

**INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION**

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/JABALPUR/IRONORE-18

Mine code : 30MPR18018

- (i) Name of the Inspecting : **NQ08**) **KATHROJU NAVEEN**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Alok Pandey (Lessee's Representative) , Shri R
Official with
Designation
- (iv) Date of Inspection : 31-DEC-22
- (v) Prev.inspection date : 12-OCT-18

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **HRIDEYANAGAR IRONORE 4.67**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : JABALPUR
Village : HRIDEYANAGAR
Taluka : SIHORA
Post office : HRIDEYANAGAR
Pin Code : 483222
FAX No. :
E-mail :
Phone :
- (f) Police Station :
- (g) First opening date : 01-DEC-14
- (h) Weekly day of rest : SUN
2. Address for :
correspondance
3. (a) Lease Number : MPR2432
- (b) Lease area : 4.67
- (c) Period of lease : 20
- (d) Date of Expiry : 18-MAR-34
4. Mineral worked : IRON ORE Main
LATERITE Associated
MANGANESE ORE Associated

5. Name and Address of the

Lessee : SHRIKANT PANDEY
50, GANDHIR\GRANM
(BURHAGAR) TEHSIL-SIHORA
DISTT. JABALPUR (M.P.)
JABALPUR MADHYA PRADESH
Phone:09425800763
FAX :NA

Owner : SHRIKANT PANDEY
50, GANDHIR\GRANM
(BURHAGAR) TEHSIL-SIHORA
DISTT. JABALPUR (M.P.)
JABALPUR MADHYA PRADESH
Phone: NA
FAX : NA

6. Date of approval of Mining : MP review under 17(1) MCR 2016 11-DEC-18
Plan/Scheme of Mining

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	proposed 3 core drill holes in 2018-19.	6 Bore holes drilled during 2022-23	
1b	Exploration over lease area for geological axis 1 or 2	proposed to bring entire lease area in G1 level	G2	Exploration was insufficient to convert entire lease area under G1 category of UNFC
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Mentioned in the previous approved document	On contractual basis Expenditure incurred Rs 7,00,000 /-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	proposed to bring entire area under G1.		Exploration was insufficient to convert entire lease area under G1 category of UNFC.
1e	Balance reserve as on 01/04/20	83,228T of Iron Ore and 2,218T of Managanese.	1,01,221 T of Iron Ore 8,802 T of Manganese.	as per the last approved Mining plnat dated 11/12/2018 reserves were 1,65,755 T of Iron ore and 14,258T of Manganese were present ot of which it is proposed to produce 82,527 t of Iron ore and 12,040 T of Mn by 01.04.2022. abut the actual production reported as per the Annual returns submitted were 65,534 T Iron ore and 5,456T Mn.

1f	General remarks of inspecting officers on geology, exploration etc	the details exploration was not s per the MEMC Rules 2015 and it is proposed to produce 82,527 t of Iron ore and 12,040 T of Mn by 01.04.2022 but the actual production reported as per the Annual returns submitted were 65,534 T Iron ore and 5,456T Mn.
----	--	--

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	South centre part of the lease area	A per the proposal.	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	proposed seperate benches in OB and Mineral.	As per the proposal.	
2c	Stripping ratio or ore to OB ratio	1:0.68	1:0.67	
2d	Quantity of topsoil generation in m3	Not proposed	Not Applicable	
2e	Quantity of overburden generation in m3	9128 Cu.m		
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			No top soil present in the proposed area.

Exploitation:

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

3a	Number of pit proposed for production	Two pits were proposed for production	Observed 3 pits in the lease	the Two pits Observed i the proposed Mn and Iron ore band were encroached the Lease Boundary against which violation under rule 11(1) has been issued.
3b	Quantity of ROM mineral production proposed	26,560T of ROM out of which 24,304T of Iron ore and 2256T of Mn is proposed to be produced .	26,290T of ROM out of which 24,034 T of Iron ore and 2,256T of Mn is reportedly produced .	
3c	Recovery of sailable/usable mineral from ROM production	Iron ore -100% Manganese ore 20%	Recovery details not observed in the mine for which recovery study is recomended in scrutiny coments of the submitted RMP.	
3d	Quantity of mineral reject generation	Not proposed	Not Applicable	
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	Manual	
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	proposed manual working in B category mines.	proposed manual working in B category mines.	
3k	Provision of mining machineries in mineral benches	Manual Working	Manual Working	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	yea	yes	
3m	Total area covered under excavation/pits	Total 1.2508 ha were proposed to be under pits during the proposal period	it is found 1.39ha under pits a per the submitted data . two pits wereencroached the Lease boundary	It is found two pits wereencroached the Lease boundary for which violatio has been issued under rule 11(1) of MCDR-2017.
3n	Ore to OB ratio for the pit/mine during the year.	1:068	1:067	
3p	Production of ROM mineral during the last five year period as applicable	2018-19.....234 30T 2019-20.....197 95T 2020-21.....24 782T 2021-22.....26 560T 202223 (till date) 20882t	2018-19....11,700T 2019-20....12,400 T 2020-21.....19,600T 2021-22.....26,290T 202223.....18,480T (till date)	
3q	General remarks of inspecting officers on method of mining etc.			No Mineral Reject or Subgrade mineral found in the mine.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Generated waste quantity was proposed to be kept towards Northern side of the lease.	Found waste dump at the stated location.	some portion of the dump is being found outside the lease against which violation has been issued.
4b	Location of topsoil, OB and mineral reject dumps	Northern side of the lease	Northern side of the lease	
4c	Number of dumps within lease area and outside of lease area	one	One	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Northern side of the lease	Northern side of the lease some piortion of dump found encroachng the lease Bondary.	
4e	Number of active and alive dumps.	one	one	
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.	proposed	Not found	garland drain not found around the periphery of dump for which violation has been issued under Rule 37
4i	Length of Retaining wall or garland drain all along dumps	Not Given	Not Observed.	
4j	Number of settling ponds	Not proposed	Not Applicable	
4k	Specific comments of inspecting officer on waste dump management			Some portion of the dump is being found outside the lease against which violation has been issued.

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.	75m2 mined out area over 7.5m barrier zone	Not found.	
5b	Area under backfilling of mined out area	75m2	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Not Applicable	
5d	Total area fully reclaimed and rehabilitated	Not proposed	Not Applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			

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	Submitted	
6b	Area available for rehabilitation (ha) .	Not proposed	Nil	
6c	afforestation done (ha) .	proposed 0.45ha	plantatin done along the LB	

6d	No. of saplings planted during the year	100 saplings proposed	not observed	It is recommended to propose the plantation proposal along with the backlog in the next proposal during first year itself.
6e	Cumulative no .of plants	500	NA	It is recommended to propose the plantation proposal along with the backlog in the next proposal during first year itself.
6f	Any other method of rehabilitation	Not proposed	Not applicable	
6g	Cost incurred on watch and care during the year	NA	NA	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	15*5*2m proposed	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	waste	nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	Not proposed	Nil	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Nil	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not proposed	Nil	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	proposed 500 saplings	saplings planted are less compared to the proposed	Plantation has been done on southern part of lease & lessee's private land adjoining to lease area
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	Not applicable	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Not proposed	Not applicable	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			It is recommended to propose the plantation proposal along with the backlog in the next proposal during first year itself.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Manual sorting was proposed	Manual sorting done	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual sorting was proposed	Manual sorting was observed	
7c	Different grade of mineral sorted out at mines.	IRON ORE-Avg. 55%-Fe2O3 MANGANESE ORE- below 25%	IRON ORE-Avg. 55%-Fe2O3 MANGANESE ORE- below 25%	
7d	Any beneficiation process at mines .	Not proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Manual sorting was being done in the mine.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not propsoed	Not applicable	
8b	Concurrent use or storage of topsoil	Not proposed	Not applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Generated waste quantity was proposed to be kept towards Norther part of the lease.	OB dump bserved on the northern side of the lease	

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)	yes proposed	plantation found
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not proposed	NA
8g	Survival rate	80%	NA
8h	Water sprinkling on roads to control airborne dust	Yes	water sprinkling on haul road found
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area		

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual returns submitted on : 24.06.2022	Annual Return and Monthly return submitted on time.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		
9d	Scrutiny of Annual return on afforestation	within the lease 150 outside the lease 200.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral reject reported	No mineral reject found
9f	Scrutiny of Annual return on ROM stock and/or graded ore	13,488.8 t of Iron Ore stock and 9049.425 T of Mn stock reported	Few quantity of iron ore stock found but no Mn stock observed during the inspection
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	ex minme price of iron ore reported as 500/- Mn ore below 25% ex mine price reported is 800. Mn ore 35%-46% exmine price reported as 8824/-	

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

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 11(1)	03-JAN-23			
MCDR17	Rule 26(2)	03-JAN-23			
MCDR17	Rule 37(2)	03-JAN-23			

Date :

(KATHROJU NAVEEN)

Indian Bureau of Mines