

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

Mining Plan Modification REPORT

Bangalore regional office

Mine file No : KNT/BLR/FE/403/BNG

Mine code : 30KAR03113

- (i) Name of the Inspecting : **A101**) **ARUN KUMAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine :
Official with
Designation
- (iv) Date of Inspection : 09/09/2017
- (v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **DONIMALAI(53.20 H)**
- (b) **Registration NO.** : **IBM/250/2011**
- (c) **Category** : **A Fully Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **KARNATAKA**
- District : **BELLARY**
- Village : **TARANAGAR**
- Taluka : **SANDUR**
- Post office : **TARANAGAR**
- Pin Code :
- FAX No. : **080-41105775branchoffice@na**
- E-mail : **admin@nadeemminerals.com**
- Phone : **080-41105475 (O)7406944424**
- (f) **Police Station** : **SANDUR**
- (g) **First opening date** : **19/07/2006**
- (h) **Weekly day of rest** : **SUN**
2. **Address for correspondance** : **NADEEM MINERALS, ALFA MANOR, No. 227,**
1st FLOOR, GREENGLEN LAYOUT, Off: OUTER RING Road
BELLANDUR, VARTUR HOBLI, Bangalore-560103
3. (a) **Lease Number** : **KAR0996**
- (b) **Lease area** : **53.2**
- (c) **Period of lease** : **20**
- (d) **Date of Expiry** : **18/07/2026**
4. **Mineral worked** : **IRON ORE** **Main**

5. Name and Address of the

Lessee : NADEEM MINERALS.,
 BELLARY KARNATAKA
 Phone:
 FAX :

Owner : FAISAL SHAREEF,
 BANGLORE URBAN KARNATAKA
 Phone: 9980944424, 08
 FAX :

Manager
 Name : BHARATHI DASAN
 Qualification : DIPLOMA IN MINING , MINES MANAGER FCC
 Appointment/ : 06/12/2012
 Termination date

6. Date of approval of Mining	:	Modif.of approved Mining Plan	18/10/2005
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	24/04/2007
	:	MS modif under MCR 1960	21/04/2014
	:	Mining Scheme rule 12 MCDR1988	23/02/2016

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Proposal	Nil	51 RC holes drilled, total meterage of 2355 m in 2012-14.
1b	Exploration over lease area for geological axis 1 or 2	20 bore holes proposed amounting to 1692m	10 bore holes drilled amounting to 576 m	No activities to be carried out in unbroken forest area as per SC order
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal	Nil	APC drilling & construction pvt ltd
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	Nil	Exploration Proposal given in 2018-19 to 2020-21
1e	Balance reserve as on 01/04/20		2.36 Million Tons as on 01.04.2017	
1f	General remarks of inspecting officers on geology, exploration etc			51 RC holes drilled, total meterage of 2355 m in 2012-14 previously. As on 01.04.2017, 2.36 Million Tons of reserves available.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed between Section 4-4I to 6-6I and 10-10I to 11-11I	Working carried out within the proposed area	N-1668167 to 1668338 ,E-672222 to 672407 and N-1668574 to 1668850,E-671951 to 672112
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in ore & OB	Five bench in OB & 02 benches in ore	-

2c	Stripping ratio or ore to OB ratio	1:1.07	1:7	Higher stripping ratio due to increasing depth, dilution & presence of multiple irregular intersections of shale and BHJ into the ore bands.
2d	Quantity of topsoil generation in m3	No proposal	Nil	No top soil generated
2e	Quantity of overburden generation in m3	195401 cum.	345677 cum.	Presence of multiple irregular intersections of shale and BHJ into the ore bands.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Working carried out within the proposed area but with higher stripping ratio. Modification applied.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pits ,Pit No.1 & Pit No.2	Exploitation of ore from two pits	-
3b	Quantity of ROM mineral production proposed	4,10,000 MT	93,920 MT	Not achieved due to increasing depth, dilution & presence of multiple irregular intersections of shale and BHJ into the ore bands
3c	Recovery of sailable/usable mineral from ROM production	95%	95%	5% as treated as loss
3d	Quantity of mineral reject generation	No proposal	Nil	-
3e	Grade of mineral rejects generation and threshold value declared.	The IBM threshold value for Iron Ore is 45% Fe.	Nil	High grade ore is blended with low grade grade ores
3f	Quantity of sub grade mineral generation.	No proposal	nil	-

3g	Grade of sub grade mineral generation	No proposal	Nil	-
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized Method proposed	Mechanized Mine is adopted for segregating from ROM.	-
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	No such beneficiation study carried out	-
3j	Provision of drilling and blasting in mineral benches	Proposed	Drilling & blasting is carried out as per requirement	Used only in hard rocks. In soft rocks backhoes are directly used
3k	Provision of mining machineries in mineral benches	Proposed	Mining machineries are used as per the approved document	-
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	8 mts bench height in OB & Ore .	Suitable as per the equipments used
3m	Total area covered under excavation/pits	13.82 Ha	13.82 Ha	-
3n	Ore to OB ratio for the pit/mine during the year.	1:1.07	1:7	Modification of RMP applied with fresh proposal
3o	Total area put in use under different heads at the end of year	40.05 ha	Already exploited & abandoned-3.92 Ha, Pit area-13.82 Ha ,Reclaimed & rehabilitated-11.33 Ha,Infrastructure including road area-1.97 Ha,Waste disposal-5.79 Ha,Others-7.37 Ha	-
3p	Production of ROM mineral during the last five year period as applicable	2012-13 - 4,10,000 MT 2013-14 - 4,10,000 MT 2014-15 - 4,10,000 MT 2015-16 - 4,10,000MT 2016-17 - 4,10,000MT	2012-13 - 68,000 MT 2013-14 -3,42,000 MT 2014-15 -4,10,000 MT 2015-16 -2,92,015 MT 2016-17 -93,920 MT	-

3q	General remarks of inspecting officers on method of mining etc.	The mine working was into pits with 95 % recovery. D& B adopted in hard strata. Not able to maintain stripping ratio due to intercalated waste /BHJ
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Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB proposed	Separate Dumping for OB in Ear-marked location as per Mining Scheme	No generation of mineral reject or top soil
4b	Location of topsoil, OB and mineral reject dumps	OB location proposed- Section Nos. 1A-1& 2	OB location within the proposed section line	-
4c	Number of dumps within lease area and outside of lease area	WML-5 nos. , OML- Nil	WML-5 nos. , OML- Nil	No dumps outside the lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL	100 mts away from UPL	-
4e	Number of active and alive dumps.	2	2	-
4f	Number of dead dumps.	3	3	-
4g	Number of dumps established.	3	3	Stabilized by plantation & coir matting
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Retaining wall and garland Drain all along the dumps	-
4i	Length of Retaining wall or garland drain all along dumps	RW-250 mts,DG- 150 mts	RW-250 mts,GD-150 mts	Constructed Retaining wall and garland Drain as per approved R & R
4j	Number of settling ponds	Nil	Nil	-

4k	Specific comments of inspecting officer on waste dump management	Waste dump management was satisfactory. Three inactive dumps stabilized & location of the dumps outside the UPL
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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.	Part backfilling proposed	Part backfilling done	Backfilling at Section1A-1AI and 2-2I
5b	Area under backfilling of mined out area	1 Ha	1 Ha	Total backfilled area 3.92 Ha
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal	Nil	-
5d	Total area fully reclaimed and rehabilitated	3.92 Ha	3.92 Ha	5 terraces in backfilling area and afforestation done all along the terraces.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Part backfilling done in between Section1A-1AI and 2-2I covering 3.92 Ha with 5 terraces.

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).	To be submitted before 1st July every year	Annual report on PMCP submitted on 14.06.2017.	-

6b	Area available for rehabilitation (ha) .	2.15 Ha	2.15 Ha	-
6c	afforestation done (ha).	0.6 Ha	0.6 Ha	-
6d	No. of saplings planted during the year	2000 Nos	6000 Nos.	-
6e	Cumulative no .of plants	72000 Nos.	96500 Nos	-
6f	Any other method of rehabilitation	No proposal	Nil	-
6g	Cost incurred on watch and care during the year	Not specified	Rs. 6,00,000/-	-
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	1 Ha	1 Ha	-
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Part backfilled proposed	Part backfilling done	-
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	Proposed	6000 No of sapling on backfilled area done	-
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 rehabilitation (ha)	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 and buffer zone)	Season wise environmental monitoring of ambient air quality, water quality, dust fall rate, soil sample analysis& noise level	Season wise environmental monitoring of ambient air quality, water quality, dust fall rate, soil sample analysis& noise level are being carried out regularly.	All parameters are within limits
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			The lessee had carried out PMCP activities as per the proposal.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed within the lease area	Grade wise sorting done within the lease area	-
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized	Mechanized mineral sorting adopted	Dry crushing & screening plant
7c	Different grade of mineral sorted out at mines.	Proposed	Lumps, fines & Calibrated ores of 10-20mm, 20-40mm & 40mm a7 above	Depending on the requirement

7d	Any beneficiation process at mines	No proposal	No such beneficiation study carried out	-
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			Grade wise sorting done within the lease area with mechanized means adopting dry crushing & screening unit

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Nil	No generation of top soil
8b	Concurrent use or storage of topsoil	No proposal	Nil	-
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposed	OB & fines are stacked separately	-
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Yes ,proposed	Part backfilling of the mined out area is backfilled with the OB removed	-
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Porposed	Part backfilling of the mined out area is backfilled with the OB removed	5 terraces in backfilling area and afforestation done all along the terraces.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	72,000 Saplings	96,500 Saplings	-
8g	Survival rate	70%	70% Survival	-

8h	Water sprinkling on roads to control airborne dust	Proposed	Regular water sprinklings inside the lease area as well as on approach road to suppress air borne dust on roads and dumps.	Further Sprinklers are installed on Coir Matting and on plantation area
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in & around the mine is good as lessee has carried out afforestation & environmental protective measures have been taken as per the approved document

Compliance of Rule 45:

Sl.No.	Item	Proposals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		Monthly Returns: Submitted up to August-2017 Annual Returns: submitted upto 2016-17	-
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Geologist- Y L Patil, Manager Mining-Bharthi Dasan	Same as given in AR	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited & abandoned-3.92 Ha, Pit area-13.82 Ha, Reclaimed & rehabilitated-11.33 Ha, Infrastructure including road area-1.97 Ha, Waste disposal-5.79 Ha, Others-7.37 Ha	Appears to be correct	-
9d	Scrutiny of Annual return on afforestation	WML-6000 nos@70% survival	Appears to be correct	-

9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	708570 Tons	This has been wrongly given. Advised to rectify. This is the quantity of OB removed
9f	Scrutiny of Annual return on ROM stock and/or graded ore	OS-140080 Tons, Production-93920 Tons, CS-2000 Tons	Appears to be correct
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Sale value=Rs.1568/ton, Ex-mine price=Rs. 1466/ton (avg), cost of production=Rs. 1045/ton	Appears to be correct
9h	Scrutiny of Annual return on fixed assets	Rs. 1706944/- , plant & machineries	Appears to be correct
9k	Scrutiny of Annual return on mining machineries	Back hoe- 06nos, Wheel loaders-7 no, 12 T dumpers-12 nos, dozer-1 no, water tankers-5 (8KL)nos , Rock drill-01 No	Same as mentioned in the AR

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
MCDR17	Rule 11(1)	03/10/2017	23/01/2018				
MCDR17	Rule 46(a)	03/10/2017	23/01/2018				
MCDR17	Rule 27(2)	03/10/2017	23/01/2018				

Date :

(ARUN KUMAR)

Indian Bureau of Mines