

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

**Review and updation of Mining Plan REPORT**

**Jabalpur regional office**

**Mine file No :** MP/BGT/MANGANESE/29

**Mine code :** 40MPR01087

- (i) Name of the Inspecting : **K006** ) **NARESH KUMAR KATARIYA**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : S/Sh Rajesh Bhattacharya (Agent), Nilesh (Mine Manager)  
Official with  
Designation
- (iv) Date of Inspection : 24-DEC-21
- (v) Prev.inspection date : 29-APR-21

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **BHARVELI MANGANESE MINE (**
- (b) Registration NO.** : **IBM/2711/2011**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Underground
- (e) Postal address :  
State : MADHYA PRADESH  
District : BALAGHAT  
Village :  
Taluka :  
Post office :  
Pin Code :  
FAX No. : 0712-2592073  
E-mail : moilind\_ngp@sancharnet.in  
Phone : 0712-2590775
- (f) Police Station : BHARVELI POLICE STATION
- (g) First opening date : 16-SEP-16
- (h) Weekly day of rest : SUN
2. Address for : M/s MOIL Limited.  
correspondance : MOIL BHAVAN, 1A-Katol Road, Chaoni,  
Nagpur-440 013
3. (a) Lease Number :  
(b) Lease area :  
(c) Period of lease :  
(d) Date of Expiry :
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the  
Lessee : MOIL LIMITED  
VILLAGE- LUGMA TEH-  
BHARWELI DISTT.- BALAGHAT  
BALAGHAT MADHYA PRADESH  
Phone:  
FAX :
6. Date of approval of Mining :  
Plan/Scheme of Mining

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	6 Bore Hole per Year total 30 Nos. Bore Hole Proposed with 7500 Mtrs.	NIL	Mine operation not started due to want of EC.
1b	Exploration over lease area for geological axis 1 or 2	6 Bore Hole per Year total 30 Nos. Bore Hole Proposed with 7500 Mtrs.	NIL	Mine operation not started due to want of EC. Review of mining plan is approved in which exploration over lease area is proposed for geological axis G1.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	MOIL Ltd	NA	Mine operation not started due to want of EC.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Mine was proposed to be explored under G1 and G2 axis exploration for the entire lease area.	No exploration carried out due to want of EC.	
1e	Balance reserve as on 01/04/20		Balance reserve as on 01.04.2021 121 0.516 Million Tonnes 221 0.113 Million Tonnes 333 5.092 Million Tonnes	
1f	General remarks of inspecting officers on geology, exploration etc			MICA SCHIST, FELEPATHIC QUARTZITE & QUARTZ SCHIST FOUND WITH MANGNESE ORE. THE ORE IS FOUND DEEP SHEETED.

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Mine operation proposed by Underground Cut and fill method. Total proposed underground development in the heads of Haul Roads, X-Cut, Ore Drives and Winzes in the various level is approx. 1195 meters.	NIL	Mine operation not commenced due to want of EC.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not applicable for UG mine	NA	
2c	Stripping ratio or ore to OB ratio	1:0.05	Nil	Mine operation not commenced due to want of EC.
2d	Quantity of topsoil generation in m3	NIL	NIL	Only underground mining is proposed.
2e	Quantity of overburden generation in m3	Haul Road development in OB approx. 240m (2592 m3)	NIL	Mine operation not commenced due to want of EC.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine operation not commenced due to want of EC.

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	UG stoping proposed in the RY	NIL	No stoping is carried out due to want of EC.

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3b	Quantity of ROM mineral production proposed	114000 Tonnes	Nil	Mine operation not started due to want of EC.
3c	Recovery of sailable/usable mineral from ROM production	80%	NIL	
3d	Quantity of mineral reject generation	9149 Tonnes	NIL	Mine operation not started due to want of EC.
3e	Grade of mineral rejects generation and threshold value declared.	10% to Below20% Mn	NIL	
3f	Quantity of sub grade mineral generation.	NIL	NIL	
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	NIL	
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	Drilling in the drivage for haulage road, cross cut and ore drive will be done by pneumatically operated jack hammer of 33 mm dia of the length of 1.5 m.	Not done	

3k	Provision of mining machineries in mineral benches	Yes	Not deployed	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Underground cut and fill method	No done	
3m	Total area covered under excavation/pits	Underground Method	NIL	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.05	NIL	
3o	Total area put in use under different heads at the end of year	UG method of Mining. Total 1.66 Hect area proposed for roads	1.66 Hect area covered for roads	
3p	Production of ROM mineral during the last five year period as applicable	2016-17 0.000 2017-18 0.000 2018-19 0.0037 2019-20 0.014 2020-21 0.045	2016-17 0.000 2017-18 0.000 2018-19 0.000 2019-20 0.000 2020-21 0.000	
3q	General remarks of inspecting officers on method of mining etc.	Underground Mine (Waste generated from U/G is used in backfilling of stopes) operation not commenced due to want of EC.		

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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Not done	Mine operation not commenced due to want of EC.

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4b	Location of topsoil, OB and mineral reject dumps	Underground Mine (Waste generated from U/G is used in backfilling of stopes)	Nil	Mine operation not commenced due to want of EC.
4c	Number of dumps within lease area and outside of lease area	NIL	NIL	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NA	NA	
4e	Number of active and alive dumps.	NIL	NIL	
4f	Number of dead dumps.	NIL	NIL	
4g	Number of dumps established.	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not applicable	Not done	
4i	Length of Retaining wall or garland drain all along dumps	Not applicable	Not done	
4j	Number of settling ponds	Not applicable	Not done	
4k	Specific comments of inspecting officer on waste dump management			Underground Mine (Waste generated from U/G is used in backfilling of stopes) development proposed by cut and fill method. No waste dump proposed in the approved plan period.

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Solid Waste Management - Backfilling:

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Sl.No.	Item	Propasals	Actual work	Remarks
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5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	full extraction of mineral from mined out area before starting backfilling	Extraction of mineral not done	Mining operation not stated due to want of EC.
5b	Area under backfilling of mined out area	9378 Cum Mtrs.	Nil	Mine operation not started.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Not done	
5d	Total area fully reclaimed and rehabilitated	Not proposed	Not done	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			9378 Cum Mtrs. area was proposed for backfilling of mined out area. But, mine operation not started.

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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).	Yes	Not applicable	Mine operation not started.
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	Not applicable for UG mine	Nil	
6d	No. of saplings planted during the year	NA	NA	

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6e	Cumulative no .of plants	NIL	NIL	Total 10000 Plants Planted in waste land in the year 2017-18 as per available records.
6f	Any other method of rehabilitation	Not proposed	Not done	
6g	Cost incurred on watch and care during the year	Not specified	No records.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	9378 Cum Mtrs	NIL	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	9378 Cum Mtrs	NIL	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Not applicable for UG mine	NA	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not applicable	Not done	
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed	Not done	

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1.12 Ha. by plantation	5 Ha.	
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation	Plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Yes	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Total 10000 Plants Planted in waste land in the year 2017-18 as per available records. Mining operation not started due to want of EC.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting of mineral	Nil	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Not done	

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7c	Different grade of mineral sorted out at mines.	Below 25% Mn, 25% to 35% Mn. and 46% and above Mn	Nil	
7d	Any beneficiation process at mines .	Yes	Yes, washing and jigging plant is established for the same.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mining operation not started due to want of EC.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	Nil	
8b	Concurrent use or storage of topsoil	Not proposed	Not done	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	NIL	NIL	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Underground Mine (Waste generated from U/G is to be used in backfilling of stopes)	Nil	

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8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Underground Mine (Waste generated from U/G is to be used in backfilling of stopes)	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2000 plants per year	Total 10000 saplings planted in last approved period as per available records.	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Mine was not in operation.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Total 10000 saplings planted in the waste land of lease area at last approved period as per available records.

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#### Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	NA	Monthly and Annual Returns not submitted by lease holder.	Mine not opened due to want of EC. Mine code 40MPR01087 issued in the year 2021 after application by Lessee.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Annual Returns not submitted	

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Annual Returns not subitted
9d	Scrutiny of Annual return on afforestation	Annual Returns not subitted
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Annual Returns not subitted
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Annual Returns not subitted
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Annual Returns not subitted
9h	Scrutiny of Annual return on fixed assets	Annual Returns not subitted
9k	Scrutiny of Annual return on mining machineries	Annual Returns not subitted

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**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

**Date :**

**(NARESH KUMAR KATARIYA)**

Indian Bureau of Mines