

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

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/BGT//MN-194/NGP Vol.II

Mine code : 40MPR01016

- (i) Name of the Inspecting : **K006**) **NARESH KUMAR KATARIYA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Dr. G G Manekar, Sh M k Singh(Mine Manager), M R Bhan
Official with
Designation
- (iv) Date of Inspection : 08-FEB-20
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SITAPATHORE**
- (b) **Registration NO.** : **IBM/5711/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : MADHYA PRADESH
District : BALAGHAT
Village : SITAPATORE
Taluka : KATANGI
Post office : SUKLI
Pin Code :
FAX No. : 0712-2592073
E-mail : moil_ngp@sancharnet.in
Phone : 0712-2590775
- (f) Police Station : TIRODI
- (g) First opening date : 01-JUL-62
- (h) Weekly day of rest : MON
2. Address for : MOIL BHAWAN, 1A-KATOL ROAD,
correspondance : CHAONI, NAGPUR
PIN-440013
3. (a) Lease Number : MPR0575
- (b) Lease area : 43.35
- (c) Period of lease : 20
- (d) Date of Expiry : 30-JUN-22
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the
Lessee : MANGANESE ORE INDIA LTD
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	06 exploratory Boreholes	06 exploratory Boreholes of DTH. but details of the boreholes have not been provided	Violation pointed out for the same.
1b	Exploration over lease area for geological axis 1 or 2	For G-1 axis	05 Bore holes	Exploration not done as per proposal . Violation pointed out for the same.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	MOIL	MOIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	36.802 Ha	
1e	Balance reserve as on 01/04/20		19427 T	
1f	General remarks of inspecting officers on geology, exploration etc			

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	PIT NO.6 & 8	PIT NO.6 & 8	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	
2c	Stripping ratio or ore to OB ratio	1:15	1:12	
2d	Quantity of topsoil generation in m3	Nil	Nil	

2e	Quantity of overburden generation in m3	O/C:120720 Dump:41270	O/C:75593 Dump:9055	It was proposed to remove 66640 m3 quantity of OB from pit no-06. But, only 38312 m3 quantity of OB removed from pit no-06 for development of mine in the year 2018-19. Violation pointed out for the same.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The mine development was lagging from the proposal and not as per the approved proposals. Violation pointed out for the same.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	02Nos.(Pit No.6 &8)	02Nos.(Pit No.6 &8)	
3b	Quantity of ROM mineral production proposed	8505 Te	8500 Te	
3c	Recovery of sailable/usable mineral from ROM production	Dump - 15% OC mining - 90%	Dump - 15% OC mining - 90%	
3d	Quantity of mineral reject generation	15%	15%	
3e	Grade of mineral rejects generation and threshold value declared.	10-25 %	10-25%	
3f	Quantity of sub grade mineral generation.	41270 Te	9055 Te	

3g	Grade of sub grade mineral generation	25%-35%	25%-35%
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	NA
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
3m	Total area covered under excavation/pits	6.548 Ha	6.548 Ha
3n	Ore to OB ratio for the pit/mine during the year.	1 : 15	1:12
3o	Total area put in use under different heads at the end of year	19.811 Ha	19.811 Ha
3p	Production of ROM mineral during the last five year period as applicable	2015-16=16900 2016-17=16900 2017-18=16900 2018-19=16900	2015-16=10585 2016-17=12317 2017-18=12115 2018-19=16900

3q General remarks
of inspecting
officers on
method of mining
etc.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB and Mineral rejaect proposed	Separate dumping of OB and Mineral rejaect	
4b	Location of topsoil, OB and mineral reject dumps	Near the mineralisd dump within mining lease.	Near mineralised dump within mining lease.	
4c	Number of dumps within lease area and outside of lease area	Four	Four	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	On Foot wall side of pit with in lease area	On Foot wall side of pit with in lease area	
4e	Number of active and alive dumps.	Four	Four	
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	200 m	200 m	
4j	Number of settling ponds	One	One	

4k Specific comments of inspecting officer on waste dump management

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.	Full extraction	Full extraction	
5b	Area under backfilling of mined out area	0.5 Ha	0.5 Ha	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Nil	
5d	Total area fully reclaimed and rehabilitated	0.5 Ha	0.2 Ha	Violation pointed out for the same.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			It was proposed to use OB of pit no. 06 for reclamation of pit no. 07. But, reclamation has not been done as per proposal. Violation pointed out for the same.

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 submitted	yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted for the year 2018-19. Violation pointed out for the same.
6b	Area available for rehabilitation (ha) .	0.5 Ha	0.2 Ha	Violation pointed out for the same.
6c	afforestation done (ha).	0.5 Ha	0.5 Ha	
6d	No. of saplings planted during the year	Not proposed	1000	
6e	Cumulative no .of plants	NA	1000 Nos	
6f	Any other method of rehabilitation	Not proposed	NA	
6g	Cost incurred on watch and care during the year	Nil	Nil	
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	10 Mtrs	05 Mtrs	reclamation has not been done as per proposal. Violation pointed out for the same.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Nil	Nil	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	NA	
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	NA	NA	
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	Nil	Nil	
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	Nil	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Quarterly	Quarterly	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			yearly report in respect of rule 26(2) of MCDR 2017 has not been submitted for the year 2018-19. Violation pointed out for the same.

Mineral Conservation:

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

7a	ROM Mineral dispatch or grade-wise sorting within lease area	16900 Te	16900 Te
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Manual	Manual
7c	Different grade of mineral sorted out at mines.	25%-46%	25%-46%
7d	Any beneficiation process at mines .	Not proposed	NA
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes. for plantation	Yes. for plantation	
8b	Concurrent use or storage of topsoil	NA	NA	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Waste dump & Mineral dump maintained separatly	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Yes	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	reclamation has not been done as per proposal. Violation pointed out for the same.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	plantation in lease area	plantation in 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			

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	MR of Apr-18 to Mar-19 have been submitted and AR of 2018-19 has been submitted.	MR of Apr-18 to Mar-19 have been submitted and AR of 2018-19 has been submitted.	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	appointment letter of whole time Mining Engineer and Mine Geologist have not been submitted for this lease area in the prescribed format	Violation pointed out for the same.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	19.811 Ha	
9d	Scrutiny of Annual return on afforestation	Yes	0.5 Ha	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Yes	15%	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Yes	as per AR	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes	as per AR	
9h	Scrutiny of Annual return on fixed assets	Yes	as per AR	
9k	Scrutiny of Annual return on mining machineries	Yes	as per AR	

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)	07-APR-20			
MCDR17	Rule 26(2)	07-APR-20			
MCDR17	Rule 33	07-APR-20			
MCDR17	Rule 55(1) (3)	07-APR-20			

Date :

(NARESH KUMAR KATARIYA)

Indian Bureau of Mines