

**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 : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sh. Sohan Das Vairagi, Mine Manager and Sh. O.P. Shar
Official with
Designation
- (iv) Date of Inspection : 22-OCT-23
- (v) Prev.inspection date : 15-JUL-22

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
MP modif under 17(3) MCR 2016 07-SEP-22

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal of exploration during previous year 2021-22.	No exploration during the previous year 2021-22.	Nil
1b	Exploration over lease area for geological axis 1 or 2	No proposal of exploration during reporting year (RY) 2022-23.	No exploration during the Reporting year (RY) 2022-23.	Entire area covered under G1 level of exploration
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable as no proposal.	Not applicable.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not applicable as no proposal.	Not applicable.	Nil
1e	Balance reserve as on 01/04/20	Reserve and resource as on 01/04/20222 was 42.74 and 82.94 million tons respectively.	Reserve and resource as on 01/04/20222 was 42.74 and 82.94 million tons respectively.	Nil
1f	General remarks of inspecting officers on geology, exploration etc	No proposal of exploration.	Not applicable.	Entire area covered under G1 level of exploration.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	N2732493 to N2732117/E4678 95 to 467681	Development has been carried out within the approved limit.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate removal of top soil and mineral. No proposal of OB generation.	Top soil and mineral removed separately. No OB generation during RY.	Nil

2c	Stripping ratio or ore to OB ratio	1:0.00 T/T	1:0.00 T/T	Nil
2d	Quantity of topsoil generation in m3	34.97 CuM	32.17 CuM	Nil
2e	Quantity of overburden generation in m3	No proposal.	No OB/waste generation during RY.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Opencast method of development has been proposed.	Opencast method of development is being practiced.	Development method proposed is suitable for the kind of deposit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	One.	One.	Nil
3b	Quantity of ROM mineral production proposed	1,10,296.10 tons	1,09,329.07 tons	Nil
3c	Recovery of sailable/usable mineral from ROM production	1,10,296.10 tons	1,09,329.07 tons	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.	No proposal.	Not applicable.	Nil
3g	Grade of sub grade mineral generation	No proposal.	Not applicable.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	No processing within lease area.	Entire ROM is being sent to the cement plant for further processing.	Nil

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal.	Not applicable.	Nil
3j	Provision of drilling and blasting in mineral benches	Blast hole of 115 mm dia in Staggered pattern along with ANFO & Booster has been proposed.	Drilling and blasting is being carried out as per proposal.	Nil
3k	Provision of mining machineries in mineral benches	Hydraulic excavator, dumper, drilling machine, dozer etc.	Hydraulic excavator, dumper, drilling machine, dozer etc.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of the benches have been proposed to 8 mts.	Height of the benches have been maintained to 8 mts.	Nil
3m	Total area covered under excavation/pits	24.065 Ha	23.939 Ha	Up to 31.3.2023
3n	Ore to OB ratio for the pit/mine during the year.	1:0.00 T/T	1:0.00 T/T	Nil
3o	Total area put in use under different heads at the end of year	As per approved document 07/09/2022 an area of 34.55 hectare has been proposed under various heads at the end of the year 2022-23.	Area degraded under excavation/pits as on 31/03/2023 was 33.99 hectare.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2018-19: 1899393.20 2019-20: 1674357.58 2020-21: 1498768.30 2021-22: 1498775.00 2022-23: 110296.10	2018-19: 1416889.54 2019-20: 1389693.55 2020-21: 974836.35 2021-22: 1017878.29 2022-23: 109329.07	All figures in metric tons.

3q General remarks of inspecting officers on method of mining etc. Nil

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	Concurrent use of top soil. No proposal of waste and MR generation.	Top soil generated used for plantation. No waste and MR generation.	Top soil of 32.17 Cum Generated during RY.
4b	Location of topsoil, OB and mineral reject dumps	Concurrent use of top soil. No proposal of waste and MR generation.	Top soil generated used for plantation. No waste and MR generation.	Top soil used for plantation.
4c	Number of dumps within lease area and outside of lease area	Within lease area: 03- Mineral reject/Sub-grade stacks. Outside lease area: No proposal.	Within lease area: 03- Mineral reject/Sub-grade stacks. Outside lease area: No proposal.	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Mineral reject : Outside ultimate pit limit.	Mineral reject : Outside ultimate pit limit.	Nil
4e	Number of active and alive dumps.	03 Mineral reject/Sub-grade stacks.	03 Mineral reject/Sub-grade stacks.	Nil
4f	Number of dead dumps.	No proposal.	Not applicable.	Nil
4g	Number of dumps established.	No proposal.	Not applicable.	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Retaining wall-Proposed. Garland drain- No Proposal.	Retaining wall-Not constructed. Garland Drain-Observed.	Nil
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall-106m Garland drain- Nil	Retaining wall-Nil Garland-Nil	Violation of rule 11(1) of MCDR, 2017 issued for shortfall in retaining wall construction.
4j	Number of settling ponds	No proposal.	Not applicable.	Nil

4k	Specific comments of inspecting officer on waste dump management	No proposal of waste dumping.	No waste has been generated. There are 03 MR/Sub-grade dumps.	No issue related to waste dumping.
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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 proposal.	No backfilling during reporting year.	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Top soil proposed to use for plantation work.	Top soil generated has been consumed for plantation work.	Top soil of 32.17 Cum Generated during RY.
5d	Total area fully reclaimed and rehabilitated	No proposal.	Not Applicable	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.	No proposal of backfilling.	NIL	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).	As per rule 26 of MCDR, 2017 holder of mining lease shall submit PMCP before 1st day of July every year.	PMCP report for the year 2022-23 has been submitted.	Nil
6b	Area available for rehabilitation (ha) .	No proposal.	Not applicable.	Nil

6c	afforestation done (ha).	1.2 hectare.	2.71 hectare.	Nil
6d	No. of saplings planted during the year	1500 no.	6790 no.	Nil
6e	Cumulative no .of plants	Not Specified.	Cumulatively 20348 saplings have been planted as on 31/03/2023.	Nil
6f	Any other method of rehabilitation	No proposal.	Not applicable.	Nil
6g	Cost incurred on watch and care during the year	No proposal.	Rs. 4,69,438.00	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 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 proposal.	Not applicable.	Nil

6m	Compliance of rehabilitation of waste land within lease (i)afforestation	1500 no.	6790 no.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	1.20 hectare.	2.71 hectare.	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)	Regularly monitoring of environmental parameters.	Environment parameters are being monitoring as per norms.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	An area of 1.20 hectare with 1500 number of saplings has been proposed to plant.	An area of 2.71 hectare with 6790 number of saplings has been planted within lease area.	PMCP compliances are satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	No grade wise sorting is proposed.	Entire ROM fed to crusher located at cement plant.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No proposal	Not applicable.	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	Entire ROM is proposed to use in cement plant after crushing and screening.	Beneficiation of ROM is not required as ROM is directly usable in cement plant after crushing and screening.	No issue 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)	Top soil of 34.97 CuM was proposed to generate.	Top soil of 34.97 CuM was proposed to generate. Top soil of 32.15 CuM was generated during RY.	Nil
8b	Concurrent use or storage of topsoil	Concurrent use of top soil.	Top soil generated used for plantation.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of Mineral reject/Sub-grade material.	There are three MR/Sub-grade dumps in lease area.	No waste/MR generation during the year.
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)	An area of 1.20 hectare with 1500 number of saplings has been proposed to plant.	An area of 2.71 hectare with 6790 number of saplings has been planted within lease area.	Nil
8g	Survival rate	No proposal.	90% as per AR 2022-23.	Nil

8h	Water sprinkling on roads to control airborne dust	To control the air born dust particle, water sprinkling has been proposed.	Waster sprinkling has been observed during the mine inspection.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	An area of 1.20 hectare with 1500 number of saplings has been proposed to plant.	An area of 2.71 hectare with 6790 number of saplings has been planted within lease area.	The general aesthetic beauty is satisfactory in and around mine area.

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 returns to be submitted.	Annual and Monthly returns for RY have been submitted.	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. Ramesh Chandra Vyash	Manager, Mining Engineer and Geologist are appointed.	Scrutiny of AR 2022-23.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Total of 33.91 hectare has been furnished under various heads.	The information of land use furnished appears in order.	Nil
9d	Scrutiny of Annual return on afforestation	6790 nos. within ML & Nil outside ML.	Found to be in order.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Mineral Reject: Nil	No mineral reject generation during RY.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM and graded ore closing stock: NIL	No stock as entire mineral consumed in captive cement plant during RY.	Nil

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price and cost of production: Rs 204.60 /tons.	Found to be in order	Nil
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets (Rs) 735039475 /-	Appears to be in order.	Nil
9k	Scrutiny of Annual return on mining machineries	Shovel, Rock Drill, Tipper, Water Tanker, Pumps etc.	Shovel, Rock Drill, Tipper, Water Tanker, Pumps etc.	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 11(1)	01-DEC-23			

Date :

(DILIP JAIN)

Indian Bureau of Mines