

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

**MCDR inspection REPORT**

**Nagpur regional office**

**Mine file No :** MP/BGT/MN-36 /NGP

**Mine code :** 40MPR01041

- (i) Name of the Inspecting : **KQ14** ) **NARESH KUMAR KATARIYA**  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sh Rajesh Bhattacharya, Agent, Sh A. W. Shaikh, Mine  
Official with  
Designation
- (iv) Date of Inspection : 10-JUN-21
- (v) Prev.inspection date : 31-OCT-04

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **SUKLI (8.013H)**
- (b) **Registration NO.** : **IBM/5711/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :  
State : MADHYA PRADESH  
District : BALAGHAT  
Village : SUKLI  
Taluka : KATANGI  
Post office : SUKLI  
Pin Code :  
FAX No. :  
E-mail :  
Phone :
- (f) Police Station :
- (g) First opening date : 01-JAN-06
- (h) Weekly day of rest : MON
2. Address for :  
correspondance :
3. (a) Lease Number : MPR0518
- (b) Lease area : 79.55
- (c) Period of lease :
- (d) Date of Expiry : 31-MAR-20
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:  
 FAX :

Owner : C.P.N.PATHAK  
 3, MOUNT ROAD EXTN. POST  
 BOX NO. 34 NAGPUR NAGPUR  
 MAHARASHTRA  
 Phone: 0712 - 2545703  
 FAX : 0712 - 2524996

6. Date of approval of Mining	:	Renewal under rule 22 MCR1960	05-JUL-01
Plan/Scheme of Mining		FMCP under 23C(1)	14-JUN-07
		Renewal under rule 24 MCR1960	14-JUN-07
		Mining Scheme rule 12 MCDR1988	03-AUG-12
		MP modif under MCR 1960	31-AUG-16

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Not applicable	Not applicable	
1b	Exploration over lease area for geological axis 1 or 2	10 nos of boreholes	6 DTH boreholes drilled	Violation pointed out for the same under rule 11(1) of MCDR 2017
1c	Exploration Agencies and Expenditure in lakh rupees during the year	MOIL Ltd	MOIL Ltd	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	G1- 1.28 ha G2- 0 ha G3- 4.73 ha G4- 23.09 ha	Violation pointed out for the same under rule 11(1) of MCDR 2017
1e	Balance reserve as on 01/04/20		Balance reserves as on 01/04/2021 18099 T	IT IS CENTRAL CRYSTALLINE ZONE OF SAUCER SERIES. ORE IS PRESENT AS BANDS /POCKETS PATTERN IN BOTH DIP AND STRIKE .BANDS AND POCKET IN 15TO 20MTR DIP IN LENGTH WITH 15 TO 30 MTR IN STRIKE LENGTH.
1f	General remarks of inspecting officers on geology, exploration etc			As per geological considerations, pocket type deposit of Mn Ore exist in the Sukli Mine.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	PIT NO.5	PIT NO.5	Working was carried out as per approved proposal as per provided records.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	OB benches :05 nos Ore benches :01 no	
2c	Stripping ratio or ore to OB ratio	1:5	1:5	
2d	Quantity of topsoil generation in m3	NIL	NIL	
2e	Quantity of overburden generation in m3	145285 m3	79845.53 m3	Only 79845 m3 overburden was removed against the approved proposal of 145285 m3 during the year 2020-21 distorting stripping ratio. Violation pointed out for the same under rule 11(1) of MCDR 2017
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development was found lagging and distorting stripping ratio. Violation pointed out for the same under rule 11(1) of MCDR 2017.

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	01Nos.(Pit No.5)	01Nos.(Pit No.5)	Excavation found with in proposed area.
3b	Quantity of ROM mineral production proposed	15000 Tonnes	14945 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	Not specified	Reject of 430 tonnes reported as per available documents.	

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3d	Quantity of mineral reject generation	430 tonnes	430 tonnes
3e	Grade of mineral rejects generation and threshold value declared.	Mineral <20%	Mineral <20%
3f	Quantity of sub grade mineral generation.	Nil	Nil
3g	Grade of sub grade mineral generation	NA	NA
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 done
3j	Provision of drilling and blasting in mineral benches	DTH hammers of 110 mm by wagon drills	DTH hammers of 110 mm by wagon drills
3k	Provision of mining machineries in mineral benches	By Shovel Dumpers	By Shovel Dumpers
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes, 05 benches of OB and 01 bench of Mn mineral was observed.
3m	Total area covered under excavation/pits	7.3 Ha	7.3 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1 : 5	1 : 5

3o	Total area put in use under different heads at the end of year	19.128 Ha	19.128 Ha	
3p	Production of ROM mineral during the last five year period as applicable	2017-18=9720 2018-19=8505 2019-20=15000 2020-21= 15000	2017-18=4141 2018-19=8500 2019-20=14751 2020-21=14945	
3q	General remarks of inspecting officers on method of mining etc.			Development of the pit is being done in opencast mining method as per approved document.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Proposed separate dumping of OB	Dumping separately as per proposal	
4b	Location of topsoil, OB and mineral reject dumps	N 21° 40' 17" E 79° 40' 23"	N 21° 40' 17" E 79° 40' 23"	
4c	Number of dumps within lease area and outside of lease area	Within lease - 01 dump Outside - Nil	Within lease - Nil Outside - Nil	01 dump
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	N 21° 40' 17" E 79° 40' 23"	N 21° 40' 17" E 79° 40' 23"	
4e	Number of active and alive dumps.	One	One	
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.	Yes	Yes	

4i	Length of Retaining wall or garland drain all along dumps	Not specified	Garland length- 60 meter	
4j	Number of settling ponds	Nil	Nil	
4k	Specific comments of inspecting officer on waste dump management			One OB dump was observed in the lease area.

#### 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.	Existing pit is not fully extracted	Existing pit is not fully extracted	Area not matured for back filling
5b	Area under backfilling of mined out area	NIL	NIL	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not proposed	Utilized for Plantation.	
5d	Total area fully reclaimed and rehabilitated	Nil	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Area not matured for back filling

#### Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	Yes	Submitted
6b	Area available for rehabilitation (ha) .	NIL	NIL
6c	afforestation done (ha).	NIL	NIL
6d	No. of saplings planted during the year	NIL	NIL
6e	Cumulative no .of plants	NIL	Cumulative 150 nos. of saplings planted.
6f	Any other method of rehabilitation	Not proposed	Not done
6g	Cost incurred on watch and care during the year	Not specified	Rs. 250.00 per Plant (2020-21) (Including maintenance, labor coast and fencing,)
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	NIL	NIL
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NIL	NIL
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	NIL	NIL

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NIL	NIL	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NIL	NIL	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	0.1 Hect	0.1 Hect ( 100 sapling planted as per available data)	
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, Quarterly	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Annual report of PMCP is submitted and found in accordance to approved mining plan. Plantation done in the waste land.

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**Mineral Conservation:**


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Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	15000 Tonnes	<25%- NIL 25-35%- 9280 T 35-46 %- 5665 T	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	Mn-25%, Mn-30 %, Mn-38 % , Mn-42 %	Mn-25%, Mn-30 %, Mn-38 % , Mn-42 %	
7d	Any beneficiation process at mines .	Not Proposed	Not applicable	Manual sorting of the mineral is being done form the ROM.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Manual sorting of the mineral is being done form the ROM for mineral conservation.

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**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	No top soil removal proposed in the RY. Top soil already utilised for plantation as per records.
8b	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	OB stored in the dump for future use in the location N 21° 40' 17" E 79° 40' 23"	

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8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	OB stored in the dump for future use.	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Plantation	100 saplings planted in 2020-21	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation in the wasteland and around the lease area.	100 saplings planted in 2020-21	Plantation observed in the waste land and around the lease area.
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation observed in the waste land and around the lease area for aesthetic beauty.

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	All MR of Apr-2020 to Mar-2021 have been already submitted and AR of 2020-21 submitted.	

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9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer- Shri A. W. Saikh Geologist- Sh. Subhransu Pani
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Pit area- 4.84 Ha Dump Area - 1.2 ha Reclaim area- Nil
9d	Scrutiny of Annual return on afforestation	Yes	0.1 Ha (100 plants)
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	As on 01.04.2021 25 - 35 % Mn- 952.76 Tonnes 35 - 46% Mn- 997.86 Tonnes
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	Production cost per Tonnes- Rs. 1424.81 Ex mine price- 25-35 %- Rs. 7010.2  35-46%- Rs. 13189.4
9h	Scrutiny of Annual return on fixed assets	Yes	Rs. 82.5 Lakhs
9k	Scrutiny of Annual return on mining machineries	Yes	Dumper-05 Electric Pump- 01 Excavator - 01

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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
MCDR17	Rule 11(1)	02-JUL-21			

**Date :**

**(NARESH KUMAR KATARIYA)**

Indian Bureau of Mines