

INDIAN BUREAU OF MINES

MINES CONTROL AND CONSERVATION OF MINERAL DIVISION

MCDR INSPECTION REPORT

Ranchi Regional Office

I/38738/2024

Mine file No: MCDR-MiFLOFE/2/2022-RCH-IBM_EZ

Mine code: 30BHR27017

Date of Inspection: 19.07.2024

1.0 GENERAL

SN	Particulars	Details
1	Name of the Mine	Dhobil Iron Ore Mines, Manoharpur Ore Mines, BSL, M/s. Steel Authority of India Ltd.
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest Land – 513.036 Ha. ;Non-Forest Land-0.00 Total Lease Area- 513.036 (Ha)
3	Mine Code	Mines Code – 30BHR27017
4	IBM Registration Number under rule 45 of MCDR, 1988	Registration No. - IBM/5662/2011
5	Name of the lessee, Address, phone, email and fax number	Steel Authority of India Limited; Ispat Bhawan, Lodi Road ;New Delhi- 110003 Fax No.- 011-24368779;Ph:011-24363358 Email: chairman.sail@sail.com
6	Village	Chiria
7	Manoharpur	Manoharpur
8	District	West Singhbhum
9	Pincode	833106
10	State	Jharkhand
11	Post office	Chiria
12	Nearest police station	Manoharpur
13	Nearest Railway station	Manoharpur
14	Date of Grant of Mining Lease	08.03.1948
15	Date of Execution	21.04.2018 Last Executed
16	Date of opening of Mine	08.03.1948
17	Date of first Renewal, if applicable and its period & expiry	08.03.1978. Period 20 years from 08.03.1978 to 07.03.1998.
18	Date of second Renewal, if applicable and its period & expiry	08.03.1998. Period 20 years from 08.03.1998 to 07.03.2018.
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri Birendra Kumar Tiwari Director in Charge, Bokaro Steel Plant, , Bokaro, M/s. SAIL;Jharkhand, PIN-827001 Contact No. 8895500173 Date of Appointment: 20.04.2024 Email: bsl_director@sail.in
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Kamal Bhasker ; Chief General Manager (Mines) Manoharpur Ore Mines, PO- Chiria, West Singhbhum, Jharkhand- 833213;Ph. No. 8895502967 Date of Appointment: 01.01.2022 Email: momchiria@gmail.com
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Sri Ravi Ranjan, GM (Mining) PO:Chiria, West Singhbhum, Jahakhand-833106, Ph:8986881261, E mail ID : momchiria@gmail.com Date of appointment:18.01.2019
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Sri R K Patri, AGM (L&L), PO:Chiria, West Singhbhum, Jahakhand-833106, Ph:8986881636, E mail ID :momchiria@gmail.com Date of appointment:18.01.2019

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SN	Particulars	Details
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes; Dr R K Naik, DGM (Geology), PO:Chiria, West Singhbhum, Jahakhand-833106, Ph:8895504068, E mail ID : momchiria@gmail.com Date of appointment:14.11.2014
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	RMP & PMCP Approved by IBM Vide Ref : RAN/WSB/Fe/MP-10/2021-22, Dated:15.11.2021 for the period (01.04.22 to 31.03.2027) No specific conditions
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Not Applicable
27	Mineral(s) granted in lease and proved for mining	Iron Ore (Hematite)
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanized
30	Captive/Non Captive	Captive

Scientific Mining: Compliance of proposals of approved mining plan/Scheme of mining. : 2022-23 to 2026-27

Exploration

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	23 nos of Boreholes with 2558.50 meterage	Backlogs of previous year was done in reporting yr.
1b	Exploration over lease area for Geological axis 1 or 2.	Yes	G1 level exploration completed.	Found correct.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	M/s Gemcokati Exploration Pvt Ltd. & Expenditure - 2.00 Crores
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	As per approved Proposal
1e	Balance reserves as on 01.04.2024	10.357 MT	11.692 MT	As on 01.04.21 reserves were 12.6 MT
1f	General remarks of inspecting officer on geology, exploration etc.	Lessee has satisfactorily done progress in the area of Exploration.		

2.0 DEVELOPMENT

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t. lease area	At 628, 622, 616, 610 mRL	At 628, 622, 616, 610 mRL	As per approved Proposal
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Nil	Nil	No Topsoil available
2c	Stripping ratio or ore to OB ratio	Nil	1:0.088	As per Approved RoMP
2d	Quantity of topsoil generation in m3	Nil	Nil	As per Approved RoMP
2e	Quantity of overburden generation in m3	Nil	43307.83	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Satisfactory work has been done in the area of development of mine.		

3.0 EXPLOITATION

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SN	Item	Proposals (2023-24)		Actual work (2023-24)		Remarks
3a	Number of pits proposed for production	01		01		As per Approved RoMP
3b	Quantity of ROM mineral production proposed	745000 Te		491139.87 Te		Almost 65% achievement has been made
3c	Recovery of saleable/usable mineral from ROM production	745000 Te		491139.87 Te		Almost 65% achievement has been made
3d	Quantity of mineral reject generation	Nil		Nil		As per Approved RoMP
3e	Grade of mineral reject generation and threshold value declared	Nil		Nil		As per Approved RoMP
3f	Quantity of sub-grade mineral generation	Nil		Nil		As per Approved RoMP
3g	Grade of sub-grade mineral generation	Nil		Nil		As per Approved RoMP
3h	Manual / Mechanised method adopted for segregating from ROM	Manual & Mechanized		Manual & Mechanized		As per Approved RoMP
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No Specific		No Specific		As per Approved RoMP
3j	Provision of drilling & blasting in mineral benches	<p>Drill hole of 100 mm dia by wagon drills provided with Wet Drilling facility.</p> <p>Blasting is done by using slurry explosives and Nonnel fuses detonators. Spacing and burden in OB & ore benches are 3 m and 2.5 m respectively.</p>		<p>100 mm diameter holes are drilled by using Crawler mounted wagon drills. Drills equipped with Wet Drilling arrangement.</p> <p>Blasting is done by using slurry explosives (Special blast 83mm Cartridge) and Nonel detonators (C Det). Spacing and burden in OB & ore benches are 3 m and 2.5 m respectively.</p>		As per Approved RoMP
3k	Provision of mining machineries in mineral benches	Proposed		Done		As per Approved RoMP
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6 mtr		6 mtr		As per Approved RoMP
3m	Total area covered under excavation/pits	20.82 Ha		20.82 Ha		As per Approved RoMP
3n	Ore to OB ratio for the pit/mine during the year	Nil		1:0.088		
3o	Total area put in use under different heads at the end of year	29.411 Ha		29.411 Ha		As per Approved RoMP
3p	Production of ROM mineral during last five-year period, as applicable	Year	Prod. (Te)	Year	Prod. (Te)	Almost 65% achievement has been made
		2019-20	749858	2019-20	733794.93	
		2020-21	749359	2020-21	553841.03	
		2021-22	749278	2021-22	75251.75	
		2022-23	749900	2022-23	341182.29	
		2023-24	745000	2023-24	491139.87	
3q	General remarks of inspecting officer on method of mining etc.	Lessee was unable to produce the mineral quantity as per approved RoMP document.				

4.0 SOLID WASTE MANAGEMENT-DUMPING

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes	OB dump:2	As per Approved RoMP
4b	Location of topsoil, OB & mineral reject dumps	Topsoil: Nil OB dump: 1) North West Corner, 2) North side of quarry 3) Fines Dump - North West side, 4) Sub grade dump - Southern side	Topsoil: Nil OB dump: 1) North West Corner, 2) North side of quarry, 3) Fines Dump - North West side, 4) Sub grade dump - Southern side	As per Approved RoMP
4c	Number of dumps within lease area and outside lease	WML: 4 OML :Nil	WML: 4 OML :Nil	As per Approved RoMP
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	N2462930- 2463000 E-322120-322190 630-634 MSL	N2462930- 2463000 E-322120-322190 630-634 MSL	As per Approved RoMP
4e	Number of active & alive dumps	01	01	As per Approved RoMP
4f	Number of dead dumps	02	02	As per Approved RoMP
4g	Number of dumps stabilised	02	02	As per Approved RoMP
4h	Whether Retaining wall or garland drain all along dumps	Yes	Yes	As per Approved RoMP
4i	Length of Retaining wall or garland drain all along dump	Nil.	Old retaining walls are repaired & maintained	Total 325 mts concrete retaining wall & 765 mts length boulder retaining wall was provided at the bottom of dumps.
4j	Number of settling ponds	-	02	02 Nos of settling ponds have been made for extra precautions
4k	Specific comments of inspecting officer	Satisfactory work has been made in the area of solid waste management-dumping		

5.0 SOLID WASTE MANAGEMENT-BACKFILLING

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposal	Not Applicable	No proposal for the reporting year
5b	Area under backfilling of mined out area	No proposal	Not Applicable	No proposal for the reporting year
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	0	0	As per Approved RoMP
5d	Total area fully reclaimed & rehabilitated	Not Applicable	Not Applicable	No proposal for the reporting year
5e	General remarks of inspecting officer on backfilling, reclamation etc	No working pit has been exhausted in respect of iron ore minerals hence backfilling and rehabilitation has not been done yet		

6.0 PROGRESSIVE MINE CLOSURE PLAN

SN	Item	Proposals (2023-24)	Actual work (2023-24)	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.	June every year	Submitted through vide letter reference no. MOM/IBM/5/223, dated 27.06.2024	As per Approved RoMP
6b	Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	No proposal	Not Applicable	No proposal for the reporting year
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	No proposal	Not Applicable	No proposal for the reporting year
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No proposal	Not Applicable	No proposal for the reporting year
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air, noise, water monitoring on monthly basis by Manoharpur Ore Mines and half yearly by a NABL certified laboratories (under Jharkhand State Pollution Control Board)	Air, noise, water monitoring on monthly basis by Manoharpur Ore Mines and half yearly by a NABL certified laboratories (under Jharkhand State Pollution Control Board)	From 1 st April 2024 Air, water is being monitoring through NABL accredited lab on monthly basis and noise on quarterly basis . a) Air monitoring 6 Stations in core zone and 4 in buffer zone b) Water monitoring at 4 Stations Noise monitoring at 9 Stations
6f	General remarks of inspecting officer on PMCP compliance & progressive	Satisfactory work has been made in the area of progressive mine closure plan by the lessee.		

7.0 MINERAL CONSERVATION

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Fe>55%	Lump (62-65%)-160135.180, Lump (65% & Above)-19994.370, Fines (62-65%)-311010.320)	As per Approved RoMP
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Manual & Mechanical	Manual & Mechanical	As per Approved RoMP

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7c	Different grade of mineral sorted out at mines	Fe>55%	Lump (62-65%) - 160135.180, Lump (65% & Above) - 19994.370, Fines (62-65%) - 311010.320	As per Approved RoMP
7d	Any beneficiation process at mines	No proposal	Not Applicable	No proposal for the reporting year
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Satisfactory work has been made in the area of mineral conservation by the lessee.		

8.0 ENVIRONMENT

SN	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Not Applicable	No proposal for the reporting year
8b	Concurrent use or storage of topsoil	0	0	As per Approved RoMP
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Topsoil: Nil OB dump: 1) North West Corner, 2) North side of quarry, 3) Fines Dump - North West side, 4) Sub grade dump - Southern side	Topsoil: Nil OB dump: 1) North West Corner, 2) North side of quarry, 3) Fines Dump - North West side, 4) Sub grade dump - Southern side	As per Approved RoMP
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not Applicable	No proposal for the reporting year
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Not Applicable	No proposal for the reporting year
8f	Baseline information on existence of plantation & additional plantation done	650 saplings	Plantation within ML area – 550 nos, Outside ML area – 100 nos	WML: 550; Violation issued in this regard.
8g	Survival rate	60%	60%	As per Approved RoMP
8h	Water sprinkling on roads to control airborne dust	Wet drilling, water sprinkling on roads and Dust generating areas	Wet drilling, water sprinkling on roads and Dust generating areas	As per Approved RoMP
8i	General remarks of inspecting officer on aesthetic beauty in and around mines a	Lessee has planted 550 saplings and has done water sprinkling in the mine for control of fugitive dust control. It sustains the aesthetic beauty in and around mines		

9.0 COMPLIANCE OF RULE 45

SN	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return submitted up to: June 2024 Annual Return submitted for FY: 2023-24		
SN	Item	Details given in A.R.	Observation of I/O	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri R. K. Patri Geologist: Dr. R. K. Naik Manager: Shri Ravi Ranjan	Mining Engineer: Shri R. K. Patri Geologist: Dr. R. K. Naik Manager: Shri Ravi Ranjan	As per submitted annual return 2023-24. Annual Return submitted on 25.06.2024, found correct

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1/38738/2024 9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 20.82 Ha. Dump: 1.89 Ha. Infrastructure: 1.1 Ha. Other purpose (Sub grade, Fines stack & afforestation): 5.601 Ha. Total : 29.411 Ha.	Pit: 20.82 Ha. Dump: 1.89 Ha. Infrastructure: 1.1 Ha. Other purpose (Sub grade, Fines stack & afforestation): 5.601 Ha. Total : 29.411 Ha.	As per submitted annual return 2023, found correct
9d	Scrutiny of Annual return on afforestation	650 Nos.	650 Nos.	As per submitted annual return 2023, found correct
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	As per submitted annual return 2023, found correct
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock-138156.270 Te, Production-491139.870 Te, Dispatch-491139.870 Te, Closing Stock-138156.270 Te	Opening Stock-138156.270 Te, Production-491139.870 Te, Dispatch-491139.870 Te, Closing Stock- 138156.270 Te	As per submitted annual return 2023, found correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-mine price: 3897.37	Ex-mine price: 3897.37	As per submitted annual return 2023,,found correct
9i	Scrutiny of Annual return on fixed assets	Rs. 5115885333	Rs. 5115885333	Verified from asset register
9k	Scrutiny of Annual return on mining machineries	1. Backhoe-03 2. Blast Hole Drill-01 3. Dumper-60 4. Crusher-02, 5. Water Tanker-01, 6. Front End Loader-04	1. Backhoe-03 2. Blast Hole Drill-01 3. Dumper-60 4. Crusher-02, 5. Water Tanker-01, 6. Front End Loader-04	As per Approved RoMP

10 - Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

1. Earlier pointed out violation: Rule 26(1) dated 25.06.24 on ; complied
2. Violation pointed out in the current inspection is as under: Nil.

(Vikas Kumar),
Asst. Controller of Mines,
Indian Bureau of Mines- Ranchi