

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-3

Mine code : 38RAJ09003

- (i) Name of the Inspecting : **G021**) **DATA RAM GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. Dilip Kumar Dhakar, Mine Manager
Official with
Designation
- (iv) Date of Inspection : 21-SEP-22
- (v) Prev.inspection date : 02-MAR-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MALIAKHERA**
- (b) **Registration NO.** : **IBM/418/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
State : RAJASTHAN
District : CHITTORGARH
Village : MALIAKHERA
Taluka : NIMBAHERA
Post office : PHALWA
Pin Code : 312617
FAX No. : 01477-220027
E-mail : mines.nbh@jkcement.com
Phone : 01477-220087
- (f) Police Station : NIMBAHERA
- (g) First opening date : 24-JUN-89
- (h) Weekly day of rest : WED
2. Address for : VILLAGE-NIMBAHERA
correspondance : POST-KAILASH NAGAR, Nimbahera
DISTT-CHITTORGARH (Raj.)
3. (a) Lease Number : RAJ0007
- (b) Lease area : 315.41
- (c) Period of lease : 50
- (d) Date of Expiry : 12-FEB-34
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 : Shri D K Dhakar, Full Time
Qualification : BE, FCC
Appointment/ : 01-MAR-19
Termination date

Geologist

Name : Rajneesh Kothari, Full Time
Qualification : M.sc.(Tech) Applied geology
Appointment/ : 13-MAY-15
Termination date

Manager

Name : D.K.Dhakar
Qualification : B.E
Appointment/ : 01-MAR-19
Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Modif. approved Mining Scheme	15-JAN-04
		Renewal under rule 22 MCR1960	01-OCT-04
		Mining Scheme rule 12 MCDR1988	03-MAR-09
		Renewal under rule 24 MCR1960	19-JAN-15
		Mining Scheme rule 12 MCDR1988	20-MAY-15
		MP modif under 17(3) MCR 2016	23-MAY-18
		MP modif under 17(3) MCR 2016	29-NOV-18
		MP review under 17(1) MCR 2016	25-NOV-19
		MP modif under 17(3) MCR 2016	24-NOV-20

PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	No proposal during the previous year 2020-21.	None during the previous year 2020-21.	No backlog of previous year.
1b	Exploration over lease area for geological axis 1 or 2	During the year 2021-22 total 39 boreholes (2580m) proposed.	During the year 2021-22 total 39 nos. of bore holes(3888.50m) drilling has been carried out.	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Exploration Agency: Departmentally / M/s Synergy Geotech Private Ltd., Nagpur Expenditures: Not specified	Exploration Agency: M/s Synergy Geotech Private Ltd., Nagpur Expenditures: Rs. 5.268 Lacs.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	During the year 2021-22 it is proposed that 146.669 hect. area will be covered under G1 level.	During the year 2021-22 total 146.669 hect. area covered under G1 level.	At the end of year 2021-22, entire lease area has been explored under G1 level.
1e	Balance reserve as on 01/04/20	No specific proposal given in this regard.	Balance reserve as on 01.04.2022 Proved Mineral Reserve (111) - 96.202 Million Tonnes, Probable Mineral Reserve (122)- 68.213 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
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2a	Location of development w.r.t.lease area	2021-22: Pit 1 E/W 461082 460305 N/S 2730602 2729255	During the year 2021-22, mine development has been carried out within proposed limit.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No top soil & OB benches proposed, only mineral benches proposed.	Top soil Benches - Nil, Overburden Benches- Nil, Mineral Limestone Benches- 5 Benches	Nil
2c	Stripping ratio or ore to OB ratio	2021-22: 1 : 0.026	2021-22: 1 : 0.010	Nil
2d	Quantity of topsoil generation in m3	2021-22: 17482.52 Cu.m	2021-22: 13594.40 Cu.m.	Nil
2e	Quantity of overburden generation in m3	2021-22: 118881.12 Cu.m.	2021-22: 40886.01 Cu.m.	Interburden (clay)/ Screen rejects
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development has been carried out as per proposal.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2021-22: One	2021-22: One	Nil
3b	Quantity of ROM mineral production proposed	2021-22: 46,05,119.01 Tonnes	2021-22: 39,50,876.919 Tonnes	Nil
3c	Recovery of sailable/usable mineral from ROM production	2021-22: 42,00,068.01 Tonnes	2021-22: 36,33,227.90 Tonnes	Nil
3d	Quantity of mineral reject generation	No proposal during the year 2021-22.	Not generated during the year 2021-22.	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal during the year 2021-22.	Not applicable	Nil

3f	Quantity of sub grade mineral generation.	2021-22: 4,05,051.00 Tonnes	2021-22: 3,17,649.019 Tonnes	Nil
3g	Grade of sub grade mineral generation	CaO -- 39.8% MgO -- 0.9%	CaO -- 39.47% MgO -- 1.11%	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised Method	Mechanised Method	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study proposed.	None during the year.	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, drilling will be done by Nakoda Indus (4.5 inch dia), DTH drills holes will be blasted by explosive (Kelvex 600 and ANFO).	Yes, drilling is done by Nakoda Indus (4.5 inch dia), DTH drills holes are blasted by explosive (Kelvex 600 and ANFO).	Nil
3k	Provision of mining machineries in mineral benches	Hyd. Excavator, Drill Mach., Dozer, Tipper etc.	Hyd. Excavator, Drill Mach., Dozer, Tipper etc.	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes suitable to the deposit.	Nil
3m	Total area covered under excavation/pits	77.440 Hect.(As on 31.03.2022)	75.40 Hect.(As on 31.03.2022)	Nil
3n	Ore to OB ratio for the pit/mine during the year.	2021-22: 1 : 0.026	2021-22: 1 : 0.010	Nil
3o	Total area put in use under different heads at the end of year	105.952 Hects.(upto 31.03.2022)	97.088 Hects.(upto 31.03.2022)	Nil

3p	Production of ROM mineral during the last five year period as applicable	2017-18 - 1900000.21T 2018-19 - 2112068.515 T 2019-20 - 4175000T 2020-21 - 3150003.96T, 2021-22 - 4605119.01T	2017-18 -1560893T 2018-19 - 1686388 T 2019-20 - 2545017T 2020-21 - 2999393T 2021-22 - 3950876 T	Nil
3q	General remarks of inspecting officers on method of mining etc.	Open cast method of mining has been proposed.	Open cast mining method is being practiced.	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)	No proposal of top soil dumping, direct use in plantation. Interstitial clay/ Waste & Subgrade dumping proposal given.	Top soil is used in plantation area. Interstitial clay/ screen reject & Subgrade dumping has been carried out on proposed location.	Nil
4b	Location of topsoil, OB and mineral reject dumps	Interburden (clay)/ Screen rejects/ Waste generation in South side between section line ML 22-23. Subgrade dump between ML 19 - ML 22-23 in SE side of Mining lease.	Within proposed location.	Nil
4c	Number of dumps within lease area and outside of lease area	Two dumps (Within lease) Subgrade dump -- 1 Nos. Interburden (clay)/ Waste sump -- 1 Nos.	Two dumps (Within lease) Subgrade dump -- 1 Nos. Interburden (clay)/ Waste sump -- 1 Nos.	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.	Active dumps - 02 Nos. (one Subgrade dump & one Interburden (clay)/Screen reject dump)	Active dumps -- 02 Nos. (one Subgrade Interburden (clay)/Screen reject dump)	Nil
4f	Number of dead dumps.	No proposal	Nil	Nil
4g	Number of dumps established.	No proposal	Nil	Nil
4h	Whether Retaining wall or garland drain all along dumps are there.	Garland drain proposed during the year.	Garland drain made during the year.	Nil
4i	Length of Retaining wall or garland drain all along dumps	2021-22: 400 m (Garland drain) & 800 m fencing	2021-22: 415 m (Garland drain) & 1100 m fencing	Nil
4j	Number of settling ponds	No proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management			No issue related to waste dump management.

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.	None during the year.	Nil
5b	Area under backfilling of mined out area	No backfilling proposal during the last year.	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 during the last year.	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			No backfilling & reclamation proposal 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).	PMCP report should be submitted before 1st July for the previous financial year.	Yes, PMCP report 2021-22 submitted within time limit.	Nil
6b	Area available for rehabilitation (ha) .	2021-22: Area --4.46 Hects.	2021-22: Area covered - 7.905 Hects.	Nil
6c	afforestation done (ha).	2021-22: Area --4.46 Hects.	2021-22: Area covered - 7.905 Hects.	Nil
6d	No. of saplings planted during the year	2021-22: 4460 Nos.	Year 2021-22: 33316 nos. sapling planted within lease area.	Nil
6e	Cumulative no .of plants	No such specicfic proposal given	Within Lease -- 67116 Nos. Outside Lease -- 13779 Nos.	Up to year 2021-22.
6f	Any other method of rehabilitation	No proposal	None	Nil
6g	Cost incurred on watch and care during the year	No specific proposal given	2021-22: Rs. 6.7 lakh	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal of backfilling.	No backfilling has been carred out during the year.	Nil

6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Nil	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	Nil	However rain water was accumulated in pit bottom.
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	Afforestation -- 4460 Nos. of plants, Area - 4.46 Hects within lease.	7.905 Hects. (Afforestation within lease) having 22316 nos. saplings.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	2021-22: Area --4.59 Hects.	2021-22: Area -- 7.905 Hects.	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)	Yes	Yes, Compliances of environmental monitoring is being carried out.	Nil

6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	PMCP compliances 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	Usable Limestone dispatched for Cement manufacturing in captive cement plant.	Usable Limestone dispatched for Cement manufacturing in captive cement plant.	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.	Subgrade mineral CaO -- 39.8% MgO -- 0.8%	Subgrade mineral CaO -- 39.47% MgO -- 1.11%	Nil
7d	Any beneficiation process at mines	No proposal during the year.	None	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
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Yes for plantation.	Nil
8b	Concurrent use or storage of topsoil	Plantation	Plantation	Nil

8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes as per proposal	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such 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 except plantation.	Plantation has been carried out as per proposal.	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year 2021-22, total 4460nos. plantation proposal over an area 4.46 hect.	22316 Nos. of plants planted covering 7.905 Hects. area within lease during the year 2021-22.	Nil
8g	Survival rate	Not specified	90%	Nil
8h	Water sprinkling on roads to control airborne dust	Proposed	Observed	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The general aesthetic beauty in and around mine area is satisfactory.

Compliance of Rule 45:

Sl.No.	Item	Proposals	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.	Monthly returns and Annual returns have been submitted timely.	Nil

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer - Sh. Dilip Kumar Dhakar Geologist - Sh. Rajneesh Kothari Manager - Sh. Dilip Kumar Dhakar	Found ok	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR.	Seems to be correct.	Nil
9d	Scrutiny of Annual return on afforestation	Within lease - 22316 Nos	Seems to be correct.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Not reported	No mineral reject reported	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Balance - 1444490.981 Tons & Closing Balance - 1762140.00 Tons	Seems correct.	Subgrade stock.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost & Ex-Mine Price- Rs. 166.49/- per tonne	Seems correct	Captive mine
9h	Scrutiny of Annual return on fixed assets	Fixed assest Rs. 665906382	Seems correct.	Nil
9k	Scrutiny of Annual return on mining machineries	Detail given in AR.	Found in order.	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 31(4)	03-OCT-22			

Date :

(DATA RAM GURJAR)

Indian Bureau of Mines