

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

**MCDR INSPECTION REPORT**

**Ajmer regional office**

**Mine file No :** RAJ/BAR-40/SE-20

**Mine code :** 97RAJ04020

- (i) Name of the Inspecting : **DJ03** ) **DILIP JAIN**  
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Shri Narayan Singh, Lessee and Shri Rajesh Nawal, ME  
Official with  
Designation
- (iv) Date of Inspection : 07-JAN-20
- (v) Prev.inspection date : 17-FEB-18

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **MOKHAB(64/2013)**
- (b) **Registration NO.** : **IBM/19005/2014**
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address :  
State : RAJASTHAN  
District : BARMER  
Village : Mokhab  
Taluka : Shiv  
Post office :  
Pin Code :  
FAX No. : 9414771114  
E-mail : narayansinghrathore999@gma:  
Phone : 9414771114
- (f) Police Station : MOKHAB
- (g) First opening date : 20-FEB-17
- (h) Weekly day of rest : SUN
2. Address for : VPO- BUDHA TALA, BHIYAD  
correspondance : TAH- SHIV, DIST BARMER
3. (a) Lease Number :  
(b) Lease area :  
(c) Period of lease :  
(d) Date of Expiry :
4. Mineral worked : SILICEOUS EARTH Main

## 5. Name and Address of the

Lessee : NARAYAN SINGH S/O SHRI JALAM SINGH RATHO  
VPO BUDHA TALA, BHIYAR  
TEHSIL SHIV BARMER  
RAJASTHAN  
Phone:  
FAX :

Owner : NARAYAN SINGH S/O SHRI JALAM SINGH  
VPO-BUDHA TALA, BHIYAR TAH-  
SHIV BARMER RAJASTHAN  
Phone:  
FAX :

## Mining Engineer

Name : Shri Rajesh Nawal, Part Time  
Qualification : BE(Mining)  
Appointment/ : 20-FEB-17  
Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 12-MAR-15

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal of exploration during the previous year i.e. 2017-18.	Not applicable as no proposal.	NIL.
1b	Exploration over lease area for geological axis 1 or 2	No proposal of exploration during the reporting year i.e. 2018-19.	No exploration has been carried out.	NIL.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable as no proposal of exploration.	Not applicable.	NIL.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No specific proposal about the balance area to be explored under G1/G2.	Not applicable as no proposal.	NIL.
1e	Balance reserve as on 01/04/20	As per approved document dated 12/03/2015, the position of reserve and resource was 113080 and 82920 tonnes respectively.	The position of reserve and resource as on 01/04/2019 was 100150 and 82920 tonnes respectively.	Depletion of 12930 tonnes.
1f	General remarks of inspecting officers on geology, exploration etc	No specific proposal for reporting year.	Geologically the area is flat and covers with sandy soil. No much variation the dip of the Siliceous earth.	NIL.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
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2a	Location of development w.r.t.lease area	Development has been proposed between grid line 10N to 198N and 90W to 54E.	Development has been carried out within approved proposal.	NIL.
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches have been proposed in Top soil, Overburden and mineral.	Separate benches have been developed in Top Soil, OB and Mineral.	Top Soil and Overburden has been observed in the form of sandy soil.
2c	Stripping ratio or ore to OB ratio	1:0.78 Cum/ton	1:0.70 Cum/ton	NIL.
2d	Quantity of topsoil generation in m3	4154m3	1500 m3	NIL.
2e	Quantity of overburden generation in m3	8308 m3	2250 m3	Less OB generation is in account of the less production of mineral.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development has been proposed through opencast method of mining.	Opencast method of mining has been practiced.	NIL.

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### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One.	One.	NIL.
3b	Quantity of ROM mineral production proposed	16000 tonnes	5350 tonnes	Less production due to less market demand.
3c	Recovery of sailable/usable mineral from ROM production	14400 tonnes	5350 tonnes	NIL.
3d	Quantity of mineral reject generation	1600 tonnes	NIL.	No reject generation as anticipated.

3e	Grade of mineral rejects generation and threshold value declared.	No proposal about the grade of Mineral Reject.	Not applicable as mineral reject has not been generated.	NIL.
3f	Quantity of sub grade mineral generation.	No proposal.	Not applicable.	NIL.
3g	Grade of sub grade mineral generation	No proposal.	Not applicable.	NIL.
3h	Manual / Mechanised method adopted for segregating from ROM	Manual method of segregation.	Manual method has been adopted.	NIL.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal of beneficiation study.	Not applicable as no proposal.	NIL.
3j	Provision of drilling and blasting in mineral benches	No proposal of drilling and blasting.	Not applicable as no proposal.	NIL.
3k	Provision of mining machineries in mineral benches	Excavator, Tractor-Trolley, water pump fitted on the tractor.	Deployment of the Mining Machinery are as per proposal.	NIL.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height has been proposed to 3 mts in OB and 4 mts in Mineral.	Height of the benches has been maintained as per proposal.	NIL.
3m	Total area covered under excavation/pits	0.4140ha	0.1500ha	Less area under mining due to less production.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.78 cum/ton	1:0.70 Cum/ton	NIL.

3o	Total area put in use under different heads at the end of year	As per approved document dated 12/03/2015, an area of 2.25 Ha has been proposed to put in use at the end of the plan period i.e. 2020-21.	As reported an area of 1.58 ha. area has been put under different heads at the end of the year 2018-19.	NIL.
3p	Production of ROM mineral during the last five year period as applicable	2016-17: 12600 2017-18: 15200 2018-19: 16000	2016-17: 1950 2017-18: 5630 2018-19: 5350	All figures in Tonnes.
3q	General remarks of inspecting officers on method of mining etc.	Opencast method of the mining has been proposed.	Opencast method of mining has been practiced.	Due to near surface deposition of mineral opencast method is suitable.

#### Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Simultaneously backfilling has been proposed for top soil and OB.	Simultaneously backfilling has been observed.	NIL.
4b	Location of topsoil, OB and mineral reject dumps	Simultaneously backfilling has been proposed for top soil and OB. Reject dumping has been proposed near C pillar.	Simultaneously backfilling has been observed for top soil and OB. No mineral reject generation during the reporting year.	NIL.
4c	Number of dumps within lease area and outside of lease area	One reject dump has been proposed within lease area. No proposal of dumping outside of the lease area.	No dumping within lease area as no reject generation during the reporting year. No dumping has been observed outside of the lease area.	NIL.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not applicable as no proposal of dumping of OB during the reporting year.	Not applicable.	NIL.

4e	Number of active and alive dumps.	No proposal for active dumping.	Not applicable as no proposal.	NIL.
4f	Number of dead dumps.	No proposal.	Not applicable as no proposal.	NIL.
4g	Number of dumps established.	No proposal.	Not applicable as no proposal.	NIL.
4h	Whether Retaining wall or garland drain all along dumps are there.	Not applicable as no dumps in the lease area.	Not applicable.	NIL.
4i	Length of Retaining wall or garland drain all along dumps	No proposal of Retaining wall and garland drain during the reporting year.	Not applicable as no proposal.	NIL.
4j	Number of settling ponds	No proposal.	Not applicable as no proposal.	NIL.
4k	Specific comments of inspecting officer on waste dump management	Generated waste has been proposed to backfill in mined out pit area.	Waste has been backfilled in mined out area.	No issues related to waste dumping.

#### 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.	After full extraction of the mineral, backfilling of same has been proposed.	Backfilling has been carried out after full extraction of the mineral.	NIL.
5b	Area under backfilling of mined out area	2017-18: 0.130 Ha 2018-19: 0.130 Ha	During the year an area around 0.25 Ha has been backfilled including the backlog of previous year.	NIL.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	An quantity of 4154m3 of Sandy Soil has been proposed to generate and also proposed to spread over backfilled area.	A quantity of 1500 m3 sandy soil has been generated and spread over backfilled area.	NIL.

5d	Total area fully reclaimed and rehabilitated	Reclamation of 0.130 Ha area has been proposed during the year.	An area around 0.25 Ha has been reclaimed including the backlog of previous year. Total area under back filling is 0.37 Ha, out of which an area of 0.12 Ha has been fully backfilled.	NIL.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Proposal of backfilling has been envisaged after full extraction of mineral.	Generated waste has been backfilled in the mine out area.	No issues related to backfilling.

#### 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).	As per rule 26 of MCDR, 2017 holder of mining lease shall submit PMCP before 1st day of July every year.	PMCP report for the year 2018-19 has not been submitted.	Violation of MCDR issued vide letter dated 20/02/2020
6b	Area available for rehabilitation (ha) .	0.015 Ha area for the year 2018-19.	An area od 0.015 Ha has been rehabiliated by the way of plantation.	NIL.
6c	afforestation done (ha).	0.015 Ha (safety Zone) area for the year 2018-19.	An area of around 0.015 Ha. has been afforested.	NIL.
6d	No. of saplings planted during the year	50 numbers.	Within lease area 150 and outside lease area 100 saplings has been planted.	NIL.
6e	Cumulative no .of plants	150 number of trees (2016-17 to 2019-20).	Cumulatively 450 within lease area and 180 outside of the lease area.	NIL.
6f	Any other method of rehabilitation	Other than plantation, no any other method of rehabilitation	Not applicable as no proposal.	NIL.
6g	Cost incurred on watch and care during the year	2500/-	60000/- as reported.	NIL.

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	Reclamation of mine out area of 0.13 Ha has been proposed in the year 2018-19.	Reclamation of an area around 0.25 Ha has been carried out during the year including the backlog of previous year	Still the area is not fully leveled/backfilled .
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	8308 m3	2250 m3	NIL.
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	No proposal of afforestation on backfilled area.	Not applicable as no proposal of afforestation on backfilled area.	NIL.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal making reservoir.	Not applicable as no proposal of making reservoir.	NIL.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No any other specific proposal.	Not applicable as no proposal.	NIL.
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	50 numbers of saplings are proposed to plant.	Within lease area 150 and outside lease area 100 saplings has been planted.	NIL.
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.0150ha (Safety Zone)	0.0150ha as per proposal.	NIL.
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	Plantation.	Plantation.	NIL.

6p	Compliance of environmental monitoring (core zone and buffer zone)	Regular monitoring of environment parameters.	Monitoring has been carried out for the reporting year.	NIL.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Planation with 50 numbers of saplings has been proposed within lease area.	A total of 150 number of saplings has been planted within lease area.	NIL.

#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade-wise sorting within lease area.	Grade-wise sorting has been carried out.	NIL.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual.	Manual.	NIL.
7c	Different grade of mineral sorted out at mines.	No specific proposal.	Not applicable as no proposal.	NIL.
7d	Any beneficiation process at mines .	No beneficiation process at the mine.	Not applicable as no beneficiation process at the mine.	NIL.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No proposal of any beneficiation.	Not applicable as no proposal.	No issued related to Mineral conservation.

#### Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Seperate removal of top soil of 4154m <sup>3</sup> has been proposed.	During the reporting year 1500 CuM of top soil has been generated and utilized.	Top soil is in the form of sandy soil.

8b	Concurrent use or storage of topsoil	Concurrent Use.	Concurrent Use.	Sandy soil has been proposed to generate and backfill.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Waste has been proposed to backfill and reject has been proposed to utilize for blending.	Generated waste has been backfilled. No generation of reject and fines.	NIL.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Simultaneous backfilling of OB/Sandy Soil.	As per proposal.	NIL.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Reclamation of mine out area of 0.13 Ha has been proposed in each year 2017-18 and 2018-19.	An area around 0.25 Ha has been under reclamation including the backlog of previous year.	NIL.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Planation over 0.015 ha with 50 numbers of saplings has been proposed.	An area of 0.015 has been planted with 150 numbers of saplings within lease area.	NIL.
8g	Survival rate	No specific proposal	30% as reported.	NIL.
8h	Water sprinkling on roads to control airborne dust	Water spraying has been proposed on the roads.	Water sprinkling has been observed through water tanker.	NIL.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	It is proposed to plant 50 numbers of saplings.	Within lease area 150 and outside lease area 100 saplings has been planted.	No specific issue related to environment observed.

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Compliance of Rule 45:

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Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR, monthly and annual returns to be submitted.	Monthly and annual returns have been submitted for reporting year.	NIL.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information has been furnished about Mining Engineer.	Mining engineer was present at the time of the inspection.	NIL.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Already exploited & abandoned by opencast (O/C) mining:0.348 Ha, Covered under current (O/C) Workings:0.15 Ha, Reclaimed and rehabilitate: 0.015 Ha., Other purpose: 1.0 Ha., Used for waste disposal: NIL.	The information furnished found incorrect.	Violation of MCDR issued vide letter date 10/02/2020.
9d	Scrutiny of Annual return on afforestation	Plantation within lease area: 150 numbers and outside of the lease area 100 numbers.	Found in order.	NIL.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Information on Mineral reject generation of 500 tonnes has been furnished.	No mineral reject has been generated.	Violation of MCDR issued vide letter date 10/02/2020.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM closing stock: NIL and graded stock: 2331.864 tonnes.	Appears to be in order.	NIL.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex-mine price is Rs. 850.72 per tonnes and cost of production furnished is Rs. 756.00 per tonnes.	Information furnished has been found in order.	NIL.

9h	Scrutiny of Annual return on fixed assets	The value of fixed asset furnished is NIL.	The information furnished found to correct.	NIL.
9k	Scrutiny of Annual return on mining machineries	Back Hoe.	Back Hoe.	NIL.

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**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed			Show couse position		
Rule NO.	Issued on	Compliance on	Rule NO.	Issued on	Compliance on
MCDR17	Rule 26(2)	10-FEB-20			
MCDR17	Rule 33	10-FEB-20			
MCDR17	Rule 45(7)(a)	10-FEB-20			

**Date :**

**(DILIP JAIN)**

Indian Bureau of Mines