

MCDR-MPCOFE/5/2024-JBP-IBM\_RO\_JBP  
INDIAN BUREAU OF MINES

MINERALS DEVELOPEMMENT AND REGULATION DIVISION

I/29444/2024

MCDR inspection REPORT

Jabalpur regional office

Mine file No : MP/JBP/IRON ORE-21

Mine code : 30MPR18023

- (i) Name of the Inspecting : G007 ) RAGHUBIR SHARAN GARG  
Officer and ID No.
- (ii) Designation : Assistant Controller Mine
- (iii) Accompanying mine : Shri Varun Kumar Gautam, Authorized Signatory and Man  
Official with  
Designation
- (iv) Date of Inspection : 28-MAR-24
- (v) Prev.inspection date : 04-MAR-20

PART-I : GENERAL INFORMATION

1. (a) Mine Name : GHUGHRIKALA
- (b) Registration NO. : IBM/766/2011
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address  
State : MADHYA PRADESH  
District : JABALPUR  
Village :  
Taluka : SIHORA  
Post office : TIKARIYA  
Pin Code : 483334  
FAX No. : 07622403495  
E-mail : amckatni@rediffmail.com  
Phone : 07622-404395
- (f) Police Station :
- (g) First opening date : 08-JUN-18
- (h) Weekly day of rest : SUN
2. Address for :  
correspondence
3. (a) Lease Number :  
(b) Lease area : 8.59h  
(c) Period of lease : 50 years, 06/01/2017 to 05/01/2067  
(d) Date of Expiry : 05/01/2067
4. Mineral worked : IRON ORE Main

I/29444/2024

## 5. Name and Address of the

Lessee : M/s NIRMALA MINERALS  
PATHAK WARD KATNI MADHYA  
PRADESH  
Phone: 9575800480  
FAX : 07622403495

Owner : M/s NIRMALA MINERALS  
M/s NIRMALA MINERALS PATHAK  
WARD KATNI MADHYA PRADESH  
Phone: 9575800480  
FAX : 07622403495

Agent : HARSH KAPOOR  
PATHAK WARD KATNI  
JABALPUR MADHYA PRADESH  
Phone:  
FAX :

6. Date of approval of Mining : 1. MP/JBP/Iron Ore/MPLN/G-07/2016-17dtd26/12/16  
Plan/Scheme of Mining 2. MP/JBP/Iron Ore/RMP-04/2021-22dtd 16/07/2021

I/29444/2024

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	Not applicable	27 no of boreholes already carried out in year 2021-22 as per approved proposals.
1b	Exploration over lease area for geological axis	Not proposed	Not applicable.	Entire mineralized area had already explored under G2
	1 or 2			level at the time of approval of RMP approved on 16/07/21. To convert entire mineralised area into G1 level 27 no of core boreholes were proposed against year 2021-22 and the same no. of boreholes have already completed as per proposal in year 2021-22 but Based on additional exploration GSR not submitted so far. Violation of rule 12(4B) has been pointed out vide letter dated 04/04/2024.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not proposed	Not applicable	-
1d	Balance area to	b	e explored to	bring

I/29444/2024 Geologicalaxis  
in 1 or 2

Entire mineralised 8.59hect area was proven under G1 level. For conversion of mineralised area in to G1 level 27 boreholes were proposed against 2021-22.

Proposed boreholes have been carried out as per approved proposal and accordingly entire mineralised area have proven under G1 level of UNFC.

Based on additional exploration geological study report has not been submitted by the lessee. hence, violation of rule 12(4B) has been pointed out vide letter dated 04/04/2024.

I/29444/2024

1e	Balance reserve as on 01/04/20	Reserves as on 01/04/2023 122-919823T 222-512258T	Reserves as on 01/04/2023 122-951387T 222-512258T	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	Proposals	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	1:0.49	Discussed about removal of excessOB quantity than the proposed one and advise rendered at the spot to check it closely.

I/29444/2024

2d	Quantity of topsoil generation in m3	Not proposed.	NA	-
2e	Quantity of overburden generation in m3	7402cum	91260cum	Discussed about removal of excessOB quantity than the proposed one and advise rendered at the spot to check it closely.  Mechanized mining is done using shovel tipper etc. Waste soil is scrapped and removed. Mining is done in benches upto 5mtr. The development in both the blocks were proposed and accordingly development in both the blocks carried out. Mineral of block -B was found inferior grade resulting excess OB generated. However advise rendered at minesite for close watch on OB generation.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			

---

**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	199868T	185029.16T	-

I/29444/2024

3c	Recovery of sailable/usable mineral from ROM production	90%	87%	Patches of low- grade iron ore encountered in block -B 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	-
3g	Grade of sub grade mineral generation	Not proposed	NA	-
3h	Manual / Mechanised method adopted for segregating from ROM	Screening proposed	As per proposal	-
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	Not proposed	NA	-
3k	Provision of mining machineries in mineral benches	Back Hoe- 0.9cum to 1.2cum 2No. Dozer410HP 1No. Dumper 10-25T 20No.	Back Hoe- 1.1cum 2No. Dozer410HP 1No. Dumper-20T 6No. F.End Loader 1.7cum 1No.	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed	Yes, proposed	As per proposal.	Front end loader in MP/SOM

I/29444/2024 deployed  
in  
addition  
to the  
proposal  
which is  
convergent  
to the  
proposed  
bench  
height of  
5.0m



I/29444/2024

3m	Total area covered under excavation/pits	6.005hect	6.005hect	-
3n	Ore to OB ratio for the pit/mine during the year.	1:0.11	1:0.49	-
3o	Total area put in use under different heads at the end of year	6.175hect	6.088hect	-
3p	Production of ROM mineral during the last five year period as applicable	18-19=185232T 19-20=89340T 20-21=113061T 21-22=199989T 22-23=199868T	18-19 = 154152T 19-20 = 84110T 20-21 = 112066T 21-22 = 183263T 22-23 = 185029T	-
3q	General remarks of inspecting officers on method of mining etc.			Mechanized mining is in practice by bench formation using Back hoe, Front end Loader, Dumper, dozer 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/ mine waste dumping in Block B	As per proposal	-
4b	Location of topsoil, OB and mineral reject dumps	On eastern part of Block B	As per proposal	Major part of the OB/mine waste is utilised in making of bund around the lease area.
4c	Number of dumps within lease area and outside of lease area	One within lease area and Nil outside of the lease area.	One within lease area and Nil outside of the lease area.	-
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dump proposed within ultimate pit limit as too less lease area that too entirely mineralised.	Dump is within ultimate pit limit.	Entire lease area is mineralised under the circumstances dump is proposed under ultimate pit limit.
4e	Number of active and alive dumps.	One	One	-

I/29444/2024

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.	Yeas proposed against 2021-22	As per proposal	-
4i	Length of Retaining wall or garland drain all along dumps	310m garland drain.	As per proposal.	-
4j	Number of settling ponds	Not proposed.	NA	-
4k	Specific comments of inspecting officer on waste dump management			Adopted mine waste management system is observed and found 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	Backfilling of Northern portion of the pit of Block A of about 0.1hect were noticed which was reportedly carriedout in year 2021-22 as per approvedproposal. -
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed	NA	as there is no top soil.
5d	Total area fully reclaimed and rehabilitated	Not proposed.	NA	-

I/29444/2024

5e General remarks of inspecting officers on backfilling and reclamation etc. Backfilling of Northern portion of the pit of Block A were noticed which was reportedly carried out in year 2021-22 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).	Proposed.	Submitted	-
6b	Area available for rehabilitation (ha) .	Not proposed	NA	-
6c	afforestation done (ha) .	0.16hect	0.08hect	-
6d	No. of saplings planted during the year	160	85	Less plantation, matter discussed during inspection and advise rendered for better plantation.
6e	Cumulative no .of plants	320 in a period of last two years i.e. in year 2021-22 and 2022-23. .	509 cumulative	-
6f	Any other method of rehabilitation	Not proposed.	NA	-
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.	NA	-

I/29444/2024

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	Plantation proposed on statutory barrier zone.
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	Not proposed.	NA	-
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not proposed	NA	0.16 hect area belongs to 7.5m wide statutory barrier zone was proposed for plantation by 160 saplings as a green belt out of which about 0.08 hect area rehabilitated by saplings of 85 no. on the site. selected for the purpose.
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not proposed.	NA	-

I/29444/2024

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 except northern portion of pit of Block A as pit is not matured for reclamation and rehabilitation.

---

 Mineral Conservation:
 

---

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral dispatch 199868T Grade wise sorting not proposed.	ROM mineral dispatch-nil sorting within lease area (i)Lumps (a)45% to below 51% Fe-38635.48 tone (ii)Fines (a)45% to below 51% Fe-988.17 tone (b)51% to below 55% Fe-145405.15 tone	Anomaly observed in grade wise dispatched quantity and total quantity dispatched to different consignees. Deficiencies pointed out through violation of rule 45(7) vide letter dated 04/04/2024.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized screening and sizing	As per proposal	

I/29444/2024

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 .	At mining lease area there is no beneficiation plant. However, in adjoining to the lease area there is lessee's own beneficiation plant where processing of ROM is one of the option.	As per proposal.	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Grade wise mineralis 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 proposals.	Major part of OB/mine waste is reportedly utilised for the preparation of bund.

I/29444/2024

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)	160 saplings proposed as cumulative 320 saplings	85 saplings during the year and as a cumulative 509 saplings planted.	-
8g	Survival rate	80%	80%	-
8h	Water sprinkling on roads to control airborne dust	Proposed.	Water sprinkling evidenced during site inspection.	-

I/29444/2024

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 on operation in the area resulting land degradation due to mining as well as OB/ mine waste/ tailings dumps in the area. As a corrective measures plantations of saplings have been carried out in the area but growth of these sapling are too less in comparison to the growth of dumps and pits. Mine is also not reached in reclamation and rehabilitation stage resulting aesthetic beauty of the area needs 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 February, 2024 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-Shri R.K.Pandey, Geologist-Shri Dipesh Kumara	Termination notice of Shri R.K.Pandey, Mining Engineer and appointment notice of Shri Vijay Singh, as a Mining Engineer have been submitted by the lessee.



I/29444/2024

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 expl. & abandoned 0.0 ii. Covered under current (O-C) Workings- 5.622he iii. Reclaimed-rehabilitated 0.0 iv. Used for waste disposal 0.060 v. Occupied by plant, buildings, and roads etc. 0.426 vi. Used for any other purpose (specify) Mineral storage 0.04	-
9d	Scrutiny of Annual return on afforestation	Given	85	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Given	Nil	Okay
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	ROM Stock- Nil Graded stock Lumps- Nil Fines- i. 51-55Fe=200T	-
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 per Tonn) (a) 45% to below 51% Fe Rs. 547.56 Fines (a) 45% to below 51% Fe Rs. 550.00 (b) 51% to below 55% Fe  Rs. 442.98 B. Cost of production Rs. 415.88	-

I/29444/2024

9h	Scrutiny of Annual return on fixed assets	Given	Value of Fixed Assets* Rs.Nil	This is a case of combined information with another mine. In place of details of another mine details of this mine had been incorporated. deficiency pointed out through violation of rule45(7) vide letter dated 04/04/2024.
9k	Scrutiny of Annual return on mining machineries	Given	BACK HOE 1.100CUM 2 Nos F.END LOADER1.700 CUM 1 No DOZER 410.000HP 1 No DUMPER 20.000TONNE 6 Nos.	

---

I/29444/2024

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

Violation observed			Show Cause position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17 Rule 12(4)	04-APR-24				
MCDR17 Rule 45(7) (a)	04-APR-24				

**Date :10/04/2024****(RAGHUBIR SHARAN GARG)**  
Indian Bureau of Mines