

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

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MAM/NAG/MN-300/NGP

Mine code : 40MSH14023

- (i) Name of the Inspecting : **D025**) **S. M. DORLE**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 05/03/2017
- (v) Prev.inspection date : 12/10/2012

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **BHANDARBODI**
- (b) **Registration NO.** :
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :
State : MAHARASHTRA
District : NAGPUR
Village : BHANDARBODI
Taluka : RAMTEK
Post office : RAMTEK
Pin Code :
FAX No. : 0712-540588
E-mail :
Phone : (0712)-534413, 522724
- (f) Police Station :
- (g) First opening date : 22/03/1983
- (h) Weekly day of rest : TUE
2. Address for : "NANHAKA", 10, EAST HIGH COURT ROAD,
correspondance : RAMDASPETH,
DISST.- NAGPUR-440010, STATE- MAHARASHTRA
3. (a) Lease Number : MSH0099
- (b) Lease area : 7.38
- (c) Period of lease : 20
- (d) Date of Expiry : 22/03/2023
4. Mineral worked : MANGANESE ORE Main

5. Name and Address of the

Lessee : M/S D. P. RAI
 10, EAST HIGH COURT ROAD,
 NEW RAMDASPETH, NAGPUR (MS)
 NAGPUR MAHARASHTRA
 Phone:
 FAX :

Owner : M/s D.P.Rai & Co.
 10, East High Court Road,
 New Ramdaspath, Nagpur
 Distt. Nagpur (MS) NAGPUR
 MAHARASHTRA
 Phone:
 FAX :

6. Date of approval of Mining	:	Mining Scheme rule 12 MCDR1988	05/03/2001
Plan/Scheme of Mining		Renewal under rule 22 MCR1960	08/07/2003
		Mining Scheme rule 12 MCDR1988	12/06/2009
		Mining Scheme rule 12 MCDR1988	07/01/2014

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No backlog of exploration of previous year	Nil	
1b	Exploration over lease area for geological axis 1 or 2	Proposed five boreholes at 27m to 45 mdepth	Nil	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	whole balance area to be explored	Nil	
1e	Balance reserve as on 01/04/20	Reserve on 01/04/2012 is 25402 tonnes.	Balance reserve as on 01.04.2017 arrive after deduction of production of the 2012-13,2013-14,2014-15,2015-16 and 2016-17 is 30878 tonnes.	
1f	General remarks of inspecting officers on geology, exploration etc			No exploration done after 2009

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Location of development is at Pit No.1	As per proposal development is at Pit No.1	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Proposed separate benches in overburden and mineral	As per proposed separate benches in overburden and mineral	
2c	Stripping ratio or ore to OB ratio	Stripping ratio is proposed 1 :3.16 (T to M3)	As per proposal	
2d	Quantity of topsoil generation in m3	No proposal of topsoil generation	No topsoil generation	

2e	Quantity of overburden generation in m3	Proposed quantity of overburden generation during 2016-17 is 9670 m3	No overburden generation during 2016-17.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc		Existing three pits are there in the mine. No development work was carried at present in mine

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	3 nos. of pits proposed for production.	Working in 3 nos. of pits.	
3b	Quantity of ROM mineral production proposed	3856 tonnes of ROM mineral production proposed in 2015-16	652 tonnes of ROM mineral production proposed in 2015-16	
3c	Recovery of sailable/usable mineral from ROM production	Proposed recovery of sailable/usable mineral from ROM production is 3084.6 tonnes during 2015-16	Actual recovery of salable/usable mineral from ROM production is 543 tonnes during 2015-16	
3d	Quantity of mineral reject generation	Proposed quantity of mineral reject generation is 385.6 tonnes	Actual quantity of mineral reject generation is 65 tonnes	
3e	Grade of mineral rejects generation and threshold value declared.	Proposed grade of mineral reject generation and threshold value declared is below 10% of Mn content	Actual grade of mineral reject generation and threshold value declared is below 10% of Mn content	
3f	Quantity of sub grade mineral generation.	Proposed quantity of sub-grade mineral generation is 385.6 tonnes	Actual quantity of sub-grade mineral generation is 65 tonnes	

3g	Grade of sub grade mineral generation	Proposed grade of sub-grade mineral generation is 11 to 16 of Manganse	Actual grade of sub-grade mineral generation is 11 to 16 of Manganse
3h	Manual / Mechanised method adopted for segregating from ROM	Proposed manual method adopted for segregating from ROM	As per proposal manual method is being adopted for segregating from ROM
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal for analysis or beneficiation study & carried out for sub-grade mineral and reject	No analysis or beneficiation study & carried out for sub-grade mineral and reject
3j	Provision of drilling and blasting in mineral benches	Proposal for drilling & blasting in mineral benches with Jack hammer and in overburden	Drilling & blasting in mineral benches with Jack hammer and in overburden
3k	Provision of mining machineries in mineral benches	Proposed wagon drill in overburden and Jack hammer in Manganese ore body	Jack hammer is being used in Manganese ore body
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	As per proposal height of benches in overburden and mineral suitable for method of mining	Yes, height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM
3m	Total area covered under excavation/pits	As per proposal 1.4350 hectare area covered under excavation/pits	1.4350 hectare area covered under excavation/pits
3n	Ore to OB ratio for the pit/mine during the year.	As per proposal for the year 2015-16 ROM to waste ration is 1: 1.192 T:m3	NA

3o	Total area put in use under different heads at the end of year	As per proposal total area put in use under different heads at the end of year is 3.08 hectare.	As per proposal total area put in use under different heads at the end of year is around 3.00 hectare.	
3p	Production of ROM mineral during the last five year period as applicable	As per scheme of mining approved on 07.01.2014 for the period 2013 to 2018 ROM production proposed as follows:- 2013-14 - 3122 tonnes 2014-15 - 6458 tonnes 2015-16 -3856 tonnes 2016-17 - 4126 tonnes 2017-18 -6401 tonnes	Actual production as follows:- 2013-14 - 608 tonnes 2014-15 - 2249 tonnes 2015-16 -540 tonnes 2016-17 - 690 tonnes	
3q	General remarks of inspecting officers on method of mining etc.			Mine production is decreasing side as per market demand

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 topsoil, OB & mineral reject	Separate dumping of topsoil, OB & mineral reject	
4b	Location of topsoil, OB and mineral reject dumps	proposed South east of pit	As per proposal southeast of pit	
4c	Number of dumps within lease area and outside of lease area	One Number of dump within lease area and one number outside lease area	As per proposal	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out of ultimate pit limit	Out of ultimate pit limit	

4e	Number of active and alive dumps.	One	One	
4f	Number of dead dumps.	One	One	
4g	Number of dumps established.	No proposal	Dump outside lease stabilised	
4h	Whether Retaining wall or garland drain all along dumps are there.	No Proposal	Nil	
4i	Length of Retaining wall or garland drain all along dumps	No proposal	Nil	
4j	Number of settling ponds	No proposal	One Settling pond established	
4k	Specific comments of inspecting officer on waste dump management			The dumps will have to be rehandled for backfilling of the mined out land.

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.	No proposal	Nil	
5b	Area under backfilling of mined out area	It was proposed to reclaimed 762.59 m2 in year 2013-14	Not done	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	
5d	Total area fully reclaimed and rehabilitated	Nil	Not Applicable	

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Presently external dumping is being carried out. Backfilling will be commence when sufficient wide mined area is available.
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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).	Proposed	Submitted for year 2016-17	
6b	Area available for rehabilitation (ha) .	During scheme period 792.59 m2 area proposed for reclamation in 2013-14	Nil	
6c	afforestation done (ha).	Proposed 1860 m2 for plantation	Plantation around around 1000 m2	
6d	No. of saplings planted during the year	As per proposal 40 samplings to be plan per year	As per proposal	
6e	Cumulative no .of plants	Cummulative nos. of plants proposed during the scheme period is 200 Nos	40 nos of plants	
6f	Any other method of rehabilitation	Not proposed	Nil	
6g	Cost incurred on watch and care during the year	Not proposed	Nil	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	As per proposal 792.59 m2 area will be available for backfilling.	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 backfilled area	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	NA	NA
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)	Proposed	Done

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Plantation was proposed, proposed plantation has been done, no backfilling proposed .The proposed measures for progressive clouser of mine are being complied in the mine.
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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Proposed sorting within lease from ROM	Sorting within lease from ROM	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No grade-wise mineral sorting proposed	As per proposal	
7c	Different grade of mineral sorted out at mines.	NA	Nil	
7d	Any beneficiation process at mines .	No chemical process will be involove for beneficiation of ore.It will be done manually by breaking , sizing, jigging etc.	As per proposal.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No beneficiation proposed. Sorting, sizingand jigging within lease area

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil will be encountered during excavation	Nio applicable.	
8b	Concurrent use or storage of topsoil	No proposal	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal for seperate dump for overburden	Seperate waste dumps are being maintained on the southeast of the pit	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Not proposed	Not 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 study done. It was proposed to do 40 no. of plantation every year.	Around 40 nos. of plant planted in the area	
8g	Survival rate	Not proposed	Around 60%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on roads to control airborne dust proposed	done	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The terrain is flat. The general aesthetic beauty of the land is fair.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Submitted monthly return upto February 2017 Annual return not submitted since 2008	For non submission of annual report since 2008 advice letter has been sent to state government
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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)	24/04/2017			
MCDR17	Rule 11(2)	24/04/2017			

Date :

(S. M. DORLE)

Indian Bureau of Mines