

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR Inspection REPORT
Jabalpur Regional office

Mine code: 40MPR01016

(i)	Name of Inspecting officer	:	Shri Sudip Ranjan Mazumdar
(ii)	Designation	:	Regional Mining Geologist
(iii)	Accompanying mine official with Designation	:	Shri Bhuneswar Singh Karpe, Mine Manager Shri Subhransu Pani, Geologist
(iv)	Date of Inspection	:	02.10.2024
(v)	Previous Inspection date	:	20.07.2023

PART-I: GENERAL INFORMATION

1	(a)	Mine Name	:	SITAPATORE MANGANESE MINE
	(b)	Registration Number	:	IBM/5711/40MPR01016
	(c)	Category	:	Category A
	(d)	Type of Working	:	Opencast
	(e)	Postal address	:	
		State	:	Madhya Pradesh
		District	:	Balaghat
		Village	:	Sitapatore
		Taluka	:	Sitapatore
		Post Office	:	Tirodi
		Pin code	:	481449
		Fax	:	NA
		email	:	moilindia_ngp@sancharnet.in
		Phone No	:	7410084445
	(f)	Police Station	:	Tirodi
	(g)	First Opening date	:	NA
	(h)	Weekly day of rest	:	Sunday
2	Address for Correspondence		:	
3	(a)	Lease Area	:	43.35 Ha.
	(b)	Period of lease	:	70 Years
	(c)	Date of Expiry	:	30/06/2032
4	Mineral Worked (Main)		:	Manganese
5	Name of address of the Lessee with Phone, email and fax number		:	M/s MOIL LIMITED, (A Government of India Enterprise) MOIL Bhawan, 1A, Katol Road, Nagpur-440013 Email: moilindia_ngp@sancharnet.in Telephone: 0712-2590775, Fax: 0712-2592073
	Name and address of the Owner/Nominated Owner with Phone, email, fax number and Date of appointment		:	Shri M.M. Abdulla Director (Prod. & Planning), MOIL LIMITED, MOIL Bhawan, 1A, Katol Road, Nagpur-440013 Phone: 0712-2590775 Fax: NA; Email: mma@moil.nic.in Date of Appointment: 10/01/2022
	Name and address of the Agent with Phone, email, fax number and Date of appointment		:	Shri Rajesh Kumar Singh, Agent & Joint General Manager (Mines) Gr.-I,

			MOIL LIMITED, Balaghat Mine (M.P.) 481002 Phone: 7410084445 Fax: NA Email: rajesh_rajikhushi@rediffmail.com Date of Appointment: 26/10/2021
	Name of address of the Manager with Phone, email, fax number and Date of appointment	:	Shri Bhuneswar Singh Karpe, MOIL LIMITED, Sitapatore Mine, District – Balaghat (M.P.) 481449 Phone: 9685529162 Fax: NA Email: mm.sp@moil.nic.in Date of Appointment: 29/01/2022
	Mining Engineer Name Qualification Date of Appointment	:	Shri Bhuneswar Singh Karpe, B.E. (Mining) Date of Appointment – 13.09.2023
	Geologist Name Qualification, Date of Appointment	:	Shri Subhransu Pani Qualification: M.Tech in Applied Geology Date of Appointment – 18.11.2019
6	Date of approval of Mining Plan/Review of Mining Plan etc.	:	Modification of Mining plan approved vide letter no: No. E 7441 MCDR-MPC0Mn/10/2023-JBP-IBM_RO_JBP dated 27.10.2023 for the proposal period 2023-24 to 2026-27

PART III-MCDR Report details.

1. **Scientific Mining:** Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

S.N.	Item	Proposals	Actual Work	Remarks
1a	Backlog of previous year	NIL	Nil	The proposal period is from 2023-24 to 2026-27
1b	Exploration over lease area for Geological axis 1 or 2.	In 2023-24, 9 number of boreholes was proposed for drilling.	Nil	The deviation has been pointed out to the lessee in form of violation letter.
1c	Exploration Agency & Expenditure in Lakh Rupees during the year	Not Proposed	Nil	Nil
1d	Balance area to be explored to bring the Geological axis in 1 or 2.	Area to be explored is 18.38 Ha.	Area to be explored under G1 level is 18.38 Ha.	Nil
1e	Balance reserves as on 01.04.2024	At the beginning of the year 2023-24, reserve was 341,921.84 tones.	Depletion of reserves during the year 10716 tones. Balance reserves as on 31.3.2024 was 331,205.84 tones	Reserves as reported in annual return for 2023-24.
1f	General remarks of Inspecting officer on geology, exploration etc.	In 2023-24, 9 bore holes has been proposed for drilling but no exploration has been done during the year 2023-24. The deviation has been pointed out to the lessee in form of violation letter.		

Development

S.N.	Item	Proposals	Actual Work	Remarks
2a	Location of Development w.r.t. lease area	Development Proposed from Pit 3 and Pit 6	Development carried out from Pit 6 only. Pit 3 was not put in production and development.	The deviation has been pointed out to the lessee in form of violation letter

2b	Separate benches in topsoil overburden and mineral (Rule 15)	Separate bench in topsoil not proposed. Separate benches in overburden and ore are proposed.	There is no separate bench in the topsoil. Separate benches in overburden and ore maintained.	Nil
2c	Stripping ratio or ore to OB ratio	1:0.10	1:0.08	Nil
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	Nil
2e	Quantity of overburden generation in m3	Overburden generation proposal was 194548 m3	Overburden generated during the year was 125234.11 m3.	Deviation has been pointed out to lessee through violation letter.
2f	General remarks of Inspecting officer on development of pit w.r.t type of deposit etc.	Development have only been carried out from Pit 6 and not from Pit 3 as proposed. Further, the overburden removal was less than proposed. Deviation has been pointed out to lessee through violation letter.		

Exploitation FY 2023-24

S. N.	Item	Proposals	Actual Work	Remarks
3a	Number of pits proposed for production	Two Pits namely Pit 3 & Pit 6.	One Pit namely Pit 6	Deviation has been pointed out to lessee through violation letter.
3b	Quantity of ROM mineral production proposed	Total ROM 409096.0 tones (including opencast and dump working)	Actual Production: 16985.00 tones (opencast: 10716 tones and dump working: 6269 tones)	Deviation has been pointed out to lessee through violation letter.
3c	Recovery of Salable/usable minerals from ROM production	27000.00 tones	16985.00 tones	Deviation has been pointed out to lessee through violation letter.
3d	Quantity of mineral reject generation	Not Proposed	Nil	Nil
3e	Grade of mineral reject generation and threshold value declared	Not Proposed	Nil	Nil
3f	Quantity of sub-grade mineral generation	Not Proposed	Nil	Nil
3g	Grade of sub-grade mineral generation	Not Proposed	Nil	Nil
3h	Manual/Mechanized method adopted for segregation from ROM	Semi-Mechanized open cast mining with manual sorting	Semi-Mechanized open cast mining with manual sorting	Nil
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Proposed	Nil	Nil
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	Nil
3k	Provision of mining machineries in mineral benches	Yes	Yes	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	Nil
3m	Total area covered under excavation /pits (Ha.)	Total area covered under excavation/pits is 5.07 Ha	Total area covered under excavation/pits is 5.619 Ha	Nil

3n	Ore to OB ratio for the pit/mine during the year	1:0.10	1:0.08	Nil
3o	Total area put in use under different heads at the end of year	Total area put in use under different heads at the end of year will be 21.85 Ha	Total area put in use under different heads at the end of year is 22.65 Ha	FA has been submitted for 22.65 Ha
3p	Production of ROM mineral during last five-years period, as Applicable	Total ROM 409096.0 tones (including opencast and dump working)	Actual Production: 16985.00 tones (opencast: 10716 tones and dump working: 6269 tones)	Deviation has been pointed out to lessee through violation letter. Further, the proposal period is from 2023-24 to 2026-27
3q	General remarks of inspecting officer on method of mining etc.	Production was not carried out from Pit 3. Deviation has been pointed out to lessee through violation letter.		

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual Work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Separate dumping of overburden proposed	Separate dumping of overburden carried out.	Nil
4b	Location of topsoil, OB & mineral reject dumps	OB proposed for disposal in WD-02	Overburden has been disposed in the proposed WD-02.	Nil
4c	Number of Dumps within lease area and outside lease area	Number of dumps within lease area 8 Nos, Outside lease area: Nil	Number of dumps within lease area 8 Nos; Outside lease area: Nil	Nil
4d	Location of Dumps w.r.t. ultimate pit limit (Rule 16)	Only Mineralized dump within the UPL.	Only Mineralized dump within the UPL.	Nil
4e	Number of Active & Alive dumps	Number of active dumps is 8	Number of active dumps is 8	Nil
4f	Number of dead dumps	Not Proposed	Nil	Nil
4g	Number of dumps established	Not Proposed	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	Garland drain is present all along the dumps	Garland drain is present all along the dumps	Nil
4i	Length of Retaining wall or garland drain all along dump	Length of Retaining wall: 140m; Length of garland drain: 261m	Length of garland drain constructed was 140m. Length of retaining wall constructed was 300 m.	Nil
4j	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	Solid waste management was carried out as per proposal.		

Solid Waste Management-Backfilling

S.No	Item	Proposals	Actual Work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Not Proposed	Nil	Nil
5b	Area under backfilling of mined out area	Not Proposed	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not Proposed	Nil	Nil
5d	Total area fully reclaimed & rehabilitated (Ha)	Not Proposed	Nil	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc	There was no proposal for backfilling.		

Progressive Mine Closure Plan

S.N.	Item	Proposals	Actual Work	Remarks
------	------	-----------	-------------	---------

6a	Whether Annual report on PMCP submitted on time and correctly-Rule 23E (2). Details should be given in the format as given in Annexure-20	The holder of a mining lease shall submit to the competent authority a yearly report as per the format specified by the Indian Bureau of Mines, before 1 st day of July report every year	The annual return on PMCP has been submitted timely.	Nil
6b	Area available for rehabilitation (Ha)	Not Proposed	Nil	Nil
6c	Afforestation done (ha)	0.28 Ha.	1.2 Ha.	Nil
6d	No. of saplings planted during the year	350 nos	2500 Nos	Nil
6e	Cumulative no. of plants	Not Proposed	13100 Nos	Nil
6f	Any other specific method of rehabilitation	Not Proposed	Nil	Nil
6g	Cost incurred on watch & care during the year	Rs 350/plant	Rs 308/plant	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D).	Not Proposed	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings.	Not Proposed	Nil	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area.	Not Proposed	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir.	Not Proposed	Nil	Nil
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	Not Proposed	Nil	Nil
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	Not Proposed	Nil	Nil
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation	Not Proposed	Nil	Nil
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Proposed	Nil	Nil
6p	Compliance of Environment monitoring (core zone & buffer zone)	Proposed	Carried Out	Nil
6q	General remarks of inspecting officer on PMCP compliance & progressive closer operations	The PMCP compliance was carried out.		

Mineral Conservation

S.N.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or grade wise sorting within lease area	Grade-wise sorting	Grade-wise sorting	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Semi-mechanized	Semi-mechanized	Nil
7c	Different grade of mineral sort out at mine	Not Specified	25% to Below 35% Mn & 35% to below 46% Mn	Nil
7d	Any beneficiation process at mines	Not Proposed	Nil	Nil
7e	General remarks of inspecting officer on Mineral	Grade wise sorting carried out as proposed.		

	conservation & beneficiation issues	
--	-------------------------------------	--

Environment

S.N.	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil (Rule32)	Not Proposed	Nil	Nil
8b	Concurrent use or storage of topsoil	Not Proposed	Nil	Nil
8c	Separate dumps for overburden waste rock, rejects and fines (Rule 33)	Separate dumping of overburden proposed	Separate dumping of overburden carried out.	Nil
8d	Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use	Not Proposed	Nil	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Not Proposed	Nil	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Not Specified	2500 Nos	Nil
8g	Survival rate	Expected survival rate: 80%	Survival rate: 70%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Carried out	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mine area	Aesthetic beauty in and around mines is maintained.		

Compliance of Rule 45 (2023-24)

S.N.	Item	Comments	Remarks
9a	Status of submission of monthly and Annual returns	Annual Return for 2023-24 have been submitted	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer, Geologist and Manager have been employed in the mines.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current (O-C) Workings: 5.619 Ha; Used for waste disposal: 7.642 Ha; Occupied by plant, buildings, residential, welfare buildings and roads: 4.032 Ha;. Any other purpose (Mineral Storage): 5.357 Ha etc	Nil
9d	Scrutiny of Annual return on afforestation	Number of saplings planted during the year: 2500 Nos	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Nil	Nil
9f	Scrutiny of Annual return on ROM stock and/or grade ore	Closing stock of ROM was Nil	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production costs	The ex-mine price for 25% to below 35% Mn is Rs 6803.20/tonne and 35% to blow 46% is Rs12002.51.	Nil
9i	Scrutiny of Annual return on Fixed assets	Value of Fixed Assets Rs 70113839.	Nil
9k	Scrutiny of Annual return on mining Machineries	Shovel (Hydraulic)- 1no; Dozer:1no; tipper: 2no; Blast hole drill: 1no; Front end loader: 1no etc.	Nil

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
11(1) of MCDR 2017	27.03.25		

Date:

(SUDIP RANJAN MAZUMDAR)
Indian Bureau of Mines