

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/KOTA-1/LST-1

Mine code : 38RAJ19001

- (i) Name of the Inspecting : **G021**) **D R GURJAR**
Officer and ID No.
- (ii) Designation : Deputy Controller Mines
- (iii) Accompanying mine : Sh. Ramesh Chaudhry, Mines Manager & Sh. Vivek Rawat
Official with
Designation
- (iv) Date of Inspection : 11-DEC-24
- (v) Prev.inspection date : 06-MAR-19

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MCL**
- (b) **Registration NO.** : **IBM/7378/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : RAJASTHAN
District : KOTA
Village : MORAK
Taluka : RAMGANJ MANDI
Post office : ADITYA NAGAR
Pin Code : 326520
FAX No. : 07459-232156
E-mail : mines@mangalamcement.com
Phone : 07459-232156
- (f) Police Station : Morak
- (g) First opening date : 21-DEC-77
- (h) Weekly day of rest : SUN
2. Address for : SR GENERAL MANAGER
correspondance : MANGALAM CEMENT LTD, ADITYA NAGAR,
PO MORAK, DISTT- KOTA
3. (a) Lease Number : RAJ0013
- (b) Lease area : 895
- (c) Period of lease : 20
- (d) Date of Expiry : 21-FEB-97
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 : P. R. Chaudhary
Mangalam Cement Limited PO-
Aditya Nagar, Morak
District-Kota(Rajasthan)
KOTA RAJASTHAN
Phone: 07459-232156
FAX : 07459-232156

Mining Engineer
Name : Ramesh Choudhary, Full Time
Qualification : BE(Mining) & FCC(R)
Appointment/ : 01-OCT-21
Termination date

Geologist
Name : Vivek Rawat, Full Time
Qualification : M Tech(Applied Geology), FCC(R)
Appointment/ : 13-JAN-95
Termination date

Manager
Name : Ramesh Chaudhry
Qualification : B. E. (Mining), FCC (R)
Appointment/ : 31-MAR-15
Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Existing rule 11 MCDR1988 03-FEB-93
Existing rule 11 MCDR1988 18-AUG-97
Mining Scheme rule 12 MCDR1988 22-FEB-99
Mining Scheme rule 12 MCDR1988 25-SEP-03
Modif.of approved Mining Plan 18-AUG-06
Mining Scheme rule 12 MCDR1988 04-NOV-11
Modif.approved Mining Scheme 13-FEB-13
MP modif under MCR 1960 10-JUN-16

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	During the previous year 2022-23 no exploration proposed	None during the previous year	No backlog of previous year 2022-23.
1b	Exploration over lease area for geological axis 1 or 2	No proposal during the year 2023-24.	None done durin the year 2023-24	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal during the year 2023-24.	No proposal during the year 2023-24, hence not applicable.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal of balance area to be explored under G1/G2 level.	Not applicable.	Total lease area - 895.42Ha, Mineralised area - 743.8 Ha., Non-Mineralised area- 151.62 Ha. Mineralised area has already been explored under G1 level.
1e	Balance reserve as on 01/04/20	No proposal of balance resreve has been given.	The position of reserve as on 01.04.2024: 111: 76.4611 MT 121: 13.36 MT Total: 91.8211 MT	MT-Million Tons
1f	General remarks of inspecting officers on geology, exploration etc			No issue observed in the mine related to geology & exploration. Entire mineralised area has already been explored under G1 level.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Block-I, Block-II & Block-III	Block-I, Block-II & Block-III	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate benches in top soil, OB and Mineral was proposed	Separate benches in top soil, OB and Mineral are maintained as per proposal.	Top soil-1m bench hieght, OB-8m bench hieght & Mineral-6m bench hieght.

2c	Stripping ratio or ore to OB ratio	2023-24: 1:1.201	2023-24: 1:0.949	Ton:Ton
2d	Quantity of topsoil generation in m3	2023-24: 186900 cum	2023-24: 54130 cum	Nil
2e	Quantity of overburden generation in m3	2023-24: 2136536 cum	2023-24: 1404874 cum	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development has been carried out out as per proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	Block-I, Block-II & III	Block-I, Block-II & III	Nil
3b	Quantity of ROM mineral production proposed	2023-24: 4002130T	2023-24: 3330146T	Nil
3c	Recovery of sailable/usable mineral from ROM production	90%	94%	Nil
3d	Quantity of mineral reject generation	2023-24: 400213 T	2023-24: 191018 T	Crusher Reject
3e	Grade of mineral rejects generation and threshold value declared.	CaO-32.48% & Mgo-1.24%	CaO-33.12% & Mgo-1.26%	Crusher Reject
3f	Quantity of sub grade mineral generation.	No proposal	No subgrade generated during the reporting year	Nil
3g	Grade of sub grade mineral generation	No proposal	Not applicable	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Dry beneficiation by two stage double deck vibrating screen.	Dry beneficiation by two stage double deck vibrating screen.	Nil

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal	None during the RY.	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, Deep hole drilling & blasting with deck charging.	Yes, Deep hole drilling & blasting with deck charging	Nil
3k	Provision of mining machineries in mineral benches	HEMM deployment (Shovel Dumper combination)	HEMM deployment (Shovel Dumper combination)	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes bench height maintained as per proposal.	Nil
3m	Total area covered under excavation/pits	340.64 hect.	324.70 hect.	Up to year 2023-24.
3n	Ore to OB ratio for the pit/mine during the year.	2023-24: 1:1.201	2023-24: 1:0.949	Ton:Ton
3o	Total area put in use under different heads at the end of year	Working Pit= 340.64 hect, O/B Dump=24.16 hect, Building & Roads=22.15 hect. etc.	Working Pit= 324.70 hect, O/B Dump=23.24 hect, Building & Roads=22.15 hect. etc.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2019-20 =81,22,430T, 2020-21 =80,15,265T, 2021-22 =4000630T, 2022-23= 4005285T, 2023-24= 4002130T	2019-20 = 25,62,308T, 2020-21 = 27,59,894T, 2021-22 = 3462290T, 2022-23 =3859727T, 2023-24 =3330146T	Nil
3q	General remarks of inspecting officers on method of mining etc.	Opencast Mining Method was proposed using HEMM.	Mechanised mining method is being used along with HEMM as per proposal.	Method of Mining is suitable 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/IB & mineral reject were proposed.	Separate dumping of OB/IB & mineral reject were carried out as per proposal.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Block-II Grid 5250-5300/850-950	Block-II Grid 5250-5300/850-950	No dumping has been carried out in OB dumps, OB & crusher reject used simultaneously for backfilling of mined out area.
4c	Number of dumps within lease area and outside of lease area	Three - within lease area.	Three - within lease area.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Out of ultimate pit limit.	Out of ultimate pit limit.	Nil
4e	Number of active and alive dumps.	Two	Two	Nil
4f	Number of dead dumps.	One	One	Nil
4g	Number of dumps established.	Already established One	One	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	During the year 2022-23 garland drain proposed.	Garland drain made as per proposal in the reporting year.	Nil
4i	Length of Retaining wall or garland drain all along dumps	50m garland drain	30m garland drain	As per requirement.
4j	Number of settling ponds	No proposal	None	Nil
4k	Specific comments of inspecting officer on waste dump management			Waste dump management is satisfactory.

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 mineral backfilling proposed.	As per proposal area after confirmation of drill hole cutting sample.	Nil
5b	Area under backfilling of mined out area	7.82 hect.	6.57 hect.	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	For Plantation	For Plantation	Nil
5d	Total area fully reclaimed and rehabilitated	Reclaimed(Back filling)=151.25 hect. and Rehabilitated=76.72(Backfilled)+40.55(Water Reservoir)=121.42 Hect	Reclaimed(Back filling)=145.20 hect. and Rehabilitated=77.14(Backfilled)+ 51.12(Water Reservoir)=128.2 Hect	Rehabilitated by backfilling & water reservoirs
5e	General remarks of inspecting officers on backfilling and reclamation etc.			After complete extraction of mineral simultaneously backfilling & plantation work is going as per proposal.

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(2) of MCDR,2017 holder of mining lease shall submit PMCP before 1st day of July every year.	PMCP report for the year 2023-24 submitted timely.	Nil
6b	Area available for rehabilitation (ha) .	16.59 hect.	14.49 hect.	Nil

6c	afforestation done (ha).	Waste dump=0.4 hect (400 nos.), Backfilled area=3.49 hect.(3490 nos.) & Virgin area=0.5 hect.(500 nos.) Total=4.39 hect. area(4390 nos.)	Waste dump=0.5 hect (500 nos.), Backfilled area=3.50 hect.(3498 nos.) & Virgin area=0.54 hect.(508 nos.) Total=4.54 hect. area(4506 nos.)	RY 2023-24
6d	No. of saplings planted during the year	Total-4390 nos.	Total-4506 nos.	RY 2023-24
6e	Cumulative no .of plants	Not specified	177772 nos.	Up to year 2023-24.
6f	Any other method of rehabilitation	By afforestation	By afforestation	Nil
6g	Cost incurred on watch and care during the year	Rs. 8.78 lakhs	Rs. 9.01 lakhs	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	8333375 cum	4677527 cum	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	1816056 cum	1387318 cum	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on backfilled area	3.49 hect (3490 nos.)	3.50 hect (3498 nos.)	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	44.70 hect.	51.12 hect.	cummulative area under water reservoir up to year 2023-24.

6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	None	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	0.5 hect.(500 nos.)	0.54 hect.(508 nos.)	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.5 hect.	0.54 hect.	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)	As per E.C. & Consent condition noise and air quality - six monthly and water qualityquarterly	As per E.C. & Consent condition noise and air quality - six monthly and water quality quarterly	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			No issue observed related to PMCP compliances. 6n 6o 6p 6q

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	During the year 2023-24, total 3601917T usable limestone will be feed to captive cement plant.	During the year 2023-24, total 3278226T usable limestone was feed to captive cement plant.	Nil

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal of different grade wise sorting, only cement grade limestobe feed to captive cement plant.	As per proposal	Nil
7c	Different grade of mineral sorted out at mines.	No proposal	Not applicable	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 issue observed related to mineral conservation in mine.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal & use for plantation.	Topsoil separately removed and directly used in plantation.	Nil
8b	Concurrent use or storage of topsoil	Concurent use in plantation.	Concurent use in plantation.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Use of OB & crusher reject for back filling was proposed	Use of OB & crusher reject for back filling has been carried out.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Use of OB waste & crusher reject for backfilling	Use of OB waste & crusher reject for backfilling	Nil

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	Reclamation 7.82ha and Rehabilitation 3.49ha	Reclamation 6.57ha and Rehabilitation 3.5ha	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Plantation of 4390 saplings & Area 4.39 hect.	4506 Nos. (4.54 Hect) saplings planted during the year.	Cummulative plantation up to year 2023-24 is 177772 nos.
8g	Survival rate	80%	80.12%	As per AR 2023-24.
8h	Water sprinkling on roads to control airborne dust	Water sprinkling was proposed.	Water sprinkling was observed.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The aesthetic beauty in and around mines area is satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	As per MCDR 2017, monthly return shall be submitted before 10th day month for previous month & annual return shall be submitted before 1 July for previous year.	Monthly returns for the year 2023-24 & annual retrun for the year 2023-24 submitted timely.	Timely submission of monthly & annual returns.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Information of Mining Engineer, Geologist and Manager have been furnished.	Details found to be correct for Mining Engineer, Geologist and Manager	Ar 2023-24.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Pit-324.7 ha, Reclaimed Area-145.20 ha, Dump Area-23.24 ha, Building & Road-22.15 ha etc.	Some details of mineral storage area & to soil storage area not furnished in AR 2023-24.	The details of mineral storage area & top soil storage area not furnished in AR 2023-24, hence violation of Rule 45(7) of MCDR 2017 vide letter dated 06.01.2025.
9d	Scrutiny of Annual return on afforestation	No. of Plants 4506 within lease area Survival 80.12%	Details seems corrected	AR 2023-24.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral reject (Crusher Reject) 191018T generated in the year.	Details seems corrected	AR 2023-24.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM opening stock- 1049721.8T & closing stock- 910624.56T Cement Grade Limestone opening & closing stock- Nil	Details seems corrected.	AR 2023-24.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex- Mine price / production cost Rs 289.95	It is captive mine & details seems corrected.	AR 2023-24.
9h	Scrutiny of Annual return on fixed assets	Fixed Assets Rs. 28806248/-	Details seems corrected.	Nil
9k	Scrutiny of Annual return on mining machineries	Details of mine machineries given in AR 2023-24.	Seems corrected.	Nil

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 45(7)(a)	06-JAN-25				

Date :

(D R GURJAR)

Indian Bureau of Mines