

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

Review and updation of Mining Plan REPORT

Jabalpur regional office

Mine file No : MP/KATNI/LST-168

Mine code : 38MPR47055

- (i) Name of the Inspecting : **K006**) **NARESH KUMAR KATARIYA**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Mr. V.K. Patel (Mining Engineer), Mr. Mishra, Rep of
Official with
Designation
- (iv) Date of Inspection : 25-FEB-21
- (v) Prev.inspection date :

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. : N. A.
E-mail : nmdubashmaiher@gmail.com
Phone : 9424654216
- (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

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	3 DTH BORE HOLES & 1 CORE BORE HOLE (in the year 2016-17)	NIL	Violation pointed out for the same.
1b	Exploration over lease area for geological axis 1 or 2	Not proposed in the RY 2019-20	NIL	3 DTH BORE HOLES & 1 CORE BORE HOLE were proposed in the year 2016-17 which were not sunk by lease holder. Violation pointed out for the same.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	NOT PROPOSED	NA	
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 01.04.2020 is : 9038135 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.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Mine development proposed in the Pit no 03	Pit no 01, Pit no. 02 & Pit no. 03. The mine development is not as per approved document.	The location of the development is deviated from the approved document. Violation pointed out for the same.
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	The lateral development is on lower side and the vertical development is more than the proposed in the document. The development is not as per approved document. Violation pointed out for the same.
2c	Stripping ratio or ore to OB ratio	1: 0.17	1: 0.38	
2d	Quantity of topsoil generation in m3	Nil	3000 CuM	
2e	Quantity of overburden generation in m3	17159 CuM	6000 CuM	The quantity of OB generation is lower than proposed in the approved document. Violation pointed out for the same.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			The pit is not developed as per proposed in the approved document. Violation pointed out for the same.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One Pit	Three pits	Violation pointed out for the same.
3b	Quantity of ROM mineral production proposed	103953 Tonnes	58953 Tonnes	

3c	Recovery of sailable/usable mineral from ROM production	NA	NA	
3d	Quantity of mineral reject generation	NA	NA	
3e	Grade of mineral rejects generation and threshold value declared.	NA	NA	
3f	Quantity of sub grade mineral generation.	NA	NA	
3g	Grade of sub grade mineral generation	NA	NA	
3h	Manual / Mechanised method adopted for segregating from ROM	NA	NA	
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NA	NA	
3j	Provision of drilling and blasting in mineral benches	Yes	No drilling & Blasting done as per provided records.	
3k	Provision of mining machineries in mineral benches	Yes	Yes	
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	3.89 Ha	3.50 Ha	Mine development is lagging from the proposal of the approved document.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.17	1:0.38	
3o	Total area put in use under different heads at the end of year	5.51 Ha	4.82 Ha	Mine development is not done at the location proposed in approved document. Violation pointed out for the same.
3p	Production of ROM mineral during the last five year period as applicable	2015-16 - 113212 2016-17 - 113212 2017-18 - 109515 2018-19 - 103625 2019-20 - 103953	2015-16 - NIL 2016-17 - 4222 2017-18 - 4942 2018-19 - NIL 2019-20 - 58953	
3q	General remarks of inspecting officers on method of mining etc.			Height of the benches found more than proposed height in approved document. Violation pointed out for the same.

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	OB dumping was not carried out as per proposal. Violation pointed out for the same.
4c	Number of dumps within lease area and outside of lease area	Three dumps within lease area	Three dumps within lease area	Location of the dumps is not as per proposal. Violation pointed out for the same.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Dumps were proposed with in ultimate pit limit.	Dumps found within ultimate pit limit	
4e	Number of active and alive dumps.	One dump	One dump	
4f	Number of dead dumps.	Two	Two	
4g	Number of dumps established.	NA	NA	
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	NA	NA	
4j	Number of settling ponds	NA	NA	

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. But, dumping was not done as per proposal. Violation pointed out for the same.
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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.	Full extraction	Extaction of mineral not completed in the lease area.	
5b	Area under backfilling of mined out area	2120 sq m area	NIL	Backfilling proposed in the approved document is not completed. 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	2120 sq m	Nil	Violation pointed out for the same.
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Backfilling and reclamaiton was proposed in the 2120 sq m area. But, no backfilling and reclamation done as per proposal. 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) .	2120 sq m	Nil	
6c	afforestation done (ha).	194 sq m area	100 sq m area	
6d	No. of saplings planted during the year	39 saplings	170 saplings	
6e	Cumulative no .of plants	NA	NA	
6f	Any other method of rehabilitation	Not proposed	Not proposed	
6g	Cost incurred on watch and care during the year	0.2 lacs	0.2 lacs	
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L x 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	194 sq m area	100 sq m area	
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)	Yes	Yes	
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.	Manual	Manual
7c	Different grade of mineral sorted out at mines.	Not proposed	NA
7d	Any beneficiation process at mines .	Not proposed	NA
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	
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	2120 sq m area proposed to be backfilled in last review period	Nil	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%	60%	
8h	Water sprinkling on roads to control airborne dust	Yes	Yes	
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	Monthly and Annual returns to be filed on time.	Monthly and Annual retuns for the RY 2019-20 are filled but not within the time period prescribed under rule 45.	Violation pointedout for the same.

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Yes		Appointment of Mining Engineer and Geologist is not as per provisions of rule 55 of MCDR.	Violation pointed out for the same.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Yes		records shown as per AR	
9d	Scrutiny of Annual return on afforestation	170	saplings	as per AR	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NA		NA	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	58953 Tonnes		As per AR	
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Yes		records shown as per AR	
9h	Scrutiny of Annual return on fixed assets	Yes		records shown as per AR	
9k	Scrutiny of Annual return on mining machineries	Pumps		List of machineries for mine development and production have not been shown in the AR.	The lease holder is directed to show the correct list of machineries in future.

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)	27-APR-21			
MCDR17	Rule 26(2)	27-APR-21			
MCDR17	Rule 33	27-APR-21			
MCDR17	Rule 45(1)	27-APR-21			
MCDR17	Rule 55(1) (1	27-APR-21			

Date :

(NARESH KUMAR KATARIYA)

Indian Bureau of Mines