATA Dumper model 2515, 24 T capacity Tractor mounted Air Compressor Rock breaker CP 1650 Water pump with Diesel engine	Excavator/Tata, 1.0Cum capacity Loader-Tata TATA Dumper model 2515, 24 T capacity Tractor mounted Air Compressor Rock breaker CP 1650 Water pump with Diesel engine	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No OB bench height is proposed Bench height of 6m proposed in Iron & Mn ore benches	Proposed height of benches were not maintained at some location	Violation of rule 11(1) of MCDR,2017 was issued for this deviation.
3m	Total area covered under excavation/pits	2.61 Ha area was proposed in approved ROMP period i.e. 2018-19 to 2022-23.	Total 4.03 Ha area covered under excavation as per AR for the year 2021-22, As per pit diamension about +3.00 hect area covered under pit.	
3n	Ore to OB ratio for the pit/mine during the year.	Not Proposed	Not applicabile	
3o	Total area put in use under different heads at the end of year	As per the previous approved ROMP (As on 01.04.2018) Pits-2.61 Ha Mineral Storage-1.30 Ha Road - 0.01 Ha	As per the previous annual return (As on 01.04.2022) Covered under current (O/C) Workings -4.03 Ha	

I/3911/2023

3p	Production of ROM mineral during the last five year period as applicable	<table border="0"> <tr> <td style="text-align: right;">Iron Ore</td> <td style="text-align: right;">Mn</td> <td style="text-align: right;">Ore</td> <td style="text-align: right;">Mn Ore</td> </tr> <tr> <td style="text-align: right;">2017-18-:</td> <td style="text-align: right;">2,94,930</td> <td style="text-align: right;">2017-18-:</td> <td style="text-align: right;">63,500</td> </tr> <tr> <td style="text-align: right;">2018-19-:</td> <td style="text-align: right;">21,053</td> <td style="text-align: right;">2018-19-:</td> <td style="text-align: right;">90,000</td> </tr> <tr> <td style="text-align: right;">2019-20-:</td> <td style="text-align: right;">1,46,037</td> <td style="text-align: right;">2019-20-:</td> <td style="text-align: right;">700</td> </tr> <tr> <td style="text-align: right;">2020-21-:</td> <td style="text-align: right;">10,336</td> <td style="text-align: right;">2020-21-:</td> <td style="text-align: right;">1,74,207</td> </tr> <tr> <td style="text-align: right;">2021-22-:</td> <td style="text-align: right;">1,77,570</td> <td style="text-align: right;">2021-22-:</td> <td style="text-align: right;">3,807</td> </tr> <tr> <td style="text-align: right;">2022-23-:</td> <td style="text-align: right;">12,457</td> <td style="text-align: right;">2022-23-:</td> <td style="text-align: right;">222400</td> </tr> <tr> <td style="text-align: right;">2023-24-:</td> <td style="text-align: right;">223851</td> <td style="text-align: right;">2023-24-:</td> <td style="text-align: right;">300</td> </tr> <tr> <td style="text-align: right;">2024-25-:</td> <td style="text-align: right;">15033</td> <td style="text-align: right;">2024-25-:</td> <td style="text-align: right;">154225</td> </tr> <tr> <td style="text-align: right;">2025-26-:</td> <td style="text-align: right;">155508</td> <td style="text-align: right;">2025-26-:</td> <td style="text-align: right;">Nil</td> </tr> <tr> <td style="text-align: right;">2026-27-:</td> <td style="text-align: right;">10603</td> <td style="text-align: right;">2026-27-:</td> <td style="text-align: right;">Nil</td> </tr> </table>	Iron Ore	Mn	Ore	Mn Ore	2017-18-:	2,94,930	2017-18-:	63,500	2018-19-:	21,053	2018-19-:	90,000	2019-20-:	1,46,037	2019-20-:	700	2020-21-:	10,336	2020-21-:	1,74,207	2021-22-:	1,77,570	2021-22-:	3,807	2022-23-:	12,457	2022-23-:	222400	2023-24-:	223851	2023-24-:	300	2024-25-:	15033	2024-25-:	154225	2025-26-:	155508	2025-26-:	Nil	2026-27-:	10603	2026-27-:	Nil	Actual recovery of manganese ore is less than the envisaged one in last two consecutive years even in year 2021-22 it is nil.
Iron Ore	Mn	Ore	Mn Ore																																												
2017-18-:	2,94,930	2017-18-:	63,500																																												
2018-19-:	21,053	2018-19-:	90,000																																												
2019-20-:	1,46,037	2019-20-:	700																																												
2020-21-:	10,336	2020-21-:	1,74,207																																												
2021-22-:	1,77,570	2021-22-:	3,807																																												
2022-23-:	12,457	2022-23-:	222400																																												
2023-24-:	223851	2023-24-:	300																																												
2024-25-:	15033	2024-25-:	154225																																												
2025-26-:	155508	2025-26-:	Nil																																												
2026-27-:	10603	2026-27-:	Nil																																												

3q	General remarks of inspecting officers on method of mining etc.	Mechanised open cast working proposed by using Excavator /JCB & dumper combination without drilling & blasting.
----	---	---

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Not Proposed	Nil	No OB, top soil & mineral rejects proposed to generated during approved plan period
4b	Location of topsoil, OB and mineral reject dumps	Not Proposed	Nil	
4c	Number of dumps within lease area and outside of lease area	Not Proposed	NA	Almost entire unworked portion of the lease area cover either mineral stack or sub grade. In addition to this there is a mineral stock out side of the lease area lies beyond southern lease boundary

I/3911/2023

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not Proposed	NA	Almost entire unworked portion of the lease area(about 1.0hect) including statutory barrier zone cover either mineral stack or sub grade dump. Thus, entire mineral stack and sub grade dump are within ultimate pit limit.
4e	Number of active and alive dumps.	Not proposed	No active OB or top soil dumps in lease area	-
4f	Number of dead dumps.	Not proposed	Not applicable	
4g	Number of dumps established.	Not proposed	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed	Not applicable as there is no dead dumps in lease area.	
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			No overburden or top soil encountered in the mining lease area. Hence, scope of dumps management doesnt exists.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	Not Proposed	Not applicable	ML area is devoid of OB/Waste and all alone pit are yet to be exhausted,hence backfilling is not proposed as well as not applicable at present stage.

I/3911/2023

5b	Area under backfilling of mined out area	Not proiposed	Not applicable.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed.	Not applicable as there is no top soil in the lease area.	
5d	Total area fully reclaimed and rehabilitated	Not proposed	Not applicable.	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No overburden/waste encountered in the lease area. Top soil as and when generated proposed to be used for plantation purpose. Hence, scope of reclamation by backfilling doesn't exist.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	To be submitted before 1st July of every year	Submitted.	No deviation
6b	Area available for rehabilitation (ha) .	Not proposed.	NA, presently no area is available for rehabilitation	
6c	afforestation done (ha).	Total 20 saplings proposed to be planted during 2021-22	Total 20 saplings planted during the year	Survival rate 80% during the year under review.
6d	No. of saplings planted during the year	Total 20 saplings proposed to be planted during 2021-22	Total 20 saplings planted during the year	No deviation.
6e	Cumulative no .of plants	NA	Not available	

I/3911/2023

6f	Any other method of rehabilitation	Not proposed	Not applicable.	
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	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation 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 at this stage.	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed	Not applicable at this stage.	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed	Not applicable as there is no waste land within the lease area that can be rehabilitated except statutory barrier zone that also have in certain extent covered under mining.	Violation under rule 11(1) have been pointed out.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Not proposed	Not applicable.	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Not proposed	NA	

I/3911/2023

6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Air, Water, Noise monitoring Proposed	Yes, Compliances of environmental monitoring is being carried out.	Analysis reports attached with the RMP document under process of approval.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Area is devoid of OB/Waste, hence scope of backfilling followed by reclamation & rehabilitation doesn't exist and no proposals are given. Periodic env. monitoring is being carried out by outsourced consultant.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	155508 MT of iron ore & 10603 MT Mn ore proposed as total ROM production for despatch. Grade wise sorting proposed within lease area for Iron & Mn ore	147398.62 MT iron ore & Manganese ore- Nil dispatched during the year. Iron ore fines of upto 5% Fe content quantity 135095.72 tonne , 55 to 58% Fe content quantity -4496.55 tonne and 60-62% Fe content quantity 7806.35 tonne despatched shown on A. Return for the year, 2021-22.	As there is no mechanism for upgradation of iron ore within lease area except screening, question arises about dispatch of 60-62% Fe content mineral from the lease area into the market. Accordingly violation of rule 45(7) pointed out through letter dated 29/12/2022.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Proposed as Manual	As per proposal. However screening of iron ore also carried out through screen.	

I/3911/2023

7c	Different grade of mineral sorted out at mines.	Grade wise sorting & sizing for iron ore <55% Fe content and Manganese <25% Mn content proposed	Grade wise sorting & sizing for iron ore upto 55% Fe content, 55-58% Fe content & 60-62% Fe content reportedly carried out as indicated in Annual Return, 2021-22. Average grade of iron ore mineral of the lease area is 55% Fe content and within lease area there is screening facilities available only. Hence dispatch of 60-62% Fe content mineral from the lease area is questionable. Production and dispatch both of manganese reported as nil is also questionable.	Both, Dispatch of 60-62% Fe content iron ore from lease area and Nil production of manganese iron ore from lease area have been raised through violation letter dated 29/12/2022.
7d	Any beneficiation process at mines .	Not Proposed	Any beneficiation process not in use within lease area except manual sorting and occasional screening.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Iron ore & Mn ore is being conserved by grade wise sorting in the lease area. Iron ore upto 55% , 55-58% & 60-62% Fe content are being dispatched from the mine. Matter about dispatch of 60-62% Fe content in iron ore raised as there is no mechanism about upgradation of av. 55% Fe content iron ore into 62% raised through letter dated 29/12/2022.

Environment :

Sl.No.	Item	Proposals	Actual work	Remarks
--------	------	-----------	-------------	---------

I/3911/2023

8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	NA	No top soil encountered or proposed during plan period.
8b	Concurrent use or storage of topsoil	Not proposed	Not applicable. However soil generated occassionally utilised in plantation purpose.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not proposed	Not applicable.	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Not applicable.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Iron ore & Mn ore are not exhausted in any pits for aforesaid purpose.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	20 Saplings were proposed to be planted	Actual plantation with 80% survival rate.	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling was proposed by water tanker	Regular water sprinkling is done by water tanker	Water tanker of 5KL capacity is provided for the purpose

I/3911/2023

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

Aesthetic beauty in and around mine area is not much satisfactory as plantation not done up to that extent. Lease area is very small of only 4.03hect and entire lease area found mineralised with mineralisation upto 350mRl i.e.55-60m thick mineralisation. Existing mining already cover statutory barrier zone particularly on southern and Eastern portion of the lease. lessee has advised to backfilled the degraded portion of statutory barrier zone first and then think about aesthetic beautiy.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	AR for 2021-22 and MR upto Nov,2022 submitted	Annual Return for 2021-22 as well as Monthly returns upto the requisit months submitted.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	yes, name of Mining Engineer given	Nirmal Singh Kurweti as a Mining Engineer	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes, Covered under current OC working 4.03hect and under infrastucture 0.02hect	Covered under current OC working 4.03hect(about 3.0hect under pit and rest 1.0hect under mineral stacks) Infrastructure .02hect	

I/3911/2023

9d	Scrutiny of Annual return on afforestation	Yes, 20 saplings	About 12 saplings were seen.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	No mineral/ore rejects generated during the year	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	As on 01/04/2022 Manganese ore Mn content 25% 2509.24 tonne Iron Ore Fines Below 55% 11456.187 tonne 55-58% 1200 tonne 60-62% 1393.650 tonne iron ore Lumps Below 55% 99.57 tonne	Manganese ore As on 01/12/2022 Mn content 25% 91.95 tonne Iron Ore Fines Below 55% 8779.97 tonne 55-58% 1200 tonne 60-62% 6193.65 tonne iron ore Lumps Below 55% 676.97 tonne	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Manganese Ore Sale value, Ex Mine Price and Production cost not indicated as mineral production and dispatch of manganese ore during the year is Nil Iron Ore Grade Ex Mine Price (in RS) Sale Value (in Rs) Production Cost e (in RS) below 55% 934/- 934/- 689/- 55-58% 816/- 816/- 689/- 60-62% 969/- 969/ 689/-	
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (in ?) 0	In correct.	
9k	Scrutiny of Annual return on mining machineries	Given	NA	

I/3911/2023

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

Violation observed			Show cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	29-DEC-22			
MCDR17	Rule 12(4)	29-DEC-22			
	Rule 45(7)	29-DEC-22			

Date :**(RAGHUBIR SHARAN GARG)**

Indian Bureau of Mines