# MCDR-MiFLOFE/3/2023-JBP-IBM\_RO\_JBP INDIAN BUREAU OF MINES

#### MINERALS DEVELOPMENT AND REGULATION DIVISION

#### Mining Plan Modification REPORT

#### Jabalpur regional office

Mine file No : MP/JBP/IORE-4 Mine code : 30MPR18003

(i) Name of the Inspecting : GQ05 ) IBRAHIM SHARIEF

Officer and ID No.

1/34033/2024

(ii) Designation : Deputy Controller of Mines

(iii) Accompaning mine :

Official with

Designation Shri V k Pandey, mines Manager

(iv) Date of Inspection : 22-MAY-2022

(v) Prev.inspection date :

PART-I : GENERAL INFORMATION

1. (a) Mine Name : DUBIYARA

(b) Registration NO. :

(c) Category : A Fully Mechanised

(d) Type of Working : Opencast

(e) Postal address

State : MADHYA PRADESH

District : JABALPUR Village : DUBIYARA

Taluka : SIHORA (MEGHAGWA)

Post office : TIKARIYA
Pin Code : 483334
FAX No. : NONE
E-mail : NONE

Phone : 07624-271239 (Mine),07622-

(f) Police Station

(g) First opening date : 21-AUG-87

(h) Weekly day of rest : THU

2. Address for : Dubiyara Iron ore Mine of M/S Nirmala Minerals

correspondance village Dubiyara, Taluk Sihora

Dist. Jabalpur, M.P. State.

3. (a) Lease Number : MPR0562 (b) Lease area : 32.37 (c) Period of lease : 50

(d) Date of Expiry : 05-MAR-37

4. Mineral worked : IRON ORE Main

#### 1/34033/2024

5. Name and Address of the

Lessee : NIRMALA MINERALS

PATHAK WARD KATNI MADHYA

PRADESH

Owner : SHRI YASH PATHAK, S/O SRI SANJAY PATHAK

PATHAK WARD KATNI MADHYA

PRADESH

6. Date of approval of Mining : Existing rule 11 MCDR1988

Plan/Scheme of Mining

Existing rule 11 MCDR1988	15-DEC-99
Mining Scheme rule 12 MCDR1988	24-NOV-05
Renewal under rule 24 MCR1960	26-JUL-07
Mining Scheme rule 12 MCDR1988	13-FEB-13
MP modif under 17(3) MCR 2016	11-APR-17
MP modif under 17(3) MCR 2016	20-OCT-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

# Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	10 BHs proposed during the year 2021-22.	10 bore holed drilled during the year	
1b	Exploration over lease area for geological axis 1 or 2	Part of the lease area was proposed to be explore in G1 scale	entire lease area has been explored in G1 & G2 scale	exploration is proposed in the MP submitted for approval
1c	Exploration Agencies and Expenditure in lakh rupees during the year	lessee	lessee	
1d	Balance area to be explored to bring Geological axis in 1 or 2	19.5 Ha - G1 scale.12.874 Ha in G2 scale	G1 level: 19.874 Ha12.874 Ha in G2 scale	exploration is proposed in the MP submitted for approval.
1e	Balance reserve as on 01/04/20	Reserves in Million Tonnes Proved (111) - 11.75 Probable (122) - 3.3 Resources in Million tonnes Feasibilit y(211): 0.57 Pre- Feasibilit y(222):1.8	Reserves in Million Tonnes Proved (111) - 11.75 Probable (122) -3.3 Resources in Million tonnes Feasibility(211):0.57 Pre- Feasibility(2 22):1.8	

#### 1/34033/2024

Of inspecting officers on geology, exploration etc.

NA

NA

Lease area is explored in G1 level: 19.874 Ha and in G2 scale12.874 Ha

## Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	It was proposed to work towards south of Quarry 1 from 422 MRL to 416 MRL And in Quarry 2 towards North & West with bench mRLs 422to 410mRL	Mine development has been carriedout as per the proposed locations during the year 2021-22	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No top soil or OB benches proposed. Separate benches of 10 mts were proposed in mineral.	Benches formation has done as per the proposals	No top soil encountered during the year. OB in pocket form & proposed to be scrapped before ROM excavation.
2c	Stripping ratio or ore to OB ratio	Proposed as 1:0.11 Tonne/CuM	Acheived as 1:0.17Tonne/CuM	
2d	Quantity of topsoil generation in m3	Not Proposed	Nil	No top soil encountered during the year
2e	Quantity of overburden generation in m3	Total 7900 CuM intereburden proposed	Total 32175 CuM interburden generated during 2019-20	<pre>Interburden is yellow ochre/ phyllites</pre>

#### 1/34033/2024

2f General remarks NA NA There are two of inspecting quarries of officers on following development of dimensions pit w.r.t. type Quarry-1 :  $712m \times$ of deposit etc 217m x 41m Quarry-2 :  $213m \times$ 97m x 4m

## Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Two pits	Two pits	
3b	Quantity of ROM mineral production proposed	6,00,009 MT proposed in 2021-22	5,27,982 MT production acheived in 2021-22	
3с	Recovery of sailable/usable mineral from ROM production	Total 90% recovery of Iron ore proposed	Recovery of iron ore acheived is 100%	
3d	Quantity of mineral reject generation	Not Proposed	Nil	No mineral rejects generation proposed
3e	Grade of mineral rejects generation and threshold value declared.	Not Proposed	Nil	No subgrade generation proposed during the year
3f	Quantity of sub grade mineral generation.	Not Proposed	Nil	
3g	Grade of sub grade mineral generation	Not Proposed	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanical sizing & sorting proposed by portable screening	Mechanical sizing & sorting carried out	

## 1/34033/2024

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not Proposed	Nil	Portable screening for sizing proposed during the year
3 <u>j</u>	Provision of drilling and blasting in mineral benches	No drilling & blasting proposed	Nil	Iron ore is friable &soft in nature as blue dust and no blasting required
3 k	Provision of mining machineries in mineral benches	L&T PC Excavator- 1.2CuM, 210HP, TATA Dumper, 10 T capacity- 05 Nos Jack Hammer with Drill rods -32mm Water Tanker- 5KL Water pump with Diesel engine	L&T PC Excavator-1.2CuM, 210HP, TATA Dumper, 10 T capacity-05 Nos Jack Hammer with Drill rods -32mm Water Tanker-5KL Water pump with Diesel engine	HEMM deployment proposed as per the capacity & targeted production.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	No OB bench height is proposed Bench height of 6m proposed in iron ore	Bench height maintained as proposed	Proposed bench height is suitable as per the deposit
3m	Total area covered under excavation/pits	15.32 Ha area was proposed in approved MMP period i.e. 2017-18 to 2021-22	15.32 На	
3n	Ore to OB ratio for the pit/mine during the year.	Proposed as 1:0.11 Tonne/CuM	Acheived as 1: 0.32 Tonne/Cum	
30	Total area put in use under different heads at the end of year	Pits-15.32 Ha Waste Dumps- 0.75Ha Mineral Storage: 2.5 Infrastructure -0.66 Ha Road-0.20Ha Total 20.18 Ha	Opencast working-15.32 Ha Mineral Storage: 2.7 ha Waste Dumps-0.89 Ha Infrastructure-0.66 HaOthers- green belt- 1.0, Total 20.18 Ha	

## 1/34033/2024

3р	Production of ROM mineral during the last	2017-18: 421910 MT 2018-19:	2017-18-: 179971 I 2018-19-: 148420 I 2019-20-: 185293 I	MT	Production details as per online submitted annual
	five year period as applicable	399962 MT 2019-20: 413300 MT	2020-21-: 5000 MT 2021-22-: 527982 M	ΙΤ	returns
		2020-21: 455007 MT			
		2021-22: 600009 MT			Mechanised open cast working proposed by using
3q	General remarks of inspecting officers on method of mining etc.	NA	NA		Excavator /JCB & dumper combination without drilling & blasting due to friable nature of ore i.e. blue dust.

## Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	During the year no dumping proposed	Nil	OB generated being utilized for backfilling purpose towards NW mined out area
4b	Location of topsoil, OB and mineral reject dumps	Dumping not proposed	Exisitng OB dump laying towards Eastern part of lease area	Location duly marked on surface plan- Plate No-IV
4c	Number of dumps within lease area and outside of lease area	OB dumps	Two numbers of OB dumps located towards NE part of lease area	No dumping outside mining lease area
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	OB dumps outside ultimate pit limit	OB dumps observed outside the ultimate pit limit	Dumping towards NE & close to the ML boundary
4e	Number of active and alive dumps.	Two active dumps	Two active dumps in the lease area	
4f	Number of dead dumps.	No dumps in lease area	No dumps in lease area	
4g	Number of dumps established.	Not Proposed	Presently scope does not exists	OB being used for backfilling purpose

## 1/34033/2024

4h	Whether Retaining wall or garland drain all along dumps are there.	Not Proposed	NA	
4i	Length of Retaining wall or garland drain all along dumps	Not Proposed	NA	
4j	Number of settling ponds	Not Proposed	NA	
4k	Specific comments of inspecting officer on waste dump management	NA	NA	Mostly overburden generated being utilized for backfilling purpose in mined out area. Existing dumps are outside ultimate pit limit being maintained.

# 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.	Backfilling was proposed on 7.5m barrier zone towards NW part oflease area	Backfilling was carried out in 7.5m barrier zone towards NW part oflease area.	
5b	Area under backfilling of mined out area	About 2.05 Ha backfilledso for	About 2.05 Ha backfilled so for	
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Not Proposed	Nil	
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	

# MCDR-MiFLOFE/3/2023-JBP-IBM\_RO\_JBP

PAGE: 9

#### 1/34033/2024

None of the pit 5e General remarks NA NA area matured for of inspecting backfilling but officers on backfilling and some area towards reclamation etc. NW part within 7.5m barrier zone Has been Backfilling as per approved proposals.

#### 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 of every year	submitted within time limit	
6b	Area available for rehabilitation (ha).	About 2.05 Ha proposed	About 2.05 Ha backfilled so for	
6c	afforestation done (ha).	0.5	0.5	
6d	No. of saplings planted during the year	About 200 saplings proposed to be planted	485 saplings planted during the year	
6e	Cumulative no .of plants	NA	3000	
6f	Any other method of rehabilitation	Not Proposed	Nil	
6g	Cost incurred on watch and care during the year	NA	About 1 Lakh Rs.	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x B x D	2.1 Ha proposed for backfilling	About 2.4 Ha backfilled	

## 1/34033/2024

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	NA	NA	
6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestati -on on backfilled area	Not Proposed	Nil	
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not Proposed	Nil	
61	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	Not Proposed	Nil	
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	Not Proposed	Nil	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Not Proposed	Nil	
60	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	Not Proposed	Nil	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Periodical Air, Water, Noise monitoring Proposed	Carried out as per the proposals	Analysis reports were provided

# MCDR-MiFLOFE/3/2023-JBP-IBM\_RO\_JBP

PAGE : 11

#### 1/34033/2024

6q General remarks NA NA Presently none of of inspecting working pit area is mineral officers on PMCP compliance and exhausted hence progressive scope of closure reclamation by backfilling operations etc. Does not exists. However, backfilling done on 7.5m barrier zone area at some places.

## Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM produced to be dispatched.	527632 MT iron ore lumps & fines dispatched during the year	
7b	Method of grade- wise mineral sorting i.e. manual or mechanical.	Screening & sizing proposed	Screening & sizing carried out by feeding 100mm & output size is 0-5mm, 5mm to 20mm, 40mm to 100mm	
7c	Different grade of mineral sorted out at mines.	Different sizes of ore by screening & sizing	Different sizes of ore by screening & sizing	
7d	Any beneficiation process at mines	Not Proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	NA	NA	Mineral conservation is being done by systematic screening and sizing of ore for upgradation of ore quality by removing gangue material.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks

## 1/34033/2024

8a	Separate removal and utilization of topsoil (Rule 32)	Not Proposed	Nil	During the year no proposals
8b	Concurrent use or storage of topsoil	Not Proposed	No top soil generated during the year	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Not Proposed	Concurrent use of overburden/waste material for backfilling proposed	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Concurrent use of overburden/waste material for backfilling purpose	Carried out as per the proposals	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such Proposal	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	About 200 saplings proposed for plantation	About 465 saplings planted during the year	
8g	Survival rate	No	Acheived as 80%	
8h	Water sprinkling on roads to control airborne dust	Proposals Water sprinkling is proposed by	Regular water sprinkling is done by water tanker	Water tanker of 5KL capacity is provided for the purpose
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	water tanker NA	NA	Aesthetic beauty in and around mine area is quite satisfactory as plantation done in mine as well as near mines office.

# Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks	
--------	------	-----------	-------------	---------	--

## 1/34033/2024

9a

Status of

M.R.

Ja	submission of Monthly and Annual returns	submitted upto- April- 2022 A.R. not submitted for the year - 2021-22		
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Given	Shri Vijay Singh appointed as Mining Eng and shri Shailendra Kumar Patel is appointed as geologist was appointed	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Given	Opencast working- 14.408 Ha Waste Dumps-1.05 Ha Infrastructure-3.10 Ha Others- Stacks, green belt-10.008Ha	
9d	Scrutiny of Annual return on afforestation	Given	Total 465 saplings were plated during the year	Plantation works observed during the mine
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	No mineral rejects generated during the year	inspection
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Given	Lumps Iron Ore Below 55% Fe: 4899.3 MT Fines Iron Ore Below 55% Fe: 171473 MT	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Given	Lumps Iron Ore Below 55% Fe: Ex mine price Rs 620/MT, Sale price: Rs. 596  Fines Iron Ore Below 55% Fe: Ex mine price Rs 354/MT, Sale price: Rs. 542.7	
9h	Scrutiny of Annual return on fixed assets	Given	Value of Fixed Assets (in .) 99044925	
9k	Scrutiny of Annual return on mining machineries	Given	Back Hoe-1.1cum-3 No., Wheel Loader- 1.7 cum -1 No. Dozer- 410 HP- 1 no., Dumper- 20T-4 No.	

1/34033/2024

Viola	tion observed			Show cause position			
Rule NO.	Issued on	Compliance	on	Rule NO.	Issued	on Compliance	01
Jil	Nil						

	(IBRAHIM	SHARIEF)
Date		

Indian Bureau of Mines