

I/3145/2023

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

**MCDR INSPECTION REPORT**

**Nagpur regional office**

**Mine file No :** MP/BGT/MN-6/NGP

**Mine code :** 40MPR01002

- (i) Name of the Inspecting : **NQ06** ) **PUKHRAJ NENIVAL**  
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Shri Rajesh Bhattacharya, Jt. GM (Mines), & Shri Nile  
Official with  
Designation
- (iv) Date of Inspection : 27-DEC-22
- (v) Prev.inspection date : 30-AUG-19

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **BALAGHAT**
- (b) **Registration NO.** : **IBM/5711/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Underground
- (e) Postal address  
State : MADHYA PRADESH  
District : BALAGHAT  
Village : BHARWELI  
Taluka : BALAGHAT  
Post office : BHARWELI  
Pin Code : 481102  
FAX No. : 0712-245185  
E-mail : mm.bg@mail.nic.in  
Phone : 07122890050, 0712245185
- (f) Police Station : Balaghat
- (g) First opening date :
- (h) Weekly day of rest : SAT
2. Address for : MOIL Limited  
correspondance : Balaghat Manganese ore Mine, Balaghat  
Distt - Balaghat
3. (a) Lease Number : MPR0579
- (b) Lease area : 182.3003
- (c) Period of lease :
- (d) Date of Expiry : 30-JUN-32

MPR0574

182.3

30-JUN-32

4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S MANGANESE ORE (INDIA) LTD.  
 3, MOUNT ROAD EXTENSION  
 POST BOX NO. 34, NAGPUR  
 (MP) NAGPUR MAHARASHTRA  
 Phone: 0712-2590050  
 FAX : 0712-2592073

Owner : Shri MM Abdullah, Nominated Owner  
 1- A, KATOL ROAD NAGPUR  
 MAHARASHTRA BALAGHAT MADHYA  
 PRADESH  
 Phone: 0712-2590050  
 FAX : 0712-2592073

Agent : Shri R U Singh  
 Balaghat Manganese Ore Mine  
 Village - Bharveli,  
 Balaghat Distt - Balaghat  
 BALAGHAT MADHYA PRADESH  
 Phone: 0712-245185  
 FAX : 0712-245185

Mining Engineer  
 Name : SHRI SUMIT BARDHAN, Full Time  
 Qualification : BE Mining  
 Appointment/ : 21-Jul-10  
 Termination date

Geologist  
 Name : SUDHANSHU CHAVAN, Full Time  
 Qualification : Msc Geology  
 Appointment/ : 15-Dec-11  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Renewal under rule 22 MCR1960 15-OCT-03  
 Modif.of approved Mining Plan 28-JAN-06  
 Renewal under rule 24 MCR1960 28-AUG-06  
 Mining Scheme rule 12 MCDR1988 18-JAN-08  
 Mining Scheme rule 12 MCDR1988 22-MAY-08  
 Modif.approved Mining Scheme 03-MAR-11  
 Mining Scheme rule 12 MCDR1988 03-OCT-13

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Total 5 Nos. With 3356 Mtrs. (Bore Hole proposed in SOM from year 2017-18 to 2021-22)	10 Nos. Bore hole Completed with 4104.00 Mtrs. (during SOM Period, From 2017-18 to 2020-22)	
1b	Exploration over lease area for geological axis 1 or 2	G1 and G2 axis	G1 axis	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	MOIL Limited - Rs: 10565878/- For SOM Period	MOIL Limited - Rs: 19499267/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserve as on 01/04/20		111 - 9.9 MT 211 - 2.5 MT	
1f	General remarks of inspecting officers on geology, exploration etc			Lease area explored up to G1 level.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Not Applicable in U/G mining work	Not Applicable in U/G mining work	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not Applicable in U/G mining work	Not Applicable in U/G mining work	
2c	Stripping ratio or ore to OB ratio	Not applicable	Not applicable	Underground Mine (Waste generated from U/G is used in backfilling of stopes)

2d	Quantity of topsoil generation in m3	Not Applicable in U/G mining work	Not Applicable in U/G mining work	
2e	Quantity of overburden generation in m3	6724 Tons	5675.04 Tons	Underground Mine (Waste generated from U/G is used in backfilling of stopes)
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Not Applicable in U/G mining work.

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**Exploitation:**

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Not Applicable in U/G mining work	Not Applicable in U/G mining work	
3b	Quantity of ROM mineral production proposed	668566 Tons	330440 Tons	50%
3c	Recovery of sailable/usable mineral from ROM production	80%	80%	
3d	Quantity of mineral reject generation	133713 Tons	44118 Tons	67%
3e	Grade of mineral rejects generation and threshold value declared.	10% to Below20% Mn	10% to Below20% Mn	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	Not proposed	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	

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	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.	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.
3k	Provision of mining machineries in mineral benches	SDL -65 HP with 0.66 M3, LHD- 4 T in U/G workings	SDL -65 HP with 0.66 M3, LHD- 4 T in U/G workings
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not Applicable in U/G mining work	Not Applicable in U/G mining work
3m	Total area covered under excavation/pits	38.229 ha	38.229 ha
3n	Ore to OB ratio for the pit/mine during the year.	1:99	1:58
3o	Total area put in use under different heads at the end of year	38.229 ha	38.229 ha
3p	Production of ROM mineral during the last five year period as applicable	2017-18 0.426 MT 2018-19 0.455 MT 2019-20 0.594 MT 2020-21 0.643 MT 2021-22 0.670 MT	2017-18 0.326 MT 2018-19 0.341 MT 2019-20 0.374 MT 2020-21 0.345 MT 2021-22 0.33 MT

3q General remarks of inspecting officers on method of mining etc. Violation is pointed out for less development & production raised.

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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)	Proposed	Yes, Ob Dump situated within the lease area.	
4b	Location of topsoil, OB and mineral reject dumps	In between Chinage 51-54	In between Chinage 51-54	
4c	Number of dumps within lease area and outside of lease area	01 Dumps	01 Dumps	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	In between Chinage 51-54	In between Chinage 51-54	
4e	Number of active and alive dumps.	01 Dump	01 Dump	
4f	Number of dead dumps.	03 Dump	03 Dump	
4g	Number of dumps established.	03 Dump	03 Dump	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed	Nil	
4i	Length of Retaining wall or garland drain all along dumps	Not proposed	Nil	
4j	Number of settling ponds	03	03	
4k	Specific comments of inspecting officer on waste dump management			Underground Mine (Waste generated from U/G is used in backfilling of stopes)

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Solid Waste Management - Backfilling:

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Sl.No.	Item	Propasals	Actual work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	1700 cum. Mtrs.	5675.04 Cum Mtrs.	IN U/G Backfilling by Waste (Genrated During Development) and Hydraulic Sand stowing
5b	Area under backfilling of mined out area	170000 Cum Mtrs.	79896.643 Cum Mtrs.	IN U/G Backfilling by Waste (Genrated During Development) and Sand
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not applicable	Not applicable	
5d	Total area fully reclaimed and rehabilitated	Not applicable	Not applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			IN U/G Backfilling by Waste (Genrated During Development) and Hydraulic Sand stowing

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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).	Submitted	Submitted	
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	0.5 Ha.	4 Ha.	
6d	No. of saplings planted during the year	1000 nos	1000 nos	

6e	Cumulative no .of plants	Not specified	17000 nos
6f	Any other method of rehabilitation	Not proposed	Not applicable
6g	Cost incurred on watch and care during the year	Not provided	Not provided
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	1700	5675.04
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	20% of waste	100% of waste used in back filling
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on 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
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	Not proposed	Not applicable
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not proposed	Not applicable
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)	Done regularly on quarterly basis	Done regularly on quarterly basis	Air, water and dust survey done by outside agency M/S Wolkem India Limited, E-102, MIA Udaipur (Rajsthan) and Anacon Laboratories Pvt Limited, Nagpur (MOEF Recognized environmental laboratory).
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Air, water and dust survey done by outside agency M/S Wolkem India Limited, E-102, MIA Udaipur (Rajsthan) and Anacon Laboratories Pvt Limited, Nagpur (MOEF Recognized environmental laboratory).

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#### Mineral Conservation:

Sl.No.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	As per SOM	1. Below 25% Mn 2. 25% to 35% Mn. And 46% and above Mn	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanised	Mechanised	
7c	Different grade of mineral sorted out at mines.	Proposed	1. Below 25% Mn 2. 25% to 35% Mn. And 46% and above Mn	
7d	Any beneficiation process at mines .	Proposed	Yes washing and jigging plant is there	

7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Yes washing and jigging work is done.
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## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No top soil generated during the mining because this is under ground mine.	No top soil generated during the mining because this is under ground mine.	
8b	Concurrent use or storage of topsoil	No top soil generated during the mining because this is under ground mine.	No top soil generated during the mining because this is under ground mine.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	yes proposed	Underground Mine (Waste generated from U/G is used in backfilling of stopes)	
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 used in backfilling of stopes)	Underground Mine (Waste generated from U/G is used in backfilling of stopes)	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Underground Mine (Waste generated from U/G is used in backfilling of stopes)	Underground Mine (Waste generated from U/G is used in backfilling of stopes)	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)		1000 Nos. planted	

8g	Survival rate	85%	85%	Total area covered by plantation within the lease: 146.00 hect. Total No. of Trees planted within mining lease: 457883 Nos. , No. of trees survived:  387937 Nos., Survival rate (In percent): 84.72%.
8h	Water sprinkling on roads to control airborne dust	yes proposed	Regular Sprinkling on haul roads, wet drilling	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation done in and around the mine area.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Annual return is submitted From H2 on before 22/06/2022 and Monthly return is submitted From F2 on 09/11/2022.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		Mining Engineer - Shri Sumit Bardhan Date of appointment in mines - 21-07-2010  Geologist - Shri Shudhanshu V Chavan Date of appointment in mines - 15-12-2011	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.		Total area put in use under different heads at the end of year For which FA given - 38.229 ha	
9d	Scrutiny of Annual return on afforestation		1000 Nos. planted	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	133713 Tons	44118 Tons	10% to Below20% Mn
9f	Scrutiny of Annual return on ROM stock and/or graded ore		As per Annual return	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost		As per Annual return	
9h	Scrutiny of Annual return on fixed assets		As per Annual return	
9k	Scrutiny of Annual return on mining machineries		As per Annual return	

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**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)	06-JAN-23			

**Date :****(PUKHRAJ NENIVAL)**

Indian Bureau of Mines