

**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 : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri Gopal Prajapati, Mine Manager and Sri Vivek Rawat
Official with
Designation
- (iv) Date of Inspection : 09-NOV-21
- (v) Prev.inspection date : 11-JAN-21

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 : Shri P.R. Chaudhary
 Mangalam Cement Ltd. PO:
 Adityanagar-Morak Distt.
 Kota (Rajasthan) KOTA
 RAJASTHAN
 Phone: 07459-233146
 FAX : 07459- 232156

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 exploratory Bhs with 75 mts of drilling was proposed during previous year. 2019-20.	A total of 5 (DTH) exploratory BHs with 84 mtr have been drilled.	No backlog.
1b	Exploration over lease area for geological axis 1 or 2	A total of 05 Exploratory BHs with 75.0 mts of drilling has been proposed during reporting year (RY).	A total of 05 (DTH) Exploratory BHs with 84.0 mts of drilling has been done during RY.	NIL.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal of Exploration Agency & expenditure.	Agency: Mines Dept.(Mangalam Cement Ltd), Expenditure=Rs.22041	NIL.
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal on area to be explored to bring Geological axis in 1 or 2.	Around 2.25 Hect. area explored under G1 level during the RY.	NIL.
1e	Balance reserve as on 01/04/20	Reserve (2020-21)=1.2755 million tonnes.	Reserve (2020-21)=1.398 Million tonnes.	Due to less production during plan period.
1f	General remarks of inspecting officers on geology, exploration etc	Exploration by 05 Bhs with 75 mtrs of drilling was proposed.	Exploration by 05 Bhs with 84 mtrs of drilling was carried out.	No issue related execution of proposed exploration and geology.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Development has been proposed in Block-A of lease area.	Development has been carried out in Block-A of lease area.	NIL.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate removal of top soil, waste and mineral.	As per proposal.	No top soil has been generation during RY.
2c	Stripping ratio or ore to OB ratio	1:0.83 tone/tone	1:0.82 tone/tone	NIL.
2d	Quantity of topsoil generation in m3	50 Ton	Nil.	No top soil patch encountered during RY.
2e	Quantity of overburden generation in m3	42182 Ton	25184 T	Less waste generation due to less development and non-availability of surface right & Lockdown due to COVID-19.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Development has been proposed through opencast method.	Development has been carried out as per proposed method.	No issue related to method of development and suitable for type of deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Block-A,Pit-4	Block-A,Pit-4	NIL.
3b	Quantity of ROM mineral production proposed	54734 ton	30629 ton	Less production due to less development and non-availability of surface right & Lockdown due to COVID-19.
3c	Recovery of sailable/usable mineral from ROM production	50680 ton	30629 ton	Less production due to less development and non-availability of surface right & Lockdown due to COVID-19.
3d	Quantity of mineral reject generation	4054 Ton	NIL.	No mineral reject has been generation.
3e	Grade of mineral rejects generation and threshold value declared.	No proposal.	Not applicable as no mineral reject generation.	NIL.

3f	Quantity of sub grade mineral generation.	No proposal.	No sub-grade generation.	NIL.
3g	Grade of sub grade mineral generation	No proposal.	Not applicable as no sub-grade mineral generation.	NIL.
3h	Manual / Mechanised method adopted for segregating from ROM	Manual Hand sorting of Dolomitic and interstitial clay.	Manual Hand sorting of Dolomitic and interstitial clay.	NIL.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	No beneficiation study carried out during the RY.	NIL.
3j	Provision of drilling and blasting in mineral benches	No proposal of drilling and blasting.	Mineral is being broken by Rock Breaker.	NIL.
3k	Provision of mining machineries in mineral benches	Rock Breaker, Excavator, dumper etc.	Rock Breaker, Excavator, dumper etc.	NIL.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	2 to 4 mts.	Height of the benches has been maintained as per proposal.	NIL.
3m	Total area covered under excavation/pits	14.19 hectare at the end of the plan period i.e. 2021-22.	11.47 hectare at the end of the 2020-21.	Data as per AR 2020-21.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.83 tone/tone	1:0.82 tone/tone	NIL.
3o	Total area put in use under different heads at the end of year	19.24 hectare at the end of 2021-22.	15.35 hect. area at the end of 2020-21.	As per AR 2020-21.

3p	Production of ROM mineral during the last five year period as applicable	2016-17= 50059 T 2017-18= 50698 T 2018-19=50117 T 2019-20=50573 T 2020-21=50680 T	2016-17= Nil. 2017-18= 280 T 2018-19=8140 T 2019-20=36737 T 2020-21=30629 T	Less production due to non-availability of surface right, Local villager problem and covid-19 pandemic.
3q	General remarks of inspecting officers on method of mining etc.	Opencast method of mining has been proposed.	Opencast method of mining is being practiced.	The open cast mechanized method has been adopted which is best suited to the type of deposit.

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Separate dumping of OB & mineral. Soil is proposed to use for plantation.	Separate dumping of OB & mineral. No soil generation during RY.	NIL.
4b	Location of topsoil, OB and mineral reject dumps	Dumping of the waste proposed near pit 3 (western side). No MR generation.	Dumping of the waste observed near pit 3 (western side). No MR generation.	NIL.
4c	Number of dumps within lease area and outside of lease area	One dump in Block-A. No proposal of waste dumping during RY in Block B & C. However, five waste dumps exist in in Block B & C.	One dump in Block-A, Five dumps in Block-B (unauthorized working).	Lessee has already informed to officials of the State Govt. for unauthorized working.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL (Block-A)	Outside UPL (Block-A)	NIL.
4e	Number of active and alive dumps.	One.	One.	NIL.
4f	Number of dead dumps.	5 (Block B &C).	5 (Block B &C).	NIL.
4g	Number of dumps established.	No proposal.	Not applicable.	NIL.

4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal during the RY.	Garland drain observed at necessary places.	NIL.
4i	Length of Retaining wall or garland drain all along dumps	No proposal.	No retaining wall construction during the RY.	NIL.
4j	Number of settling ponds	No proposal.	Not applicable.	NIL.
4k	Specific comments of inspecting officer on waste dump management	Dumping of the waste has been proposed over and nearby existing waste dumps.	Dumping of waste carried out over and nearby existing dump. Garland drain observed at necessary places.	No issue observed 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.	No proposal of part or full extraction of mineral.	Not applicable as no proposal.	NIL.
5b	Area under backfilling of mined out area	No area matured for backfilling.	Not applicable.	NIL.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil proposed to use for plantation purpose.	No top soil has been generated during the RY.	No top soil patch encountered during RY.
5d	Total area fully reclaimed and rehabilitated	No proposal of full reclamation and rehabilitation	Not applicable.	No area matured for reclamation and rehabilitation.
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposal as no area matured for backfilling.	No area matured for backfilling.	No area matured for reclamation and rehabilitation.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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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 report every year.	PMCP report for the year 2020-21 has been submitted.	NIL.
6b	Area available for rehabilitation (ha) .	Waste dump: 0.1 hect with 50 saplings and waste land: 0.2 hect with 200 saplings.	Waste dump: 0.045 hect with 30 saplings and waste land: 0.1 hect with 120 saplings.	Violation of MCDR issued vide letter dated 30/11/2021 for shortfall in plantation.
6c	afforestation done (ha).	Waste dump: 0.1 hect with 50 saplings and waste land: 0.2 hect with 200 saplings.	Waste dump: 0.045 hect with 30 saplings and waste land: 0.1 hect with 120 saplings.	Violation of MCDR issued vide letter dated 30/11/2021 for shortfall in plantation.
6d	No. of saplings planted during the year	Total 250 numbers of saplings during the RY.	Total 150 numbers during the RY.	Violation of MCDR issued vide letter dated 30/11/2021 for shortfall in plantation.
6e	Cumulative no .of plants	No specific proposal on cumulative number of plantation.	Cumulatively 3100 numbers of plants as 31.03.2021.	NIL.
6f	Any other method of rehabilitation	Other than plantation, no proposal of any other method of rehabilitation .	Plantation has been carried out as per proposal.	NIL.
6g	Cost incurred on watch and care during the year	No proposal.	Around Rs. 6000/-	NIL.
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal of backfilling.	Area not matured for backfilling.	NIL.
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal.	Not applicable.	NIL.

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal.	Not applicable.	NIL.
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal.	Not applicable.	NIL.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No any other specific proposal.	Not applicable.	NIL.
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	A 200 number of saplings have been proposed to plant.	A 120 number of saplings have been planted.	Violation of MCDR issued vide letter dated 30/11/2021 for shortfall in plantation.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	0.2 Hect.	0.10 Hect.	Violation of MCDR issued vide letter dated 30/11/2021 for shortfall in plantation.
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)	Provision for monitoring of environment parameter has been given.	Environment monitoring is being carried out in core and buffer zone.	NIL.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	A total of 0.3 Hect area (Waste dump and waste land) with 250 number of saplings have been proposed plant.	An area of 0.145 Hect. has been planted with 120 number of saplings.	Violation of MCDR issued vide letter dated 30/11/2021 for shortfall in plantation.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Sorting/separation of waste and mineral.	Sorting/separation of waste and mineral.	NIL.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Manual Hand sorting of Dolomitic and interstitial clay.	Manual Hand sorting of Dolomitic and interstitial clay.	NIL.
7c	Different grade of mineral sorted out at mines.	No proposal of grade wise sorting.	Limestone and waste has been sorted/separated.	NIL.
7d	Any beneficiation process at mines	No proposal.	Not applicable.	NIL.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	No proposal of any beneficiation.	No beneficiation has been carried out.	No issue observed related to mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	50 tons.	No top soil generated during RY.	No top soil patch encountered during RY.
8b	Concurrent use or storage of topsoil	Top soil proposed to use for plantation purpose.	No top soil generated during RY.	NIL.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of waste and mineral.	Waste has been dumped at designated place.	NIL.
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal.	Not applicable.	NIL.

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal.	Not applicable.	NIL.
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	250 nos. (0.30 Ha.)	120 nos (0.145 ha)	Violation of MCDR issued vide letter dated 30/11/2021 for shortfall in plantation.
8g	Survival rate	No proposal.	50%	Survival % is less due to water deficiency in the area.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling to control airborne dust.	Water sprinkling observed.	NIL.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Generation and utilization of top soil was proposed. Plantation over waste land was also proposed.	No top soil generation. Planation carried out on waste dump and waste land.	The general aesthetic beauty of the mine is satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per rule 45 of MCDR, 2017 monthly and annual return to be submitted to competent authority.	Monthly and annual returns have been submitted for the RY.	NIL.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information on Mining Engineer and geologist has been furnished.	Mining Engineer, Geologist and Manager has been appointed in the mine.	NIL.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits=11.47 ha Dumps=1.668 ha Infrastructure : 2.21 ha.	Information furnished on land use appears to be in order.	NIL.
9d	Scrutiny of Annual return on afforestation	Inside Lease: 150 and Outside Lease: 100 nos.	Inside Lease: 150 and Outside Lease: 100 nos.	NIL.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	25184 tons.	Quantity of waste generation has been furnished in mineral reject para.	Violation of MCDR issued vide letter dated 30/11/2021.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock: NIL Graded Stock: NIL.	Found in Order.	NIL.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. Mine price and Cost of production: Rs. 268.60 per tones.	Few errors have been observed in cost of production.	Violation of MCDR issued vide letter dated 30/11/2021.
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset has been furnished as 'NIL'.	Contractual work, hence, no fixed asset.	NIL.
9k	Scrutiny of Annual return on mining machineries	Back Hoe, Tipper, Water tanker etc.	Back Hoe, Tipper, Water tanker etc.	Contractual machineries.

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 11(1)	30-NOV-21			
MCDR17	Rule 45(7)(a)	30-NOV-21			

Date :

(DILIP JAIN)

Indian Bureau of Mines