# INDIAN BUREAU OF MINES MINERALS DEVELOPMENT 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 : 219 ) Rajesh M Khadse

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : PAISHUNI BISEN MINE AGENT

Official with Designation

(iv) Date of Inspection : 25-Jun-22
(v) Prev.inspection date : 18-Aug-21

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-Oct-05

(h) Weekly day of rest : SUN

2. Address for : "MANGLE NIWAS"NEAR POWER HOUSE,

correspondance 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-Oct-35

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 Plan/Scheme of Mining Mining Scheme rule 12 MCDR198

: Fresh under rule 22 MCR1960 07-Oct-05 Mining Scheme rule 12 MCDR1988 17-Apr-12 Mining Scheme rule 12 MCDR1988 07-Jul-16 MP review under 17(1) MCR 2016 02-Mar-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

### Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NIL	NA
1b	Exploration over lease area for geological axis 1 or 2		Six Boreholes	NA
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration Agency: SS Mineral Exploration & Allied Geoservices Expenditure (Lakh): 9.05	Exploration Agency: SS Mineral Exploration & Allied Geoservices Expenditure (Lakh): 9.05	NA
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	
1e	Balance reserve as on 01/04/20	140277	140277	NA
1f	General remarks of inspecting officers on geology, exploration etc	NIL	NIL	NIL

### Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a		295000	E: 294800 to 295000 N: 2369800 to 2369600	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	6/6 m Benches in OB &	Top Soil : Nil 6/6 m Benches in OB & Mineral	
2c	Stripping ratio or ore to OB ratio	1:0.62	1:0.62	NA

2d	Quantity of topsoil generation in m3	0	0	0
2e	Quantity of overburden generation in m3		35	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	NA	NA	

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	18005	1150	
3с	Recovery of sailable/usable mineral from ROM production	1160	335.310	
3d	Quantity of mineral reject generation	1800	360	
3e	rejects	Grade: Below 10%	Mineral Reject Grade: Below 10% Threshold Value: 10%	
3f	Quantity of sub grade mineral generation.	-	_	
3g	Grade of sub grade mineral generation	+10 to -20%	+10 to -20%	

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.	NA	NA
3j	Provision of drilling and blasting in mineral benches	Yes using Jack Hammer	Yes using Jack Hammer
3k	Provision of mining machineries in mineral benches	Yes	Yes
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes (6m)	Yes (6m)
3m	Total area covered under excavation/pits	2.8850	2.8850
3n	Ore to OB ratio for the pit/mine during the year.	-	_
30	in use under	2.8850 Ha Mineral Storage:	Mining Pit: 2.8850 Ha Mineral Storage: 0.9120 Ha Roads: 1.3296 Ha Infrastructure: 0.0268 Ha OB/Waste Dump: 0.4436 Ha
	3i 3k 3n	Mechanised method adopted for segregating from ROM  3i Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.  3j Provision of drilling and blasting in mineral benches  3k Provision of mining machineries in mineral benches  3l Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM  3m Total area covered under excavation/pits  3n Ore to OB ratio for the pit/mine during the year.  3o Total area put in use under different heads at the end of	Mechanised method adopted for segregating from ROM  3i Any analysis or NA beneficiation study proposed and carried out for sub grade mineral and rejects.  3j Provision of Yes using Jack drilling and Hammer blasting in mineral benches  3k Provision of Yes mining machineries in mineral benches  3l Whether height Yes (6m) of benches in overburden and mineral suitable for method of mining proposed in MP/SOM  3m Total area 2.8850 covered under excavation/pits  3n Ore to OB ratio for the pit/mine during the year.  3o Total area put in use under different heads at the end of year 0.9120 Ha Roads: 1.3296 Ha Infrastructure : 0.0268 Ha OB/Waste Dump:

3p	Production of ROM mineral during the last five year period as applicable	(Ton)  2017-18 1160 2018-19 1160 2019-20 1160 2020-21 1160  2021-22 1160  Year Production (Ton)  2017-18 1160 2018-19 1160 2019-20 1160 2020-21 1160	Year Production ( 2017-18 0.00 2018-19 1540.830 2019-20 0.00 2020-21 71 2021-22 1150	(Ton)		
		2021-22 1160				
3q	General remarks of inspecting officers on method of mining etc.	NA	NA		NA	

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Yes	Yes	Top Soil Quantity: Nil
4b	=	E 294800 to	Grid: E 294800 to E295200 and N2370200 to N2370000	
4c		Area:	Within Lease Area: Two (2) Dumps Outside Lease Area: Nil	

4d	Location of dumps w.r.t.	OB Dump 1: 300mRL	OB Dump 1: 300mRL
	ultimate pit		OB Dump 2: 336.121 MRL
	limit (Rule 16)	OB Dump 2: 336.121 MRL	UPL: 285mRL
		UPL: 285mRL	
4e	Number of active and alive dumps.	Two (2)	Two (2)
4 f	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	4000 m	3500 m
4 j	Number of settling ponds	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	Nil	Nil

#### 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.	NA	NA	NA
5b	Area under backfilling of mined out area	NA	NA	NA

5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NA	NA	NA
5d	Total area fully reclaimed and rehabilitated	NA	NA	NA
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NA	NA	

## 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).	NA	NA	

Remarks

6b	Area available for rehabilitation (ha) .	rehabilitation (ha): Nil ii) Afforestation done (ha): 0.0500 iii) No. of saplings planted during the year: 60 iv) Cumulative	i) Area available for rehabilitation (ha): Nil ii) Afforestation done (ha): 0.0500 iii) No. of saplings planted during the year: 60 iv) Cumulative no. of plants: 500 v) Any other specific method of rehabilitation: NA vi) Cost incurred on watch & care during the year:
6c	afforestation done (ha).	NA	NA
6d	No. of saplings planted during the year	NA	NA
6e	Cumulative no .of plants	Yes	Yes
6f	Any other method of rehabilitation		
6q 	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		

Mineral Conservation:

Propasals Actual work

Sl.No. Item

7a	ROM Mineral dispatch or grade-wise sorting within lease area		Grade-wise sorting within lease area
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.		Total No. of Additional Plantation: 60 Nos. (in FY 2022-23)
7c	Different grade of mineral sorted out at mines.	i) Below 25% Mn ii) 25% to below 35% Mn iii) 35% to below 46% Mn	)Below 25% Mn ii)25% to below 35% Mn iii) 35% to below 46% Mn
7d	Any beneficiation process at mines .	No	No
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Nil	Nil

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Top Soil : Nil	Top Soil : Nil	
8b	Concurrent use or storage of topsoil	Top Soil : Nil	Top Soil : Nil	

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	(m2) Avg. area	Dump No. Area (m2) Avg. area of Dump Height of Dump (m) Quantity in Dump (m3) Top Bottom OB-1 350.29 940.40 645.34 12 7744.14 OB-2 1984.56 3496.03 2740.29 6 16441.77 Total 2334.85 4436.43 3385.63 24185.91
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NA at this level, mining is under operation	NA at this level, mining is under operation
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	NA at this level, mining is under operation	NA at this level, mining is under operation
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Total No. of Existing Plants: 500 Nos. (till March 2022)	Total No. of Existing Plants: 500 Nos. (till March 2022)
8g	Survival rate	80-85%	80-85%

8h	Water sprinkling	Yes, Water	Yes, Water tankers are
	on roads to	tankers are	used for regular water
	control airborne	used for	sprinkling in terms of
	dust	regular water sprinkling in terms of Dust suppression.	Dust suppression.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Nil	Nil

# Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted upto May 2022 A.R. Submitted upto 2021-22		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details given in A.R		

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Details of violat violation pointed		during current	inspection ar	nd compliance position of	
Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on Compliance on	

Date : (Rajesh M Khadse)

Indian Bureau of Mines