

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

**MCDR INSPECTION REPORT**

**Nagpur regional office**

**Mine file No :** MAH/NAG/MN--79/NGP

**Mine code :** 40MSH14006

- (i) Name of the Inspecting : B014 ) CHANDRESH BOHRA  
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Shri R.A.Khan , Mine Manager, Akanksha sahu, Geologis  
Official with  
Designation
- (iv) Date of Inspection : 02-Aug-21
- (v) Prev.inspection date : 20-Nov-20

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : GUMGAON
- (b) **Registration NO.** : IBM/5711/2011
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Underground
- (e) Postal address
- State : MAHARASHTRA
- District : NAGPUR
- Village : GUMGAON
- Taluka : SAONER
- Post office : KHAPA
- Pin Code : 441101
- FAX No. :
- E-mail :
- Phone : 07113--86123
- (f) Police Station :
- (g) First opening date : 01-Jul-62
- (h) Weekly day of rest : SUN
2. Address for :  
correspondance
3. (a) Lease Number : MSH0319
- (b) Lease area : 35.97
- (c) Period of lease : 50
- (d) Date of Expiry : 29-Jun-50

MSH0086  
48.59  
60  
30-Jun-22

MSH0098  
 1.33  
 53  
 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 : DEEPANKAR SHOME  
 1-A, MOIL BHAVAN KATOL ROAD  
 NAGPUR NAGPUR MAHARASHTRA  
 Phone:  
 FAX :

Agent : Shri R.U.Singh  
 Mansar Manganese Mines,  
 Village- Mansar, Tehsil -  
 Ramtek, Nagpur Dis Mansar  
 NAGPUR MAHARASHTRA  
 Phone:  
 FAX :

Mining Engineer

Name : Shri Kishore Chandrakar, Full Time  
 Qualification : B.E.Mining  
 Appointment/ :  
 Termination date

Geologist

Name : Akanksha Sahu, Full Time  
 Qualification : Msc. Geology  
 Appointment/ : 21-Nov-19  
 Termination date

Geologist

Name : Shri I.A.Siddiqui, Full Time  
 Qualification : M.Sc. (Geology)  
 Appointment/ :  
 Termination date

6. Renewal under rule 22 MCR1960 01-Apr-03  
 Modif.of approved Mining Plan 03-Jun-05

Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	22-Jul-08
Plan/Scheme of Mining		Mining Scheme rule 12 MCDR1988	09-Jul-13
		MP review under 17(1) MCR 2016	20-Jun-17

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	04	00	Due to covid 19 , tendering process has got delayed . lessee has written to takeup in 2022-23 in modified mining plan.
1b	Exploration over lease area for geological axis 1 or 2	G1	G1	whole potentially mineralized area has been explored upto G1 level . now lessee is proposing to take up drilling to explore depth persistence.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	MOIL Ltd	Not done	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	NA	
1e	Balance reserve as on 01/04/20		455974 tons as on 1.04.2021	

1f	General remarks of inspecting officers on geology, exploration etc	The thickness available for mining within the area ranges from 3m to 50m. The manganese bearing area lies in the Pre- Cambrian shield. Manganese ore lies in the pre Cambrian 210 km long belt of Meda Sedimentary rocks that originates from Ukwa in Madhya Pradesh. At Gumgaon mine , manganese ore is associated with Quartz Mica Schist of Munsar formation. The deposit consists of two parallel ore zones ( Main bed and soth bed), these two zones apparently represents limbs of isoclinal anticlines.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Nil no development was proposed for the year 2020-21	3728 tonnes waste vremoved in form of winzes & cross cut to overcome last years backlog	Modified Mining Plan also submitted and approved.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Not applicable as underground mining	Not applicable	
2c	Stripping ratio or ore to OB ratio	Not applicable( Nil development proposed against 1 lakh ton of production )	3728 tons of development against 54247 tons of production	

2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	Nil	3728 Tons	pervious years development backlog
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development activity carried out in gumbaon mines is in good manner. all the stopes ready to excavation is being developed by way of haulage road, ore drive, cross cuts and winzes.

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**Exploitation:**

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Nil	Nil	
3b	Quantity of ROM mineral production proposed	86700 T	60000 T	Less production due to spread of covid -19 pandemic
3c	Recovery of sailable/usable mineral from ROM production	90%	100%	Due to market scenerio whole ROM despatched , between 10-20%Mn also
3d	Quantity of mineral reject generation	8670 Ton	Nil	
3e	Grade of mineral rejects generation and threshold value declared.	10-20% Mn	Nil	
3f	Quantity of sub grade mineral generation.	Nil	Nil	
3g	Grade of sub grade mineral generation	No such proposal	Nil	

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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.	No such proposal	Nil	
3j	Provision of drilling and blasting in mineral benches	Jack hammer drilling and blasting with conventional explosive	Jack hammer drilling and blasting with conventional explosive	
3k	Provision of mining machineries in mineral benches	Locomotives with tubs for transportation of ROM	Locomotives with tubs for transportation of ROM	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Not applicable as underground mining	Not applicable	
3m	Total area covered under excavation/pits	7.766ha	7.766 ha	
3n	Ore to OB ratio for the pit/mine during the year.	nil	nil	
3o	Total area put in use under different heads at the end of year		under o/c working-7.766 ha, mineral storage-1.28 ha,, township-5 ha, roads-1.75 ha, infrastructure-4.5 ha, ob dump-13.864 ha	
3p	Production of ROM mineral during the last five year period as applicable	2015-16- 2016-17- 2017-18- 2018-19- 2019-20- 2020-21-	2015-16- 2016-17- 2017-18- 2018-19- 2019-20- 2020-21-	
3q	General remarks of inspecting officers on method of mining etc.			Mining at gumgaon mines is being done with underground method of mining with cut and fill method. Mining is done as per approved mining plan.

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No top soil, Seperate dumping of OB and mineral reject proposed	No top soil generated , waste generated is used for backfilling of stope and no mineral reject generated	
4b	Location of topsoil, OB and mineral reject dumps	-400'L.-300'L.-200'L & -100'L	-400'L.-300'L.-200'L & -100'L	
4c	Number of dumps within lease area and outside of lease area	08(06 OB dumps and 02 mineral reject dumps)	08(06 OB dumps and 02 mineral reject dumps)	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	outside UPL	outside UPL	
4e	Number of active and alive dumps.	01	01	
4f	Number of dead dumps.	05	05	
4g	Number of dumps established.	05	05	
4h	Whether Retaining wall or garland drain all along dumps are there.	No such proposal prposal	nil	
4i	Length of Retaining wall or garland drain all along dumps	nil	nil	
4j	Number of settling ponds	nil	nil	
4k	Specific comments of inspecting officer on waste dump management			Most of the waste generated during development is used as backfilling in stope. old matured dumps are stabilised with plantation which increases the aesthetic beauty of the area.

## Solid Waste Management - Backfilling:

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.	Not applicable as underground mining	Not applicable	
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)	Plantation	Plantation	
5d	Total area fully reclaimed and rehabilitated	No such proposal	Nil	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Mining is done with underground cut and fill method. Goaf created during stoping operation is filled with sand stowing and with some quantity of waste generated during development.

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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).	PMCP report is to be submitted on or before 1st July of every year for preceding financial year.	PMCP report submitted	
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	Nil	plantation done on old dumps in infilling	
6d	No. of saplings planted during the year	Nil	2450	

6e	Cumulative no .of plants	No such proposal	data not available
6f	Any other method of rehabilitation	No such proposal	Nil
6g	Cost incurred on watch and care during the year	No such proposal	50000 approx
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No such proposal	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No such proposal	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No such proposal	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No such proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	No such proposal	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	No such proposal	Nil

6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	No such proposal	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)		Quarterly monitoring carried out and results are well within limit	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			There was no such specific proposal for PMCP however plantation was carried out at old abandoned dumps as infilling.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	-25%, 25-35%, 35-45% and above 45 %	Despatched as proposed	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	-25%, 25-35%, 35-45% & above 45%	-25%, 25-35%, 35-45% & above 45%	
7d	Any beneficiation process at mines .	No such proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			All the ROM produced from mines was used and sold as market was also favorable so no mineral reject generated.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No such proposal as underground mining	Not applicable	
8b	Concurrent use or storage of topsoil	No such proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	seperate dumping of waste rock and mineral reject was proposed	Waste rock was used as filling material in stope and no mineral reject generated	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal	Nil( plantation on old matured dump is being done)	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	No such information available	Plantation done of 2250 nos. on dumps	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling is proposed through water tanker	water spraying through water tanker done	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			General aesthetic beauty of mines and surrounding is good due to thick plantation on old dumps and wasteland with the help of NEEREE

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Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly return shall be submitted by 10th of every month & Annual Return must be submitted before 1st of July for preceding year.	Monthly return has been submitted upto month of September 2021 and Annual Return upto year 2020-21 has been submitted.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Enginner & Manager Mines- R. A. Khan, Geologist- Akanksh Sahu	both were available during inspection
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	dumps- 5.730 ha, mineral storage-9.046 ha,	old pit is also there which has not been shown
9d	Scrutiny of Annual return on afforestation	5000 outside lease area	as it as out side lease so not confirmed
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	all the ROM generated was sold due to favorable conditions
9f	Scrutiny of Annual return on ROM stock and/or graded ore	-25%- 552.30 Tons, 25-35%- 834.060 Tons, 35-45%- 6824.17 Tons	Can not be commented without proper survey
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	EMP & Sale Vaue- -25%- 3938 Rs/T, 25-35%- 6348.46 rs/T, 35-45%- 13242.04 Rs/T, Cost of Production- 6504.93 Rs/T	Seems correct
9h	Scrutiny of Annual return on fixed assets	rupees 861048583	

9k Scrutiny of pumps- 17,  
Annual return on Locomotive-07,  
mining Jeep-01,  
machineries Tipper-03,  
Loader-02,  
winding  
engine-01, air  
compressor-4,  
Generator-1,  
Ventilation  
fan-01

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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)	11-Aug-21	31-Jan-22			

**Date :****(CHANDRESH BOHRA)**

Indian Bureau of Mines