

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

**MCDR INSPECTION REPORT**

**Ajmer regional office**

**Mine file No :** RAJ/NGR-13/LST-1

**Mine code :** 38RAJ20001

- (i) Name of the Inspecting : **S012** ) **Sharma H.C.**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Satish Rathod, Sh Jakir, Surveyor  
Official with  
Designation
- (iv) Date of Inspection : 30-NOV-19
- (v) Prev.inspection date : 16-FEB-18

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **GAGARANA**
- (b) **Registration NO.** : **IBM/7378/2011**
- (c) Category : B Manual
- (d) Type of Working : Opencast
- (e) Postal address :  
State : RAJASTHAN  
District : NAGAUUR  
Village : GAGARANA  
Taluka : MERTA CITY  
Post office : GAGARANA  
Pin Code : 341510  
FAX No. : 0744-2500178  
E-mail : mclmorak@kappa.net.in  
Phone : 07459-232237, 01590-230614
- (f) Police Station : Gotan
- (g) First opening date : 26-MAR-87
- (h) Weekly day of rest : MON
2. Address for : Mangalam Cement Ltd.  
correspondance : SUB-POST PFFICE - GAGRANA (PO: MERTA CITY)  
District- Nagaur.
3. (a) Lease Number : RAJ1487
- (b) Lease area : 200
- (c) Period of lease : 50
- (d) Date of Expiry : 21-OCT-32
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : MANGLAM CEMENTS LIMITED  
 ADITYA NAGER -326517 PO-  
 MORAK DISTT-KOTA KOTA  
 RAJASTHAN  
 Phone: )7459)44237,44262  
 FAX :

Owner : K. C. Jain  
 Mangalam Cement Ltd. P. O.  
 Adityanagar, Morak, Distt.  
 Kota KOTA RAJASTHAN  
 Phone:  
 FAX : 07459232156

Agent : S.B.Sharma  
 Mangalam cement Ltd Aditya  
 Nagar Morak KOTA RAJASTHAN  
 Phone: 07459232262  
 FAX : 07459232231

## Mining Engineer

Name : Satish Ratod, Full Time  
 Qualification : B. E. Mining  
 Appointment/ : 21-FEB-14  
 Termination date

## Geologist

Name : Sudanshu Pandey, Full Time  
 Qualification : M Sc (geo)  
 Appointment/ : 20-MAR-17  
 Termination date

## Manager

Name : Gopal Prajapati  
 Qualification : Foreman Certificate Holder  
 Appointment/ : 20-JAN-12  
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	18-FEB-98
Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	13-JAN-03
	:	Modif.approved Mining Scheme	06-JUL-05
	:	Mining Scheme rule 12 MCDR1988	02-FEB-07
	:	Mining Scheme rule 12 MCDR1988	19-JUL-13
	:	MP review under 17(1) MCR 2016	22-MAR-17

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	A Total of 5 DTH boreholes to a meterage of 75 m during 2018-19 & 5 DTH bore holes to a materage of 75m were proposed during 2019-2020.	5 DTH holes drilled so far to a meterage of 84m so far.	
1b	Exploration over lease area for geological axis 1 or 2	1.25 ha	1.25 ha	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	M/S Mangalam Cement Ltd., Expenditue- Rs. 22041/-	M/S Mangalam Cement Ltd., Expenditue- Rs. 22041/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	32.72 ha	32.72 ha	
1e	Balance reserve as on 01/04/20	1.3766 million T	1.4664 million T	
1f	General remarks of inspecting officers on geology, exploration etc	Not applicable	The proposed exploration work for the year 2019-2020 has not been carried out, for which violation of rule 11(1) is being pointed out.	

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Block -A N250-350, E500- 600	Block -A N250-350, E500- 600	
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes	Yes	

2c	Stripping ratio or ore to OB ratio	1 : 0.86	1 : 0.40	The less proportional development is being pointed out as Violation of rule 11 (1).
2d	Quantity of topsoil generation in m3	50 T	Nil	
2e	Quantity of overburden generation in m3	43113 T	3259 T	
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Not applicable	The less proportional development is being pointed out as Violation of rule 11 (1).	

#### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Block A, Pit 4	Block A, Pit 4	
3b	Quantity of ROM mineral production proposed	50117 T	8140 T	
3c	Recovery of sailable/usable mineral from ROM production	90 %	90 %	
3d	Quantity of mineral reject generation	4510 T	814 T	
3e	Grade of mineral rejects generation and threshold value declared.	CaCo3- 55-60%, MgCO3- 6-28.21%, Si O2- 6-32%	CaCo3- 55-60%, MgCO3- 6-28.21%, Si O2- 6-32%	
3f	Quantity of sub grade mineral generation.	4510 T	814 T	
3g	Grade of sub grade mineral generation	CaCo3- 61-86 %, MgCO3- 1.57 -5.81%, Si O2- 8-16%	CaCo3- 61-86 %, MgCO3- 1.57 -5.81%, Si O2- 8-16%	

3h	Manual / Mechanised method adopted for segregating from ROM	Manual	Maual
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	Nil
3j	Provision of drilling and blasting in mineral benches	Manual breaking of Limestone	Manual breaking of Limestone
3k	Provision of mining machinerics in mineral benches	Manual breaking of Limestone	Manual breaking of Limestone
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes
3m	Total area covered under excavation/pits	12 ha	10.07 ha
3n	Ore to OB ratio for the pit/mine during the year.	1 : 0.86	1 : 0.40
3o	Total area put in use under different heads at the end of year	Pit- 12 ha, Waste 1.08 ha & others- 2.21 ha	Pit- 10.07 ha, Waste 1.198 ha & others- 2.21 ha
3p	Production of ROM mineral during the last five year period as applicable	2014-15- 50214 T, 2015-16- 50143 T, 2016- 17- 50059 T, 2017-18- 50698 T, 2018-19- 50117 T	2014-15- 5020 T, 2015- 16- 6050 T, 2016-17- Nil, 2017-18- 280 T, 2018-19-8140 T
3q	General remarks of inspecting officers on method of mining etc.	Not applicable	The opencast manual method is used for working the deposit.

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Solid Waste Management - Dumping:

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Sl.No.	Item	Propasals	Actual work	Remarks
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4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Seperate dumping of O/B & mineral Reject	Seperate dumping of O/B & mineral Reject
4b	Location of topsoil, OB and mineral reject dumps	O/B dump- N 100-200, E400-500	O/B dump- N 100-200, E400-500
4c	Number of dumps within lease area and outside of lease area	one dump in block A	one dump in block A
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL in Block- A	Outside UPL in Block- A
4e	Number of active and alive dumps.	One	One
4f	Number of dead dumps.	Nil	Nil
4g	Number of dumps established.	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland Drain	Garland Drain
4i	Length of Retaining wall or garland drain all along dumps	20 M	15 M
4j	Number of settling ponds	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	Not applicable	The retaining wall required along outer peripheri of Dumps to wards agriculture land, has not been constructed.

#### 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 of mineral has not been proposed to full depth of mineralisation	Full extraction of mineral has not been completed to full depth of mineralisation.	

5b	Area under backfilling of mined out area	No proposal	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Very little top soil available in the area	Very little top soil available in the area, which has been used for plantation.
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	Not applicable	No matured area available for reclamation.

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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).	Yes as per rule	Submitted well in time	
6b	Area available for rehabilitation (ha) .	Nil	Nil	
6c	afforestation done (ha).	0.1 ha	0.1 ha	
6d	No. of saplings planted during the year	250 nos over 0.3 ha including dump area	150 nos within lease over 0.5 ha	
6e	Cumulative no .of plants	Not specified	Not applicable	
6f	Any other method of rehabilitation	No proposal	Nil	
6g	Cost incurred on watch and care during the year	Rs 10000/-	Rs 10000/-	

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6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	Nil	
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	
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	250 Saplings including waste dumping	150 Saplings	The less no of splings planted is being pointed out as violation of rule 11 (1).
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.3 ha	0.1 ha	
6o	Compliance of rehabilitation of waste land within lease (iii)Method of rehabilitation	By plantation	By plantation	



6p	Compliance of environmental monitoring (core zone and buffer zone)	As per EC & consent condition monitoring at six monthly for Air & for Water- quaterly	As per EC & consent condition monitoring at six monthly for Air & for Water- quaterly done
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	Not applicable	The less number of trees planted over less area.

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Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	50117 T	8140 T	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual	Manual	
7c	Different grade of mineral sorted out at mines.	High grade	High grade	
7d	Any beneficiation process at mines	No proposal	Nil	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	Not applicable	There is no mineral conservation issue.	

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Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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8a	Separate removal and utilization of topsoil (Rule 32)	Small quantity excavated will be used for plantation.	Small quantity excavated used for plantation.
8b	Concurrent use or storage of topsoil	Small quantity excavated will be used for plantation.	Small quantity excavated used for plantation.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumps proposed.	Separate dumping for O/B waste done.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Not specified	Not applicable
8g	Survival rate	Not specified	40 %
8h	Water sprinkling on roads to control airborne dust	Yes	Yes, wet drilling & water spraying by tanker.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Not applicable	The aesthetic beauty is satisfactory in & around the mine.

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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	Not applicable	The M/R submitted up to November 2019. The A/R submitted for the year 2018-19.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer- Sh. Satish Ratore, Manager- Sh. Gopal Prajapati & Geologist- Sh. Sudhanshu Pandey.	Found in order.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Under excation- 10.07 ha, Waste dumping 1.198 ha, Plant & Building 2.21 ha	Under excation- 10.07 ha, Waste dumping 1.198 ha, Plant & Building 2.21 ha
9d	Scrutiny of Annual return on afforestation	Given	Found in order
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	3259 T rejects generated	Found in order
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock- 68.485T, Production- 8140 T & closing stock- 5.175 T	Found in order
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	The cost of production & Ex - Mine price stated as Rs. 278.60 per Tonne of mineral.	During 2018-19 a total of Rs. 2099391 had been expensed to raise aproduction of 8140 T of mineral thereby the cost of production comes about Rs. 257.91, which has been stated as Rs. 278.60 per tonne. The correct information has not been furnished in the annual return of 2018-19.
9h	Scrutiny of Annual return on fixed assets	The value of Fixed assets stated as Nil.	It can not be Nil
9k	Scrutiny of Annual return on mining machineries	Details Given	Found in order

**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

Date :

(Sharma H.C.)

Indian Bureau of Mines