

INDIAN BUREAU OF MINES
MINERALS DEVELOPMENT AND REGULATION DIVISION
MCDR INSPECTION REPORT
BANGALORE REGIONAL OFFICE

File No-MCDR-MiFLOFE/2/2023-BNG-IBM_RO_BNG

Mine Code- 30KAR03104

General

S N	Particulars	Details
1	Name of the Mine	Dharmapuri Iron Ore Mine (ML No-2160)
2	Date of Inspection	01.10.2024
3	Name of Inspecting Officer	Shri A K Pany, AME
4	Name of official accompanying inspection	Shri Amartaluri V. Rao, Mines Manager
5	Last date of Inspection & Officer	28.12.2023 Dr. Sudhakara T.L., SMG
6	Total Lease Area (Ha) with breakup of Non-forest and forest land	Forest Land- 18.46 ha Non Forest Land- Nil Total Lease area- 18.46 ha
7	Mine code	30KAR03104
8	IBM Registration Number under rule 45 of MCDR, 2017	IBM/178/2011
9	Name of the lessee, Address, phone, email and fax number	M/s Veerabhadrappa Sangappa & Company, VESCO House, 2/138, Ballari road, Sandur. Ph-08395260183 E-mail:vesco.co@gmail.com, vescosdr@yahoo.com
10	Village	RM Block
11	Taluka/Mandal	Sandur
12	District	Ballari
13	Pin code	583119
14	State	Karnataka
15	Post office	Sandur
16	Nearest police station	Sandur
17	Nearest Railway station	Yeshwanthanagar & Hosapete
18	Date of Grant of Mining Lease	19.10.1992
19	Date of Execution	19.10.1992
20	Date of Expiry	10.10.2042
21	Date of opening of Mine	01.12.1992
22	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Shri K S.Vinayak, VESCO House, 2/138, Ballari road, Sandur. Email-vescopd028@gmail.com, Ph-08395260183

		Date of Appointment-29.06.2023
23	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri Shanmukhappa Mandal, VESCO House, 2/138, Ballari road, Sandur. Email-vescopd028@gmail.com, Ph-9900010433 Date of appointment: 19.01.2022
24	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shri. Amartaluri V. Rao, VESCO House, 2/138, Ballari road, Sandur. Ph-9448395512, Email- vescosdr@yahoo.com Date of Appointment: 15.09.2009.
25	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Subramani M , B.E mining with 6 yrs experience VESCO House, 2/138, Ballari road, Sandur. Email- vescosdr@yahoo.com Date of Appointment: 01.08.2022
26	Name of the Geologist, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shri Satish K. Chougule, Qualification: Msc. Applied Geology Experience: 10 Years VESCO House, 2/138, Ballari road, Sandur. Email- vescosdr@yahoo.com Date of Appointment : 12.10.2020
27	Date of Approval of Review of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Review of Mining Plan approved vide letter No. 279/232/90/BNG dated 23.11.2021 for the period 2022-23 to 2026-27
28	Mineral(s) granted in lease and proved for mining	Iron
29	Method of Mining(Open cast, Underground)	Open cast
30	Category (Fully Mechanized, Others or Manual)	Category-A, Fully Mechanized
31	Captive/Non Captive	Non-Captive

Exploration

S.N.	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	NA	No Backlog from previous year.

1b	Exploration over lease area during the year for Geological axis 1 or 2.	4 nos. of Core Boreholes proposed during the year 2023-24	6 nos.	Exploration carried out as per proposal and additional holes drilled out from future proposal.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not specified	Geo-tech Exploration, Nagpur Expenditure: 21.92 Lakhs	As reported by Lessee during inspection, 21.92 Lakhs spent on exploration.
1d	Balance area to be explored to bring Geological axis in 1 or 2	As per approved RMP:- G1-13.85 Ha, G2-1.65 Ha G4-2.96 Ha	The lease area has been explored under G1 level of exploration. The latest exploration data is yet to be updated in the Mining Plan.	As reported by lessee during inspection G1 -18.46 Ha
1e	Balance reserves as on 01.04.2024	Reserve- : 7515862 Tonne Resource : 3297862 Tonne Total : 10813724 Tonne		The Balance reserve/resource figures as per Annual Return submitted for FY 2023-24 and after depleting production from last approved document.
1f	General remarks of inspecting officer on geology, exploration etc.	The Iron Ore deposit of the lease area extends 1000 m in length and 200 m in width with thickness around 100 to 150 m. The grade of Iron Ore varies from 60% to 65 % Fe. Further, 4 nos. of bore holes proposed and 6 nos. drilled during the year 2023-24. The potential mineralized area is 15.50 ha.		

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	N 1666820 to 1667100 E 661720 to 662000	N 1666820 to 1667100 E 661720 to 662000	Excavation carried out within proposed area.
2b	Separate benches in topsoil, overburden and mineral	No proposal for generation of top soil. Separate Benches in mineral is proposed	Carried out	Waste is encountered from dykes & small patches of BHQ in Mineral benches.
2c	Stripping ratio or ore to OB ratio	1: 0.05 (tonne/Cum)	1:0.04 (tonne/Cum)	
2d	Quantity of topsoil generation in m ³	Nil	Nil	
2e	Quantity of overburden/waste generation in m ³	24734 Cum	19888.88 Cum	Decrease in OB/waste is due to less generation of intercalated waste.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The open cast mine is developed in single pit operation with regular benches. Waste is mainly generated from dykes & patches of BHQ within the ore body. The adopted method is suitable to the type of the deposit.		

Exploitation

S.N.	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
3a	Number of pits proposed for production	One Pit	One Pit	
3b	Quantity of ROM production proposed	460000 tonne	460000 tonne	
3c	Recovery of salable/usable mineral from ROM production	460000 tonne (100% of ROM)	460000 tonne (100% of ROM)	
3d	Quantity of mineral reject generation	No proposal of generation of Mineral rejects.	Nil	
3e	Grade of mineral reject generation and threshold value declared	Threshold Value- Haematitic iron ore: 45% Fe(Min) and Haematitic Siliceous Ore: 35% Fe (Min). Cutoff grade and threshold value are same.	As per proposal	
3f	Quantity of sub-grade mineral generation	No proposal of generation of sub-grade.	Nil	
3g	Grade of sub-grade mineral generation	No proposal of generation of sub-grade.	Nil	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized	Mechanized	Deployed 100 TPH Crusher & 250TPH Screening for segregating from ROM
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No beneficiation study proposed	Nil	
3j	Provision of drilling & blasting in mineral benches	Provision of drilling & blasting proposed in mineral benches	Deep hole drilling/blasting with 100 mm dia. & 8m Depth. 2m burden and 2.5m spacing.	5% volume of production & development is used for drilling & blasting.
3k	Provision of mining machineries in mineral benches	Excavator – 1 -2.5 Cum Dumper – 38 tonne	Excavator – 1 -2.5 Cum Dumper – 38 tonne	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in	Bench Height-7.5 m, Width- 10 m	Bench Height-7.5 m, Width- 10 m	The bench height is suitable for the method of mining.

	MP/SOM			
3m	Total area covered under excavation/pits	12.98 ha at the end of 2023-24	12.98 ha	Within proposed area under mining.
3n	Ore to OB ratio for the pit/mine during the year	1: 0.05 Ore- 460000 tonne Waste- 24734 Cum	1:0.04 Ore- 460000 tonne Waste- 19888.88 Cum	
3o	Total area put in use under different heads at the end of year	Mining - 12.8 Ha. Dumps - 4.15 Ha. Green belt - 1.13 Ha Other- 0.2 ha Total- 18.46 Ha	Mining - 12.8 Ha. Dumps - 4.15 Ha. Green belt - 1.13 Ha Other- 0.2 ha Total- 18.46 Ha	Within proposed land use
3p	Production of ROM mineral during last five-year period, as applicable	2019-20-460000 Tonne 2020-21- 460000 Tonne 2021-22 -460000 Tonne 2022-23- 460000 Tonne 2023-24- 460000 Tonne	2019-20- Nil 2020-21- Nil 2021-22 - Nil 2022-23- 460000 Tonne 2023-24- 460000 Tonne	
3q	General remarks of inspecting officer on method of mining etc.	Mechanized opencast mining operation is carried out with shovel – dumper combination. The common boundary working is also carried out with adjacent Ramandurga Iron Ore Mine of M/s SKME Pvt Ltd.		

Solid Waste Management-Dumping

S.N	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Separate dumping of OB/waste proposed	Carried out	No proposal of generation of topsoil/mineral rejects.
4b	Location of topsoil, OB & mineral reject dumps	Waste dump- AD1 <u>Location:</u> N1667100 to 1667290 E 661560 to 661660	OB Dump- PD1 <u>Location:</u> N1667100 to 1667280 E 661560 to 661660	Waste dumping carried out within proposed area.
4c	Number of dumps within lease area and outside lease area	01 Nos. – within lease area No dumps outside lease area		
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL		
4e	Number of active & alive dumps	1 nos. of active dump	1 nos. of active dump	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilized	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there	No	Proposed	As reported by lessee during inspection the length of existing Toe wall is 955m and Garland drain is 780m.
4i	Length of Retaining wall or garland drain all along dump	Retaining wall- 25 m, Garland Drain- 25 m proposed during the year	Retaining wall- 169 m has been constructed	Deviation pointed out to lessee through violation letter issued.

		2023-24		
4j	Number of settling ponds	No proposal	Nil	
4k	Specific comments of inspecting officer on waste dump management	Waste dumping has been carried out as per the proposed location. The construction of retaining wall is carried out; however, the garland drain has not been constructed as per proposal. The deviation is pointed out to lessee through violation letter dated 22.10.2024.		

Solid Waste Management-Backfilling

S.N.	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	Nil	Mineral not exhausted from pit
5b	Area under backfilling of mined out area	No proposal	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposal	Nil	No generation of top soil
5d	Total area fully reclaimed & rehabilitated	No proposal	Nil	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	The mineral has not been exhausted from quarry and no proposal of back filling during the year.		

Progressive Mine Closure Plan

S.N.	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26.	To be submitted before 1 st July	Submitted	
6b	Area available for rehabilitation (ha)	No proposal	Nil	
6c	Afforestation done (ha)	0.13 ha	0.21 ha	0.17 ha area afforestation carried out at dump slope & 0.04 ha at green belt area of safety zone
6d	No. of saplings planted during the year	325 nos.	670 nos.	
6e	Cumulative no. of plants	Total 2030 nos. of tree planted.		-
6f	Any other specific method of rehabilitation	No proposal	Nil	-
6g	Cost incurred on watch & care during the year	Rs. 32500.00	Rs. 57357.00	As reported by lessee during inspection.

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D).	No proposal	Nil	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings.	No proposal	Nil	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area.	No proposal	Nil	-
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir.	No proposal	Nil	-
6l	Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means	No proposal	Nil	-
6m	Compliance of Rehabilitation of waste land within lease (i) Afforestation	No proposal	Nil	-
6n	Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation	No proposal	Nil	-
6o	Compliance of Rehabilitation of waste land within lease (iii) Method of rehabilitation	No proposal	Nil	-
6p	Compliance of Environmental monitoring (core zone & buffer zone)	Quarterly monitoring of Noise, Air and Ground water quality proposed	Monitoring carried out quarterly.	Within permissible limit.
6q	General remark of inspecting officer on PMCP compliance and progressive closure operation etc.	The afforestation carried out as per proposal during the year.		

Mineral Conservation

S.N.	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting within lease area	Grade wise sorting within lease area	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	
7c	Different grade of mineral sorted out at mines	62% to below 65% Fe (Lumps) and 62% to	62% to below 65% Fe (Lumps) and 62% to below 65% Fe (Fines)	

		below 65% Fe (Fines)		
7d	Any beneficiation process at mines	No proposal	No Beneficiation plant exists within lease.	Dry Crushing (100 TPH) & Screening (250TPH)
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No Beneficiation plant installed in the mine and only screening and crushing is carried out. During the inspection, it is observed that around 1.5 lakh tonnes of Iron ore fines stacked in the mine. Stacking of such a large quantity of fines in the mine during rainy season is not appropriate in the view of conservation of mineral. The same is pointed out to lessee through violation letter dated 22.10.2024.		

Environment

S.N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal of generation of Topsoil	Not generated	
8b	Concurrent use or storage of topsoil	No proposal	Nil	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate waste dump proposed	Carried out	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	2030 Nos. of cumulative plantation up to 31.03.2024		
8g	Survival rate	85%	85%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling on haul roads proposed to suppress the dust	Carried out	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	The aesthetic beauty in & around the mine area is maintained.		

Compliance of Rule 45

S.N.	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly and Annual Return submitted within due time.		
S.N.	Item	Details Given in AR.	Observation of I/Officer	Remarks

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Mining Engineer, Geologist and Manager Furnished in the Annual Return.	The same were appointed.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit – 12.98 Ha Dump – 4.15 Ha Reclaimed area- Nil	Within proposed land use.
9d	Scrutiny of Annual return on afforestation	670 Nos. within lease area	Plantation carried out
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Appears to be correct.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock- Nil <u>Grade wise stock-</u> 62% to below 65% Fe (Lump)-17052.80tonne 62% to below 65% Fe (Fines)- 38352.03tonne	Appears to be correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Cost of production Rs. 1775.03 <u>Ex-mine price</u> 62% to below 65% Fe (Lump)- Rs. 5869.07 62% to below 65% Fe (Fines)- Rs. 5329.51	Appears to be correct.
9i	Scrutiny of Annual return on fixed assets	Rs. 10271882.00	Appears to be correct.
9k	Scrutiny of Annual return on mining machineries	Shovel – 1.0 -2.5 Cum Loader-2.6 Cum Dumper – 38 Tonne Water Tanker- 8 KL Back Hoe-0.5 Cum Crusher-100 TPH	Deployed in the mine.

Details of violations observed during current inspection and compliance position of violation pointed out

Violation			Show cause		
Rule No.	Issued on	Compliance on	Rule No.	Issued on	Compliance on
11(1) & 12(1) of MCDR, 2017	22.10.2024	--	--	--	--

(ASHOK KUMAR PANY)
Assistant Mining Engineer

