MCDR-MiFLOFE/41/2023-BNG-IBM_RO_BNG INDIAN BUREAU OF MINES

MINERALS DEVELOPMENT AND REGULATION DIVISION

1/29492/2024

MCDR inspection REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/403/BNG Mine code : 30KAR03113

(i) Name of the Inspecting : 277) GANGADHAR BHAKAT

Officer and ID No.

(ii) Designation : Assistant Mining Engineer

(iii) Accompaning mine : Jeelan, Mines Manager, C.V. Narayan Reddy Asst Mines

Official with Designation

(iv) Date of Inspection : 13/10/2023

(v) Prev.inspection date : 27/08/2022

PART-I : GENERAL INFORMATION

.. (a) Mine Name : DONIMALAI (53.20 H)

(b) Registration NO. : IBM/250/2011

(c) Category : A Fully Mechanised

 $\text{(d)} \qquad \text{Type of Working} \qquad \qquad : \quad \text{Opencast} \\$

(e) Postal address

State : KARNATAKA
District : BELLARY
Village : TARANAGAR
Taluka : SANDUR
Post office : TARANAGAR

Pin Code

FAX No. : 080-41105775branchoffice@nate=mail : admin@nadeemminerals.com
Phone : 080-41105475 (0)7406944424

(f) Police Station : SANDUR

(g) First opening date : 19/07/2006

(h) Weekly day of rest : SUN

2. Address for : NADEEM MINERALS, ALFA MANOR, No. 227,

correspondance 1st FLOOR, GREENGLEN LAYOUT, Off: OUTER RING Road

BELLANDUR, VARTUR HOBLI, Bangalore-560103

3. (a) Lease Number : KAR0996 ML No. 2526

(b) Lease area : 52.82 Ha

(c) Period of lease : 50 Years, up to 18/07/2056

(d) Date of Expiry : 18/07/2056

4. Mineral worked : IRON ORE Main

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29/01/1998

24/11/2020

1/29492/2024

5. Name and Address of the

Lessee : NADEEM MINERALS.,

BELLARY KARNATAKA

Phone: FAX:

Mining Engineer

Name : Manohar Mallikarjuna K,,Full Time

Qualification :

Appointment/ : 26/03/2022

Termination date

Geologist

Name : Venkatasubbaiah Ch, Full Time

Qualification : M.Sc GEOLOGY

Appointment/ : Termination date

Manager

Name : JEELAN

Qualification :

Appointment/ : 19/11/2022

Termination date

6. Date of approval of Mining Plan/Scheme of Mining

Fresh under rule 22 MCR1960 08/07/1999 Modif.of approved Mining Plan 18/10/2005 Modif.of approved Mining Plan 24/04/2007 Renewal under rule 22 MCR1960 25/05/2007 MS modif under MCR 1960 21/04/2014 Mining Scheme rule 12 MCDR1988 23/02/2016 MP modif under 17(3) MCR 2016 25/10/2017 MP review under 17(1) MCR 2016 24/06/2020

: Fresh under rule 22 MCR1960

MP review under 17(1) MCR 2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	NA	-
1b	Exploration over lease area for geological axis 1 or 2	No Proposal	NA	Entire mineralized area 26.82 ha explored under G1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable.	NIL	
1d	Balance area to be explored to bring Geological axis in 1 or 2	NIL	NIL	
1e	Balance reserve as on 01/04/20		8.8197 Million Tonnes	Reserves as per AR 2022-23.
1f	General remarks of inspecting officers on geology, exploration etc			Out of 52.82 Ha 26.82 ha is Mineralized area explored in G1 level and remaining 26 Ha is proved Non-Mineralized.

Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N-1668444 to 1668803 E- 672015to 672187	N-1668510 to 1668820 E- 672130 to 672000 South Pit:	
2b	overburden and minerals (Rule	2 benches in Over burden	and 2 benches in	
2c	Stripping ratio or ore to OB ratio	1:0.22	1: 0.0149	Violation pointed out.

2d	Quantity of topsoil generation in m3	No Proposals.	Nil	No topsoil generated during the year 2022-23.
2e	Quantity of overburden generation in m3	90,032 MT (BHJ+Shale)	5,040 Tonnes (Only Shale)	Violation pointed out.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			In the interest of mineral conservation BHJ is being treated as low grade Iron Ore & stacked separately.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2 Blocks (North Block & South Block)	2 Blocks (North Block & South Block)	
3b	Quantity of ROM mineral production proposed	4,09,993 MT	3,38,022 MT	
3с	Recovery of sailable/usable mineral from ROM production	95%	95%	As per the approved Mining Plan recovery is 95%
3d	Quantity of mineral reject generation	No proposals.	No mineral reject generating.	No mineral reject generated during the FY 2022-23.
3e	Grade of mineral rejects generation and threshold value declared.	No proposals.	Nil.	No mineral reject generated during the FY 2022-23.
3f	Quantity of sub grade mineral generation.	NIL	NIL	No sub grade mineral was generated.
3g	Grade of sub grade mineral generation	NIL	NIL	No sub grade mineral was generated.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized method by engaging Dry crushing & screening unit of 350 Tph capacity.	Mechanized method adopted by engaging Dry crushing & screening unit of 350 TPH capacitiy.	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposals.	None	
3;	Provision of drilling and blasting in mineral benches	Drilling and blasting being practiced in hard ore bands, soft ore shall be excavated directly.	Drilling and blasting being practiced in hard ore bands, soft ore shall be excavated directly.	The formations are mostly hard in nature & drilling blasting is done in hard stratum except for soft Ore body. Most of the material handling requires drilling & Blasting. Wagon drill deployed for drilling of blast holes and slurry explosives used as proposed.
3k	Provision of mining machineries in mineral benches	Air Compressor - 1 Backhoe - 4 Dumper - 10 Wheel loader - 3 Crusher - 1 Water tanker - 4 Rock drill (Non - Elec.) - 1	Water tanker - 2 Rock drill (Non - Elec.)	Machineries as proposed numbers are engaged in the mineral benches for achieving the proposed quantity of production and development.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Mine is proposed to operate by mechanized opencast mining with 8 m bench height.	Mine is being operated by mechanized opencast mining with 8 m bench height.	By and large the bench height and width are maintained as per the proposal.
3 m	Total area covered under excavation/pits	15.11 Ha	15.11 Ha	Appears to be correct and as given in AR 2022-23.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.22	1:0.0149	Violation issued for deviation in stripping ratio.

30	Total area put in use under different heads at the end of year	Area under mining 15.11 Waste dumping-11.272 Backfilling-4.64 Mineral storage- 1.30 Infrastructure - 0.20 Roads -1.0 Green belt & Afforestation -8.238 Mineral Separation - 0.35 Undisturbed Area - 9.71 Others (R&R works) - 1.0 TOTAL - 52.82	Mineral storage- 1.30 Infrastructure - 0.20 Roads -1.0 Green belt & Afforestation -8.238 Mineral Separation - 0.35 Undisturbed Area - 9.71 Others (R&R works) - 1.0	
3p	Production of ROM mineral during the last five year period as applicable	2018-19 (4,10,000 Tonnes) 2019-20 (4,10,000 Tonnes) 2020-21 (4,10,000 Tonnes) 2021-22 (4,09,973 Tonnes) 2022-23 (4,09,993 Tonnes)	2018-19 (98,000 Tonnes) 2019-20 (41,500 Tonnes) 2020-21(3,85,220 Tonnes) 2021-22(2,77,000 Tonnes) 2022-23(3,38,022 Tonnes)	Production Proposals & achieved figures are as per the online submitted Annual Returns of the respective years.
3q	General remarks of inspecting officers on method of mining etc.			The Mine is a fully mechanized mine and machineries as proposed are engaged for development, Production and mechanized method for segregation of ore.

Sl.No. Item Propasals Actual work Remarks

Solid Waste Management - Dumping:

4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	No topsoil generation. OB for the 2022-23 is 90,032 MT No mineral reject.	No topsoil generation. OB for the 2022-23 is 5,040 MT No mineral reject.	Violation issued for less development.
4b	Location of topsoil, OB and mineral reject dumps	OB of Shale at NW Part and BHJ is at SE corner.	OB of Shale at NW Part and BHJ is at SE corner.	All waste dumps are located within the ML.
4c	Number of dumps within lease area and outside of lease area	Dump WML:5(2 active & 2 stabilized) Backfilled : 1 OML:- Nil	WML:5 (2 active & 2 stabilized) Backfilled: 1 OML:- Nil	All the waste dumps are located within ML and no dumps outside the ML.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	NW&SE portion of the lease area	NW&SE portion of the lease area	All the dumps are outside the UPL and backfilled into mined out pit.
4e	Number of active and alive dumps.	2 No's	2 No's	
4f	Number of dead dumps.	1 No's	1 No's	
4g	Number of dumps established.	2 No's (One dump is stabilized & afforested, Second one is Partially stabilized)	2 No's (One dump is stabilized & afforested, Second one is Partially stabilized)	Out of 2 Dead dumps one is fully stabilized and other partially stabilized by way of plantation and geo textiling with toe wall and garland drains.
4h	Whether Retaining wall or garland drain all along dumps are there.	YES	YES	Retaining wall and garland Drains are all along the dumps.
4i	Length of Retaining wall or garland drain all along dumps	No proposals.	NIL	
4j	Number of settling ponds	No proposals.	NIL	
4k	Specific comments of inspecting officer on waste dump management			Out of 2 Dead dumps one is fully stabilized and other partially stabilized by way of plantation and geo textiling with toe wall and garland drains.

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.	shale waste in	Waste generated during mining was Backfilled at proposed sectional area of X-X' section.	Backfilling is in progress in the proposed part of the already mined out pit.
5b	Area under backfilling of mined out area	0.37 На	0.37 Ha	During 2022- 23, 2964.7Cubic meter waste has been backfilled by as reported AR for the year 2022-23.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal.	Nil.	No top soil generated during the year 2022-23.
5d	Total area fully reclaimed and rehabilitated	*0.37 Ha	*0.02 Ha	Backfilling is being carried out over existing backfilled area of 4.64 ha only as per proposal.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling of the mined out pit is in progress as proposed. Over 4.64 Ha of the mined out pit is backfilled till date. Reclamation is done by plantation over the fully backfilled portion.

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	PMCP report submitted on 07.07.2023.
6b	Area available for rehabilitation (ha) .			
6c	afforestation done (ha).	0.184 Ha	0.184 Ha	-

6d	No. of saplings planted during the year	460 Nos.	460 Nos.	-
6e	Cumulative no .of plants	38,220 No's.	75,020 No's.	As reported by the lessee.
6f	Any other method of rehabilitation	No proposal.	NIL	
6g	Cost incurred on watch and care during the year	Rs. 92,000/-	Rs. 4,95,144/-	As reported by the mine management.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	0.37Ha	0.37Ha	There is an existing backfilled area of 4.64 Ha and during the plan period.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Total 4.64 Ha	0.74На	Backfilling is under progress.
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati on on backfilled area			
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No Proposal.	NIL	
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	By Terracing with plantation.	By Terracing with plantation.	
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 rehabilitation (ha)	No Proposal.	NIL	
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	No Proposal.	NIL	
6p	Compliance of environmental monitoring (core zone and buffer zone)		Ambient air quality monitoring stations were established in the core zone as well as in the buffer zone and monitoring regularly by Sai Universal Mining Services (SUMS) - NABL accredited laboratory Hospete.	Environmental Monitoring in Core zone & Buffer zone being done as per MOEF Guidelines. All environmental parameters were observed to be within the permissible limit.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The proposed the afforestation is done. All the PMCP activities are mostly carried out in accordance with the Approved Mining Plan.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	sorting within	Dry crushing & screening for size separation is being practiced at mine site by using the Metsocrushing &Screening Plant of 350 TPH.	The Grade /size wise sorting of ROM is done by crushing and screening within the lease area dispatched after segregating
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Mechanical method proposed for grade-wise mineral sorting.	Grade wise sorting adopted for Mechanical method (mobile Crushers and Screening plants)	
7c	Different grade of mineral sorted out at mines.	No proposal.	Lumps & Fines both 45% to below 51% Fe	

7d	Any beneficiation process at mines	No proposal.	None	No beneficiation process carried out except dry crushing & screening
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Mineral conservation aspect is taken care of. No such beneficiation is carried out during the year 2022-23. The ore is segregated grade wise and size wise into lumps and fines at mine site by engaging mobile crusher & screening units.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	proposed	NIL	Working with in the Broken up area.
8b	Concurrent use or storage of topsoil	No proposal.	NA	Working with in the Broken up area.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes.	Dumping being carried out as per proposal.	BHJ generated in the past is dumped and stored separately in the locations as proposed.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	The waste generated is proposed to be backfilled within the mineral exhausted area.	Backfilling is being carried out within the Mineral exhausted area.	

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	is proposed to restore by way	Exhausted pit is being restored by way of backfilling and afforestation works carried out on inactive terraces of backfilling area.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Proposed for Planting in the mineral exhausted area after backfilling.	Plantation work has been carried out in the Backfilled area as per the proposal.	
8g	Survival rate	80%	80%	As per AR submitted during the year 2022-23.
8h	Water sprinkling on roads to control airborne dust	sprinkling	Regular water sprinkling is being carried out on the haulage roads to suppress airborne dust.	2No's of 8 K.L. & 12 K.L. capacity of water tanker deployed in mine.
8i 	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty in and around the mine is good and all efforts are taken in its maintenance.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Returns: Submitted up to September - 2023 Annual Returns: submitted up to 2022-23		AR submitted on 29/06/2023 & MR submitted on 06/10/2023.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager - Jeelan Mining Engineer - Manohar Mallikarjuna Geologist- Venkata Subbaiah Chereddy	Verified and found all the Statutory persons were present on the day of inspection.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	workings - 15.11Ha Reclaimed/Reha	Appear to be correct.
9d	Scrutiny of Annual return on afforestation	460 Saplings were planted on dumps@80% survival rate.	Appear to be correct.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL	Appear to be correct.

9f	Scrutiny of Annual return on ROM stock and/or graded ore		Appear	to	be	correct.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Lumps(730.18	Appear	to	be	correct.
9h	Scrutiny of Annual return on fixed assets	Fixed assets: Rs. 680846/-	Appear	to	be	correct.
9k	Scrutiny of Annual return on mining machineries	Air Compressor - 01 Backhoe - 04 Dumper - 08 Wheel loader - 02 Crusher - 01 Water tanker - 02 Rock drill (Non Elec.) - 01	Appear	to	be	correct.

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Details of violations observed during current inspection and compliance position of violation pointed out					
Violation	n observed	Show couse position			
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on		
MCDR17 Rule 11(1)	21/11/2023				

Date: (GANGADHAR BHAKAT)

Indian Bureau of Mines