

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

**MCDR INSPECTION REPORT**

**Gandhinagar regional office**

**Mine file No :** RAJ/CHT/LST-13

**Mine code :** 38RAJ09013

- (i) Name of the Inspecting : **G021** ) **DATA RAM GURJAR**  
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Sohan Das Vairagi, Mine Manager and Sh. O.P. Shar  
Official with  
Designation
- (iv) Date of Inspection : 15-JUL-22
- (v) Prev.inspection date : 13-OCT-21

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **MANGROL**
- (b) **Registration NO.** : **IBM/418/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address  
State : RAJASTHAN  
District : CHITTORGARH  
Village : MANGROL  
Taluka : NIMBAHERA  
Post office : MANGROL  
Pin Code : 312617  
FAX No. : 01477-20087,220562  
E-mail : manish.toshniwal@jkcement.  
Phone : 01477-20087,220562
- (f) Police Station : Nimbahera sadar
- (g) First opening date : 10-JUN-13
- (h) Weekly day of rest : WED
2. Address for : PO- MANGROL  
correspondance : DISTT CHITTORGARH  
RAJASTHAN
3. (a) Lease Number : RAJ4468
- (b) Lease area : 132
- (c) Period of lease : 50
- (d) Date of Expiry : 03-MAY-62
4. Mineral worked : LIMESTONE Main

## 5. Name and Address of the

Lessee : J.K.Cement Works  
Kailashnagar Nimbahera  
CHITTORGARH RAJASTHAN  
Phone:01477-220087  
FAX :01477-220027

Owner : Ajay Kumar Saraogi  
J.K. Cement Ltd Kamla  
Tower, Kanpur KANPUR URBAN  
UTTAR PRADESH  
Phone: 0512 - 2311478  
FAX : 0512 - 2364250

Agent : Manish Toshniwal  
J K Cement Works Kailash  
Nagar, Nimbahera  
CHITTORGARH RAJASTHAN  
Phone: 01477-20087,220562  
FAX : 01477-20087,220

## Mining Engineer

Name : Sh. Jitendra Kumar Nagar,Full Time  
Qualification : BE Mining.  
Appointment/ : 19-SEP-19  
Termination date

## Geologist

Name : Manish Madhav,Full Time  
Qualification : M Sc Geology  
Appointment/ : 09-JUL-15  
Termination date

## Manager

Name : Sh. Sohan Das Vairagi  
Qualification : BE Mining.  
Appointment/ : 19-AUG-21  
Termination date

## Manager

Name : R.C.Vyas  
Qualification : Diploma in mining and FCC  
Appointment/ : 11-APR-13 18-AUG-21  
Termination date

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 22-MAR-10  
MP review under 17(1) MCR 2016 30-NOV-21

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

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No Backlog of previous year i.e. 2020-21.	Not applicable	Nil
1b	Exploration over lease area for geological axis 1 or 2	No proposal of exploration during RY 2021-22.	Drilled 23 boreholes, totaling 1591m. carried out during the RY 2021-22.	Exploration drilling has been carried out as per Norms of MEMC Rules 2015 & Rule 12(4) of MCDR 2017.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No proposal during the reporting year 2021-22.	Agency-M/s. SynergyGeotech Pvt. Ltd., Nagpur Expenditures-Rs.05.74 lacs.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No specific proposal given for the year 2021-22.	Entire lease area has been covered under G1 level.	Nil
1e	Balance reserve as on 01/04/20	No specific proposal in this regard.	Balance reserves as on 01.04.2022 41.86 mill. Tons	Nil
1f	General remarks of inspecting officers on geology, exploration etc			No issue observed related to Geology & Exploration.

## Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Proposed grid: 467962E/ 467542E & 2733220N/2732064N	Mine development has been carried out within proposed limit.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches only in mineral	As per proposal	Nil
2c	Stripping ratio or ore to OB ratio	1:0	1:0	No OB generation proposal.
2d	Quantity of topsoil generation in m3	12692.10 cum	8500.69 cum	Nil

2e	Quantity of overburden generation in m3	No proposal	Not applicable.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development has been carried out as per proposal.

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**Exploitation:**

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	1 pit.	1 pit.	Nil
3b	Quantity of ROM mineral production proposed	2021-22: 14,98,775.00 tons	2021-22: 10,17,878.29 tons	Less production due to less requirement from plant.
3c	Recovery of sailable/usable mineral from ROM production	2021-22: 13,99,775.00 Tons	2021-22: 9,92,078.29Tons	Nil
3d	Quantity of mineral reject generation	No proposal	Not applicable	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not applicable	Nil
3f	Quantity of sub grade mineral generation.	2021-22: 99,000.00 Tons	2021-22: 25800.00 Tons	Nil
3g	Grade of sub grade mineral generation	LSF-68.00 CaO-40.95%	LSF-69.12 CaO-41.10%	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No such study propoaed	None during the year	Nil

3j	Provision of drilling and blasting in mineral benches	Yes drilling & blasting proposal given.	Drinning & blasting has been carried out as per approved proposal.	Nil
3k	Provision of mining machineries in mineral benches	Hyd. Excavator, Drill machine, Dozer and Tipper etc.	Hyd. Excavator, Drill machine, Dozer and Tipper etc.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes	Nil
3m	Total area covered under excavation/pits	31.162 Ha	23.90 Ha	Up to 31.3.2022
3n	Ore to OB ratio for the pit/mine during the year.	1:0	1:0	Nil
3o	Total area put in use under different heads at the end of year	Pit area-31.162 Ha Subgrade dump area-7.18 Ha Plantation area-5.50 Ha Cement Plant and Residential area-1.66 Ha.	Pit area-23.90 Ha Subgrade dump area-6.85 Ha Plantation area-8.68 Ha Cement Plant and Residential area-1.66 Ha.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2021-22:14,98,775.0 tons 2020-21:14,98,768.3 tons 2019-20:16,74,357.5 tons 2018-19:18,99,393.2 tons 2017-18:18,99,000.0 tons	2021-22:10,17,878.29 tons 2020-21:9,74,836.35 tons 2019-20:13,89,693.55 tons 2018-19:14,16,889.54 tons 2017-18:15,02,338.48 tons	Nil
3q	General remarks of inspecting officers on method of mining etc.			Method of mining is suitable to the type of deposit.

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Top soil : No proposals OB dumps : No proposals Mineral reject : No proposals The proposal of separate dumping of subgrade mineral only.	Yes as per proposal separate dumping of subgrade mineral is being carried out.	Nil
4b	Location of topsoil, OB and mineral reject dumps	No proposal of dumping of topsoil, OB, & Mineral Reject. The proposal of dumping was only proposed for subgrade mineral.	Subgrade dumping is being carried out on proposed locations.	Nil
4c	Number of dumps within lease area and outside of lease area	03 subgrade dumps.	03 subgrade dumps.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside of UPL	Outside of UPL	Nil
4e	Number of active and alive dumps.	03 subgrade dumps.	03 subgrade dumps.	Nil
4f	Number of dead dumps.	No proposal	None	Nil
4g	Number of dumps established.	No proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal during the RY 2021-22.	None during the year.	Nil
4i	Length of Retaining wall or garland drain all along dumps	No proposal during the year 2021-22.	None during the year 2021-22. Cummulative garland drain 1449m.	Nil
4j	Number of settling ponds	No such proposal given	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management			No waste dump was observed only subgrade mineral stacking is being carried out.

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 backfilling proposal during the year 2021-22.	Nil	Nil
5b	Area under backfilling of mined out area	No backfilling proposal during the year 2021-22.	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Plantation	Plantation	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No proposal as no area matured for 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).	Annual report on PMCP shall be submitted by 1 July for the previous year i.e. 2021-22.	Annual report of PMCP for the year 2020-21 has been submitted on time.	Nil
6b	Area available for rehabilitation (ha) .	2021-22: 0.8 hect.	2021-22: 2.20 hect.	Nil
6c	afforestation done (ha).	2021-22: 0.8 hect.	2021-22: 2.20 hect.	Nil
6d	No. of saplings planted during the year	2021-22: 1000 nos.	2021-22: 5750 nos.	Nil
6e	Cumulative no .of plants	No such specific proposal given	13558 nos. up to year 2021-22.	Nil
6f	Any other method of rehabilitation	No proposal	None	Nil

6g	Cost incurred on watch and care during the year	Rs. 75,000.00	Rs. 2,63,280.00	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling ( Lx B x D	No proposal	Not applicable	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	None	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No such proposal given.	Rain water accumulated at bottom bench.	Nil
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	During the year 2021-22 Plantation proposed over an area 0.8 hect.	During the year 2021-22 actual planation has been carried out over an area 2.2 hect. area.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.8 hect. by plantation	2.2 hect by plantation.	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)	Environment parameters to be monitor for EC and other Conditions compliance.	Environment parameters are being monitored regularly.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance is satisfactory.

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#### Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	13,99,775.00 Tons usable grade limestone will be dispatched to captive cement plant duiring the year 2021-22.	9,92,078.29 Tons usable grade limestone dispatched to captive cement plant duiring the year 2021-22.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanical	Mechanical	Nil
7c	Different grade of mineral sorted out at mines.	Usable grade of limestone for captive cement plant & subgrade.	Usable grade of limestone for captive cement plant & subgrade.	Nil
7d	Any beneficiation process at mines .	No proposal	None	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No issue observed related to mineral conservation.

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## Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Yes as per proposal	Nil
8b	Concurrent use or storage of topsoil	Concurrent use for plantation.	Concurrent use for plantation.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Only subgrade dumps.	Only subgrade dumps.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal given	None	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal duirng the last year.	Nil	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	1000 nos. plantation proposed over an area 0.8 hect. during the year 2021-22.	5750 nos. plantation has been carried out over an area 2.2 hect. during the year 2021-22. Cummulative plantation 13558 nos. up to year 2021-22.	Nil
8g	Survival rate	Not specified	88%	Nil
8h	Water sprinkling on roads to control airborne dust	Regular sprinkling of water on haul roads proposed.	Water sprinkling on haul roads was observed.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty is good in and around the mines area.

## Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
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9a	Status of submission of Monthly and Annual returns	Monthly returns submitted up to July 2022 & Annual returns submitted up to 2021-22.	Regular timely submission of returns.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer:Sh. Jitendra K Nagar Geologist :Sh. Manish Madhav Mines Manager :Sh. S D Vairagi	Found correct.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit area : 23.90 Ha Subgrade : 6.85 Ha	Seems corrected.	Nil
9d	Scrutiny of Annual return on afforestation	No. of trees planted : 5750 (Inside lease area)	Seems corrected.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Quantity - 25,800 tons Quality - 41.10% CaO	Seems corrected.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	No ROM stock reported & Grade wise stock reported -1084236 tonnes	Seems corrected	This is subgrade mineral stock.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex. mine price: Rs.188.95 & Production cost: Rs.188.95	This is captive mine hence cost of production & ex-mine price is same. Figures seems corrected.	Nil
9h	Scrutiny of Annual return on fixed assets	Value of fixed assetsRs.738517461	Seems corrected	Nil
9k	Scrutiny of Annual return on mining machineries	Details of mine machineries given in Annual Return.	Machinery deployment was observed.	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

**Date :**

**(DATA RAM GURJAR)**

Indian Bureau of Mines