

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

**MCDR inspection REPORT
Jabalpur regional office**

Mine file No : MP/KATNI/LST-168

Mine code : 38MPR47055

- (i) Name of the Inspecting : **G006**) **ABHISHEK RANJAN GAUTAM**
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : Shri K K Chandra, Manager, Amitesh Kumar Tiwari, Mini
Official with
Designation
- (iv) Date of Inspection : 04-JAN-22
- (v) Prev.inspection date : 02-MAR-17

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **RAJARWARA (5.894)**
- (b) **Registration NO.** : **IBM/12983/2012**
- (c) Category : A Other Mechanised
- (d) Type of Working : Opencast
- (e) Postal address :
State : MADHYA PRADESH
District : KATNI
Village :
Taluka :
Post office :
Pin Code :
FAX No. : 07626271288
E-mail : nmdubashmaihar@gmail.com
Phone : 07626271288
- (f) Police Station : Vijayraghaogarh
- (g) First opening date : 31-DEC-90
- (h) Weekly day of rest : SUN
2. Address for : SMT RATNA MISHRA
correspondance : NAI BASTI, KATNI (M.P.) 483501
3. (a) Lease Number : MPR0034
- (b) Lease area : 5.89
- (c) Period of lease : 20
- (d) Date of Expiry : 31-MAR-06
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : RATNA MISHRA
 SAVARKAR WARD SAVARKAR WARD
 KATNI MADHYA PRADESH
 Phone:N. A.
 FAX :N. A.

Owner : RATNA MISHRA
 NAI BASTI, KATNI MADHYA
 PRADESH
 Phone: N. A.
 FAX : N. A.

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	24-JUN-02
Plan/Scheme of Mining		Renewal under rule 24 MCR1960	05-OCT-07
		MP modif under MCR 1960	04-NOV-15
		Mining Scheme rule 12 MCDR1988	18-MAR-16
		MP review under 17(1) MCR 2016	26-JUL-21

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	6 nos of Bore hole proposed in 2021-22. 6 nos of core bore hole @50 mtr each has been drilled as per plan dated 26/07/2021 form I has been submitted. Record of boreholes in form J were not maintained. Violation pointed out for the same.
1b	Exploration over lease area for geological axis 1 or 2	proposed to explore the lease area upto G1	lease area explored upto G2	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not Proposed	Not applicable	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not proposed	Balance area to be explored to bring Geological axis in G-1 is approx 2.39 Ha	
1e	Balance reserve as on 01/04/20		Balance reserve as on 01.04.2021 is : 1088971 Tonnes	

1f	General remarks of inspecting officers on geology, exploration etc	The lease area belongs to Vindhyan Super Group in Rohtas Limestone of Semri Group. Rocks in this formation comprise of Shale, Limestone and Dolomite. The ML area lies along the foot hill of Kymore hill range. 6 nos of Bore hole proposed in 2021-22. 6 nos of core bore hole @50 mtr each has been drilled as per plan dated 26/07/2021 form I has been submitted. Record of boreholes in form J were not maintained. Violation pointed out for the same.
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Development :

Sl.No.	Item	Propasals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Mine development proposed in the Pit no 03	As per proposal	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	B1- Soil and B2 to B5 for Limestone	B1 in Soil, B2 to B3 in OB and B4 to B7 in Limestone	Bench height not maintained as per proposal. Violation pointed out for same.
2c	Stripping ratio or ore to OB ratio	1: 0.17	1: 0.11	
2d	Quantity of topsoil generation in m3	4491 m3	4440 m3	

2e	Quantity of overburden generation in m3	17527 m3	17527 m3	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Proposed to develop the Quarry towards South & West of Quarry with height of bench 3 mtr and 7.5 mtr width. Top soil used for plantation.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One Pit	One Pit	
3b	Quantity of ROM mineral production proposed	102239 Tonnes	101148 Tonnes	
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	Not applicable	Not applicable	
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable	Not applicable	
3f	Quantity of sub grade mineral generation.	Not applicable	Not applicable	
3g	Grade of sub grade mineral generation	Not applicable	Not applicable	
3h	Manual / Mechanised method adopted for segregating from ROM	Not applicable	Not applicable	

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	Not proposed	Not applicable	
3j	Provision of drilling and blasting in mineral benches	No proposal	Not applicable	
3k	Provision of mining machineries in mineral benches	Yes	Yes, 01 Shovel & 4 Dumper	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Height of the benches found more than proposed in the approved document.	Violation pointed out for the same.
3m	Total area covered under excavation/pits	3.8977 Ha	3.8977 Ha	
3n	Ore to OB ratio for the pit/mine during the year.	1:0.17	1:0.17	
3o	Total area put in use under different heads at the end of year	5.51 Ha	5.0332 Ha	
3p	Production of ROM mineral during the last five year period as applicable	2016-17 - 113212 2017-18 - 109515 2018-19 - 103625 2019-20 - 103953 2020-21 - 102239	2016-17 - 4222 2017-18 - 4942 2018-19 - NIL 2019-20 - 58953 2020-21 - 101148	

3q	General remarks of inspecting officers on method of mining etc.	Height of the benches found more than proposed height in approved document. Violaiton pointed out for the same.
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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)	Yes	Three OB dumps observed in the Southern part of the lease area.	
4b	Location of topsoil, OB and mineral reject dumps	Dump proposed in the Northern part of the mine.	Dump no. 01 (Inactive) N 2654118 - N 2654141, E 450120 - E450175 Dump no. 02 (Inactive) N 2653886 - N 2653919, E 450175 - E450218 Dump no. 03 (Active) N 2653798 - N 2653888, E 450008 - E450198	
4c	Number of dumps within lease area and outside of lease area	03 dumps within lease area	03 dumps within lease area	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps were proposed with in ultimate pit limit.	Temporary Dumps found within ultimate pit limit.	
4e	Number of active and alive dumps.	01 dump	01 dump	
4f	Number of dead dumps.	02 dump	02 dump	
4g	Number of dumps established.	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps are there.	Not proposed	NIL	

4i	Length of Retaining wall or garland drain all along dumps	NIL	NIL	
4j	Number of settling ponds	NIL	NIL	
4k	Specific comments of inspecting officer on waste dump management			The dumps were proposed to be used for reclamation & rehabilitation of mined out pit after mining.

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.	Full extraction	Extaction of mineral not completed in the lease area.	
5b	Area under backfilling of mined out area	Proposed 7.5 mtr barrier zone near pillar no 15 & 16 during the year 2021-22	Not done	Backfilling proposed in the approved document is not started. Violation pointed out for the same.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil stacked for rerotation of mined out area.	Top soil stacked for rerotation of mined out area.	
5d	Total area fully reclaimed and rehabilitated	Proposed	7.5 mtr barrier zone near pillar 15& 16	Violation pointed out for the same.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling proposed in the approved document is not started. Violation pointed out for the same.

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).	Annual report on PMCP to be submitted on time under rule 26(2)	Not submitted.	Violation pointed out for the same.
6b	Area available for rehabilitation (ha) .	Mined out area	0.0204 ha	
6c	afforestation done (ha).	0.0204 ha	0.0204 ha	
6d	No. of saplings planted during the year	41 within lease area	Within lease area -41 trees Outside lease area - 140 trees	
6e	Cumulative no .of plants	538 treeees	540 trees	
6f	Any other method of rehabilitation	Not proposed	Not applicable	
6g	Cost incurred on watch and care during the year	20000/-	20000/-	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	Nil	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	Nil	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestati on on backfilled area	Nil	Nil	

6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	Not proposed	Nil	
6l	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	0.1 ha	0.1 ha	
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	Nil	Nil	
6o	Compliance of rehabilitation of waste land within lease (iii) Method of rehabilitation	plantation	plantation	
6p	Compliance of environmental monitoring (core zone and buffer zone)	Proposed	Found in order	
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			Yearly report of PMCP not submitted under rule 26(2). Violation pointed out for the same.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM mineral dispatch to steel and cement industries.	ROM mineral dispatch to steel and cement industries.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical
7c	Different grade of mineral sorted out at mines.	BF grade	BF grade
7d	Any beneficiation process at mines .	Not proposed	Not applicable
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		The limestone dispatched to cement and steel industries directly.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Yes, Used for plantation	
8b	Concurrent use or storage of topsoil	Top soil stacked in mine for spreading on the mined out area	Top soil stacked in mine for spreading on the mined out area	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Dumps for OB found during inspection.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Proposed 7.5 mtr barrier zone near pillar no 15 & 16 during the year 2021-22	Not done	Backfilling proposed in the approved document is not started. Violation pointed out for the same.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Yes	Nil	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation proposed	Plantation done in the green belt and other waste land area.	
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Regular spraying of water on road	Done as per proposal	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Plantation was done in the green belt. the mine needs systematic development of the benches.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns		MR submitted upto Nov 2021 AR submitted upto 2020-21	

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Shri Amitesh Kumar Tiwari - Mining Engineer Shri Ram Raj Kushwaha - Geologist	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Covered under current working - 4.354 ha Reclaimed/Rehabilitated area - 0.191 ha Used for waste disposal - 1.890 ha	As per AR
9d	Scrutiny of Annual return on afforestation	Within lease area -41 trees Outside lease area - 140 trees	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM - 101148 Tonnes (As per AR) Closing stock - 3823 Tonnes	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price Rs- 175/- Sale Value - 175/- Cost of Production - 173/- (records shown as per AR)	
9h	Scrutiny of Annual return on fixed assets	Rs 364500/-	
9k	Scrutiny of Annual return on mining machineries	01 Shovel & 4 Dumper	

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)	14-JAN-22			
MCDR17	Rule 26(2)	14-JAN-22			
MCDR17	Rule 31(1)	14-JAN-22			
MCDR17	Rule 45(7) (a)	14-JAN-22			
MCDR17	Rule 48	14-JAN-22			

Date :

(ABHISHEK RANJAN GAUTAM)

Indian Bureau of Mines