

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAH/NAG/MN-307/NGP

Mine code : 40MSH14029

- (i) Name of the Inspecting : **D025**) **S. M. DORLE**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri Kayastha, Agent
Official with
Designation
- (iv) Date of Inspection : 22/08/2017
- (v) Prev.inspection date : 03/12/2016

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **KOTHULNA (24.00H)**
- (b) **Registration NO.** : **IBM/5036/2011**
- (c) **Category** : B Manual
- (d) **Type of Working** : Opencast
- (e) **Postal address**
- State : MAHARASHTRA
- District : NAGPUR
- Village : Kothulna
- Taluka : Saoner
- Post office : Kothulna
- Pin Code : 441101
- FAX No. :
- E-mail :
- Phone : 9373112496
- (f) **Police Station** :
- (g) **First opening date** : 30/10/2005
- (h) **Weekly day of rest** : SUN
2. **Address for correspondance** : "MANGLE NIWAS"NEAR POWER HOUSE,
CHHINDWARA ROAD, AT & POST - SAONER
DISTT. - NAGPUR
3. (a) **Lease Number** : MSH0337
- (b) **Lease area** : 24
- (c) **Period of lease** : 30
- (d) **Date of Expiry** : 24/10/2035
4. **Mineral worked** : MANGANESE ORE Main

5. Name and Address of the

Lessee : SHUBHNAM MINERAL ENTERPRISES
NAGPUR MAHARASHTRA
Phone:
FAX :

Owner : DADARAO M. MANGLE
MANGLE NIWAS, NEAR POWER
HOUSE, CHHINDWARA ROAD,
SAONER NAGPUR MAHARASHTRA
Phone:
FAX :

6. Date of approval of Mining	:	Fresh under rule 22 MCR1960	07/10/2005
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	17/04/2012
	:	Mining Scheme rule 12 MCDR1988	07/07/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for geological axis 1 or 2	Nil	Nil	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Nil	Nil	
1f	General remarks of inspecting officers on geology, exploration etc			Manganese Ore body observed to be continued further at depth

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	pit No. 1 and 2	pit No. 1 and 2	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Two	Two	
2c	Stripping ratio or ore to OB ratio	1:10	1:10	
2d	Quantity of topsoil generation in m3	44792 cum	Nil	
2e	Quantity of overburden generation in m3	44792 cum	Nil	

Exploitation:

Sl.No.	Item	Proposals	Actual work	Remarks
3a	Number of pit proposed for production	Pit No. 1 and 2	Pit No.1 and 2	

3b	Quantity of ROM mineral production proposed	5195 cum ore and 721 cum Mineral reject	212 tonnes
3c	Recovery of sailable/usable mineral from ROM production	15587 tonnes ore and	212 tonnes
3d	Quantity of mineral reject generation	721 cum	925 cum
3e	Grade of mineral rejects generation and threshold value declared.	below 15 %	Below 15 %
3f	Quantity of sub grade mineral generation.	not proposed	385 cum
3g	Grade of sub grade mineral generation	No proposed	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Manual catagory A	as per proposal
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Nil
3j	Provision of drilling and blasting in mineral benches	Wagon Drill	Jack hammer
3k	Provision of mining machineries in mineral benches	Wagon drill Tipper	Small JCB has been used as and when require.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes
3n	Ore to OB ratio for the pit/mine during the year.	1:10	1:10

3o	Total area put in use under different heads at the end of year	6.5688 Hect	Around 6.5686 Hect	
3p	Production of ROM mineral during the last five year period as applicable	2012-13-535 tonnes 2013-14-540 tonnes 2014-15-536 tonnes 2015-16-8325 tonnes 2016-17-15587 tonnes	2012-13- 270 tonnes 2013-14-280 tonnes 2014-15-1250 tonnes 2015-16-2050 tonnes 2016-17-212 tonnes.	
3q	General remarks of inspecting officers on method of mining etc.			No production target achieve as per market demand. As per proposal in approved scheme of mining, it is 'A' mines but as per present scenario work is like manual mine.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	There is no top soil available in the area. Reject generated will be stacked separately.	No top soil. No reject generated stacked seperatly.	
4b	Location of topsoil, OB and mineral reject dumps	Overburden dump at Southern side of lease. As per mining plan 3872 cum reject is to be generated during the period of 2015-16 to 2019-20	No topsoil dump in the area. 2 Nos. of Overburden dumps are in the lease area, however no reject dump available in the area.	
4c	Number of dumps within lease area and outside of lease area	Within lease - 02 Outside lease- Nil	Within lease - 02 Outside lease- Nil	

4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Northern side of lease	Northern side of lease	
4e	Number of active and alive dumps.	2 numbers	2 numbers	
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 Proposed	Not available	
4i	Length of Retaining wall or garland drain all along dumps	Not Proposed	Not applicable	
4j	Number of settling ponds	one	One settling pond is there where pumping has been done as and when required	
4k	Specific comments of inspecting officer on waste dump management			Area of waste dump is around 4 hec. Mine having production of quartz (Minor Mineral)

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.	Not proposed	Not Applicable	
5b	Area under backfilling of mined out area	Not proposed	Not applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed as no top soil exists in lease area.	Not applicable.	

5d	Total area fully reclaimed and rehabilitated	area not proposed for reclamation and rehabilitation	Not Applicable	
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Presently external dumping is being carried out. No stage of back filling is yet started..

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).	Proposed	Submitted	
6b	Area available for rehabilitation (ha) .	Nil	Nil.	
6c	afforestation done (ha).	3.37 Hec	3.00 Hect	
6d	No. of saplings planted during the year	50 Nos. of saplings	Around 50 Nos. of saplings planted.	
6e	Cumulative no .of plants	150 no.	Around 70 plants	
6f	Any other method of rehabilitation	Nil	Nil	
6g	Cost incurred on watch and care during the year	Not proposed	Not availble	
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	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)	Nil	Nil	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Plantation has been done . No proposal of backfilling	The proposed measures for progressive closure of mine are being complied in the mine

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposal for gradewise sorting given	After gradewise sorting ROM is being despatched from the mine
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Proposed manual method of mineral sorting.	Adopted manual method of mineral sorting.
7c	Different grade of mineral sorted out at mines.	Mn +38-+33 Fe - 9% -10% SiO ₂ - 11-14% Al ₂ O ₃ - 3% max P 0.18 max- 0.22 max	As per proposal.
7d	Any beneficiation process at mines .	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		There is no problem in respect of conservation of mineral. All ROM production used as different grade as mentioned above.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Not proposed	Not applicable	
8b	Concurrent use or storage of topsoil	Not proposed	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps for overburden, waste rock was proposed	As per column 4 b above i.e. Solid Waste Management-Dumping..	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Nor applicable	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not proposed	Not applicable.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information given. Area about 3.2952 m2 under plantation	Plantation in the area has been done.	
8g	Survival rate	50%	30%	
8h	Water sprinkling on roads to control airborne dust	Proposed	water Sprikling on road as and when required	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			In order to increase the aesthetic beauty, there is no specific proposal in this document. However general aesthetic beauty is fair

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Annual return for 2016-17 and monthly return November 2017 is found submitted	Most of the columns are found filled up as per guidelines.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information of Geologist is found filled up misleading for which violation has been issued.	In compliance of violation party corrected the name of Geologist	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Found Satisfactory.	

9d	Scrutiny of Annual return on afforestation	Given.	Found satisfactory.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not Given	Not applicable
9f	Scrutiny of Annual return on ROM stock and/or graded ore	given in annual return	Satisfactory
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Found satisfactory
9h	Scrutiny of Annual return on fixed assets	Given	Found Satisfactory
9k	Scrutiny of Annual return on mining machineries	Information of Mining Machinery Given	Found Satisfactory

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
Rule 27(1)	13/10/2017		Rule 27(1)	13/10/2017	
Rule 28(1)	13/10/2017	30/11/2017	Rule 46	13/10/2017	
Rule 46	13/10/2017				

Date :
(S. M. DORLE)

Indian Bureau of Mines