

MCDR-MiFLOMn/1/2022-JBP-IBM_RO_JBP
INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION

I/17425/2023

MCDR INSPECTION REPORT

Nagpur regional office

Mine file No : MP/BGT/MN-191/NGP

Mine code : 40MPR01017

- (i) Name of the Inspecting : **S033**) **MADHAVRAO SABRE**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri D pantawane, Mine Manager, Shri S Pani Geologist.
Official with Designation
- (iv) Date of Inspection : 08-NOV-22
- (v) Prev.inspection date : 06-AUG-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **TIRODI**
- (b) **Registration NO.** : **IBM/5711/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : MADHYA PRADESH
- District : BALAGHAT
- Village : TIRODI
- Taluka : KATANGI
- Post office : TIRODI
- Pin Code : 481449
- FAX No. : 07630276836
- E-mail : mm.td@moil.nic.in
- Phone : 07630276735
- (f) Police Station : Tirodi
- (g) First opening date : 22-JUL-62
- (h) Weekly day of rest : MON
2. Address for : M/s. MOIL LIMITED.
correspondance : MOIL BHAVAN, -A, KATOL ROAD, ,
NAGPUR PIN - 440013
3. (a) Lease Number : MPR0573
- (b) Lease area : 254.59
- (c) Period of lease : 50
- (d) Date of Expiry : 30-JUN-32
4. Mineral worked : MANGANESE ORE Main

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5. Name and Address of the

Lessee : M/S MOIL LIMITED, MOIL
 BHAVAN,-A,KATOL ROAD, NAGPUR
 PIN - 440013 Phone:
 FAX :

Owner : Shri M.M Abdulla
 M/S MOIL LIMITED, MOIL
 BHAVAN,-A,KATOL ROAD,,
 NAGPUR PIN - 440013
 MAHARASHTRA
 Phone: 0712 - 2545703
 FAX : 0712- 2571281

Agent :
 Shri R.U Singh
 Balaghat M.P

Mining Engineer

Name :
 Qualification :
 Appointment/ :
 Termination date : Shri Nishad Nikose ,Full Time

Geologist

Name : Shri Subranshu Pani
 Qualification : ,Full TimeM.Sc.
 Appointment/ :
 Termination date : (Geology)

6. Date of approval of Mining Plan/Scheme of Mining	:	Renewal under rule 22 MCR1960	12-NOV-03
		Mining Scheme rule 12 MCDR1988	22-SEP-05
		Mining Scheme rule 12 MCDR1988	22-SEP-05
		Mining Scheme rule 12 MCDR1988	03-MAR-06
		Mining Scheme rule 12 MCDR1988	05-FEB-08
		Mining Scheme rule 12 MCDR1988	07-MAR-12
		Mining Scheme rule 12 MCDR1988	21-JAN-13
		Modif.of approved Mining Plan	23-DEC-15

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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	1500 m drilling	4126 m drilling	-
1c	Exploration Agencies and Expenditure in lakh rupees during the year	-	by Central drilling associate, Nagpur	-
1d	Balance area to be explored to bring Geological axis in 1 or 2	-	56.20 Ha	-
1e	Balance reserve as on 01/04/20	-	111- 92756 T 122- 266115 T Total :358871 T	-
1f	General remarks of inspecting officers on geology, exploration etc	-	-	Area belongs to Sauser super group, sitasaongi and Manser formations. Mn ore occurs in Silicate form.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Yes	Yes	-
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	In soil- 1 In Over Burden- 4 In Ore- 2	-
2c	Stripping ratio or ore to OB ratio	-	1:10	-
2d	Quantity of topsoil generation in m3	Nil	Nil	no top soil generated during the RY
2e	Quantity of overburden generation in m3	410000M3	842226.66M3	-

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2f General remarks - - -
of inspecting
officers on
development of
pit w.r.t. type
of deposit etc

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	04	03	-
3b	Quantity of ROM mineral production proposed	109000 T	100739 T	-
3c	Recovery of sailable/usable mineral from ROM production	109000 T	100739 T	-
3d	Quantity of mineral reject generation	From Bed mining- 0 From dump- 20600 T	From Bed mining- 0 From dump- 20600 T	-
3e	Grade of mineral rejects generation and threshold value declared.	Threshold value - less than 10 % Mn	Threshold value - less than 10 % Mn	-
3f	Quantity of sub grade mineral generation.	nIL	Nil	-
3g	Grade of sub grade mineral generation	Ni	Nil	Nil
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.	Nil	Nil	-
3j	Provision of drilling and blasting in mineral benches	Yes	Yes	

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3k	Provision of mining machineries in mineral benches	yes	Yes	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Height maintained as per approved mining scheme.	-
3m	Total area covered under excavation/pits	8.04 Ha	8.04 Ha	-
3n	Ore to OB ratio for the pit/mine during the year.	1:6.66	1:6.66	-
3o	Total area put in use under different heads at the end of year	146.92 Ha	146.92 Ha	-
3p	Production of ROM mineral during the last five year period as applicable	2017-18 105500 2018-19 107000 2019-20 109000 2020-21 109000 2021-22 109000	2017-18 105500 2018-19 107000 2019-20 109000 2020-21 109000 2021-22 109000	104900 T 106900 T 108801 T 106998 T 100739 T
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)	Yes	Yes	No top soil generated during the reporting year.
4b	Location of topsoil, OB and mineral reject dumps	OB(Magazine Dump)- 21°41'30.93"N 79°43'21.45"E Mineral Reject- 21°41'34.27"N 79°43'22.18"E	OB(Magazine Dump)- 21°41'30.93"N 79°43'21.45"E Mineral Reject- 21°41'34.27"N 79°43'22.18"E	Some dumps in 7.5 m barrier , violation issued.

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4c	Number of dumps within lease area and outside of lease area	Within lease area- 2 Outside lease area- 0	Within lease area- 2 Outside lease area- 0	Violation pointed , for dumping in 7.5 m barrier.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	North Magazine dump- 21°41'30.93"N 79°43'21.45"E	North Magazine dump- 21°41'30.93"N 79°43'21.45"E Within UPL.	
4e	Number of active and alive dumps.	2	2	-
4f	Number of dead dumps.	NIL	NA	-
4g	Number of dumps established.	Nil	Nil	-
4h	Whether Retaining wall or garland drain all along dumps are there.	not proposed	NA	-
4i	Length of Retaining wall or garland drain all along dumps	Not in proposal	NA	-
4j	Number of settling ponds	Nil	01	-
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.	NA	NA	All the pits are active.
5b	Area under backfilling of mined out area	Yes	Yes	-
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Yes	Yes	No top soil generated in RY.

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5d	Total area fully reclaimed and rehabilitated	Not in proposal	nA	-
5e	General remarks of inspecting officers on backfilling and reclamation etc.	-	-	Top soil is used in plantation activity, but there was no top soil generation during the reporting year.

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	Yes Submitted.	-
6b	Area available for rehabilitation (ha) .	Nil	Na	-
6c	afforestation done (ha).	Yes Proposed	1 ha area proposed.	-
6d	No. of saplings planted during the year	Yes proposed 1000 saplings	1000 saplings planted.	-
6e	Cumulative no .of plants	-	20000	-
6f	Any other method of rehabilitation	Na	Na	-
6g	Cost incurred on watch and care during the year	Yes	Rs 200000/-	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	20000 m3	20000 m3	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	-

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6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	na	NA	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Yes done in 1.30 Ha area.	-
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	Yes	Afforestation done on 1.30 Ha area.	-
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	Nil	Not proposed in RY	-
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Nil	NA	-
6p	Compliance of environmental monitoring (core zone and buffer zone)	Yes	Done regularly , all the reports are within prescribed parameters.	-
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Nil	-	During the reporting year 1000 saplings planted.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	Yes	Grade wise sorting done.	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	-
7c	Different grade of mineral sorted out at mines.	Yes	Below 25% Mn 25% to below 35% Mn 35% to below 46% Mn	
7d	Any beneficiation process at mines	NA	NA	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	-	NA	Manual sorting of ore is carried out in the lease area.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NA	Not proposed during the reporting year.	-
8b	Concurrent use or storage of topsoil	NA	NA	No Top soil generated
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	Separate dumps has been maintained as per rule 33
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes	Will be used in backfilling.	-

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8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Yes	-
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Yes	Yes	20000 plants
8g	Survival rate	NA	70%.	-
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	Truck mounted and fixed type sprinkler has been operated
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	-	Nil	-

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Yes	Submitted regularly.	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes	Mining Engineer : SHRI NISHAD NIKOSE Geologist : SHRI SUBHRANSU PANI Mine Manger : SHRI DEEPENDRA PANTAWANE	

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9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes	Already exploited & abandoned by opencast (O/C) mining :8.640 Ha Covered under current (O/C) Workings13.032 Ha Used for waste disposal 4.240 Ha Occupied by plant, buildings, 25.674 Ha residential, welfare buildings & roads Other Purpose (Other) 6.170 Ha	
9d	Scrutiny of Annual return on afforestation	Yes	1000 saplings planted with survival rate 70%.	-
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NA	-	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	yes	<25% Mn 25 to <35% Mn 35 to <46% Mn	-
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	yes	Grade Ex-Mine price <25% Mn 3867.51 25 to <35% Mn 6809.19 35 to <46% Mn 12946.54	There was an error in grade wise dispatch detail in Annual return for wish Violation issued, and latter on rectified.
9h	Scrutiny of Annual return on fixed assets	Yes	Cost of production is 5984.92 Value of Fixed Assets (in Rs) 183692091/-	-

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9k	Scrutiny of Annual return on mining machineries	Yes	WHEEL LOADER 1.000 CUM SHOVEL (HYDRAULIC) 2.200 CUM SHOVEL (HYDRAULIC) 2.500 CUM DUMPER 35.000 TONNE SHOVEL (HYDRAULIC) 0.920 CUM DOZER 385.000 HP DOZER 230.000 HP GENERATOR (DIESEL) 300.000 KWH BLAST HOLE DRILL (ELEC.) 100.000 MM AIR COMPRESSOR 450.000 CUM/MN DUMPER 10.000 TONNE EXPLOSIVE VAN 90.000 TONNE JEEP/TRACTOR 28.000 HP PUMPS (ELEC.) 3900.000 L/MN PUMPS (ELEC.) 4756.000 L/MN PUMPS (ELEC.) 4500.000 L/MN PUMPS (ELEC.) 2250.000 L/MN PUMPS (ELEC.) 1200.000 L/MN TIPPER 14.000 CUM
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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

Date :**(MADHAVRAO SABRE)**

Indian Bureau of Mines