

**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. RC VYAS, MINES MANAGER
Official with
Designation
- (iv) Date of Inspection : 20-OCT-19
- (v) Prev.inspection date : 05-MAR-19

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 : **maheem.kachhwaha@jkcement.co**
- 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 correspondance** : **PO- MANGROL**
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 : KAILASH NATH
 50 MIG BUNGLOW W BLOCK JUHI
 KESHAV NAGAR KANPUR UP
 CHITTORGARH RAJASTHAN
 Phone: 0512-2371478-81
 FAX : 0512-2332665

Agent : MAHEEM KACHWAHA
 J.K.CEMENT WORKS NIMBAEHRA
 CHITTORGARH CHITTORGARH
 RAJASTHAN
 Phone: 01477-22087
 FAX : 01477-220027

Mining Engineer

Name : P.K. JOSHI, Full Time
 Qualification : B.E. (Mining) FCC
 Appointment/ : 11-APR-13
 Termination date

Geologist

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

Manager

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

6. Date of approval of Mining Plan/Scheme of Mining : Fresh under rule 22 MCR1960 22-MAR-10

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	Nil	Nil
1b	Exploration over lease area for geological axis 1 or 2	During the year 2018-19 no exploration proposal given.	Nil	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	During the year 2018-19 no exploration proposal given.	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal given in approved mining plan.	Nil	Area Under G1-50.829 hect. G3-2.945 hect.(Subgrade zone) & 71.269 hect(No mineralised & subgrade zone)
1e	Balance reserve as on 01/04/20	Balance reserves as on 01.04.2019(Proved & probable) 44.62 mill. Tons	Balance reserves as on 01.04.2019 (Proved & probable) 44.62 mill. Tons	
1f	General remarks of inspecting officers on geology, exploration etc			No exploration proposal during the last year.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	One pit along the eastern boundary of the lease area.	Pit was developed on proposed location.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Yes, Benches only in mineral	Benches only in mineral	Nil

2c	Stripping ratio or ore to OB ratio	1:0	1:0	Nil
2d	Quantity of topsoil generation in m3	16631.52 m3 during the year 2018-19.	10769.23 m3 during the year 2018-19.	Nil
2e	Quantity of overburden generation in m3	No OB generation proposal	Nil	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of mine pit carried out on same location as proposed however orientations of proposed benches have not been maintained as per approved proposals during the year 2018-19 hence violation of rule 11(1) of MCDR 2017 issued to the lessee.

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	18,99,392.40 Tons (2018-19)	14,16,889.54 Tons (2018-19)	
3c	Recovery of sailable/usable mineral from ROM production	14,00,389.80 Tons	13,33,161.54 Tons	Nil
3d	Quantity of mineral reject generation	No proposal	Nil	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Nil	Nil
3f	Quantity of sub grade mineral generation.	4,99,003.40 Tons (2018-19)	83,728.00 Tons (2018-19)	Nil

3g	Grade of sub grade mineral generation	LSF 68.04, CaO 34% to 40% & MgO 5% max	LSF 68, CaO 41.26% & MgO 0.77%	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 proposed.	None	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, drilling and blasting in proposal given	Drilling and blasting is being carried out as per approved proposals.	Nil
3k	Provision of mining machineries in mineral benches	Using Hyd. Excavator, Drill machine, Dozer and Tipper.	Using Hyd. Excavator, Drill machine, Dozer and Tipper.	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	Area under mining =32.919 ha. at the end of mining plan period i.e. 2021-22.	19.20 hect. under mining up to year 2018-19.	Nil
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	Total 48.99 hect. area will be utilised under different heads up to end of mining plan period (2021-22).	Total 31.207 hect. area utilised up to the end of year 2018-19 as per annual return 2018-19.	Nil

3p	Production of ROM mineral during the last five year period as applicable	2018-19: 18,99,393.20 Tons 2017-18: 18,99,000.00 Tons 2016-17: 14,91,080.00 Tons 2015-16: 9,96,600.00 Tons 2014-15: 7,99,680.00 Tons	2018-19: 14,16,889.54 Tons 2017-18: 15,02,338.48 Tons 2016-17: 10,42,313.46 Tons 2015-16: 1223518.55 Tons 2014-15: 5,75,579.32 Tons	Nil
3q	General remarks of inspecting officers on method of mining etc.			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)	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 dump no.1 - Between section lines ML 0-4 Subgrade dump no.2 - Between section lines ML A-1 Subgrade dump no.3 - Between section lines ML 8-10	Subgrade dumping is being carried out on proposed locations: Subgrade dump no.1 - Between section lines ML 0-4 Subgrade dump no.2 - Between section lines ML A-1 Subgrade dump no.3 - Between section lines ML 8-10	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.	Nil	Nil	Nil
4g	Number of dumps established.	No proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	No proposal given for the year 2018-19	Nil	Nil
4i	Length of Retaining wall or garland drain all along dumps	No proposal during the year 2018-19	Nil	Nil
4j	Number of settling ponds	No proposal	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	Nil	Nil
5b	Area under backfilling of mined out area	No backfilling proposal	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 of backfilling during the last year.

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).	Submitted	Submitted on time.	Nil
6b	Area available for rehabilitation (ha) .	0.8 Ha	0.72 Ha	Nil
6c	afforestation done (ha).	0.8 Ha	0.72 Ha	Nil
6d	No. of saplings planted during the year	1000 nos.	1195 nos.	Nil
6e	Cumulative no .of plants	Not specified	5255 nos.	Nil
6f	Any other method of rehabilitation	No proposal	Nil	Nil
6g	Cost incurred on watch and care during the year	Rs. 75,000.00	Rs. 2,03,133.00	Nil

6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal of backfilling	Nil	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	N/A	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	Nil	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Nil	Rain water was accumulated in the bottom of pit.
6l	Compliance on reclamation and rehabilitation by backfilling (v)any other specific means.	No proposal	Nil	Nil
6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1000 nos.	1195 nos.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	0.8 hect.	0.72 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)	Environment monitoring will be carried out as per EC & consent of operate conditions.	Environment monitoring is being carried out as per EC & consent of operate conditions.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliance is staisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	14,00,389.80 Tons usable grade limestone will be dispatched to captive cement plant duiring the year 2018-19.	13,33,161.54 Tons usable grade limestone dispatched to captive cement plant duiring the year 2018-19.	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.	
7d	Any beneficiation process at mines	Noproposal	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues			No issue observed related to mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
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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 during 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 2018-19	1195 nos. plantation has been carried out over an area 0.72 hect. during the year 2018-19. Cumulative plantation 5255 nos. up to year 2018-19.	Nil
8g	Survival rate	75%	70%	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 Oct. 2019 & Annual returns submitted up to 2018-19.	Regular timely submission of returns.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Details given Geologist : Sh. Manish Madhav Mining Engineer : Sh. P K Joshi Mines Manager : Sh. R C Vyas	Found correct.	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit area : 19.203 Ha Reclaimed area: 0.00 Ha Occupied by plant & roads etc.-3.258 Ha. Dumps : 5.187 Ha Others: 3.559 ha.	Found ok	Nil
9d	Scrutiny of Annual return on afforestation	Details given No. of trees planted : 1195 (Inside lease area)	Found ok	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral reject generation.	Found ok	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Details given in AR Closing stock of up to year 2018-19 is 947776 tonnes.	This is subgrade mineral stock stacked at the earmarked place in the lease area.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Details given Cost of production- Rs. 166.96 per tonne.	This is captive mine hence cost of production & ex-mine price is same.	Nil
9h	Scrutiny of Annual return on fixed assets	Details given of Fixed assets. Rs. 10015297502	This is combined information along with other mines of the Company	Nil

9k	Scrutiny of Annual return on mining machineries	Details of mine machineries given in Annual Return.	Machinery deployment was observed.	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 11(1)	07-NOV-19			

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines