

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-3

Mine code : 38RAJ09004

- (i) Name of the Inspecting : **G021**) **DATA RAM GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Sh. R.C Vyas, Mine Manager & Sh. Om Prakash Sharma, G
Official with
Designation
- (iv) Date of Inspection : 19-JUL-23
- (v) Prev.inspection date : 20-SEP-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **MANGROL TILAKHERA**
- (b) **Registration NO.** : **IBM/418/2017**
- (c) **Category** : **A Mechanised**
- (d) **Type of Working** : **Opencast**
- (e) **Postal address**
- State : **RAJASTHAN**
- District : **CHITTORGARH**
- Village : **MANGROL, TILAKHERA**
- Taluka : **NIMBAHERA**
- Post office : **MANGROL**
- Pin Code : **312617**
- FAX No. : **91-512-2332665, 2399854**
- E-mail : **manish.toshniwal@jkcement.co**
- Phone : **91-512-2371478, 2371479, 2371**
- (f) **Police Station** : **NIMBAHERA**
- (g) **First opening date** : **09-MAY-79**
- (h) **Weekly day of rest** : **WED**
2. **Address for correspondance** : **VILLAGE-MANGROL & TILAKHERA**
POST-MANGROL
DISTT-CHITTORGARH
3. (a) **Lease Number** : **RAJ0009**
- (b) **Lease area** : **299.2**
- (c) **Period of lease** :
- (d) **Date of Expiry** : **31-MAR-30**
4. **Mineral worked** : **LIMESTONE** **Main**

5. Name and Address of the

Lessee : J.K.Cement Works
Kailashnagar Nimbahera
CHITTOGARH 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
CHITTOGARH RAJASTHAN
Phone: 01477-20087,220562
FAX : 01477-20087,220

Mining Engineer

Name : Nand Kishrore Dhakar,Full Time
Qualification : BE Mining
Appointment/ : 19-SEP-21
Termination date

Geologist

Name : Om Prakash Sharma,Full Time
Qualification : MSC Geology
Appointment/ : 01-JUL-15
Termination date

Manager

Name : L.S.POKHARNA
Qualification : BE MINING
Appointment/ : 11-NOV-18 18-AUG-21
Termination date

Manager

Name : R.C.Vyas
Qualification : Diploma in mining and FCC
Appointment/ : 19-AUG-21
Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	01-OCT-04
		FMCP under 23C(1)	24-JAN-07
		Mining Scheme rule 12 MCDR1988	04-AUG-10
		Modif.approved Mining Scheme	25-JUL-11
		Mining Scheme rule 12 MCDR1988	06-APR-15
		MP review under 17(1) MCR 2016	16-NOV-17
		MP modif under 17(3) MCR 2016	03-JAN-19
		MP review under 17(1) MCR 2016	27-JAN-23

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 2021-22.	None	Nil
1b	Exploration over lease area for geological axis 1 or 2	No exploration proposed during the year 2022-23.	None	Entire potential mineralised area(76.07 hect.) within mining lease has been explored up to G1 level.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	No exploration proposed during the year 2022-23.	None	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal during the year 2022-23.	None	Total ML area- 299.20 hect, Mineralised area- 76.07 hect & Mon Mineralised area- 223.13 hect. area. Entire mineralised area has been explored under G1 level.
1e	Balance reserve as on 01/04/20	No specific proposal given in this regard.	The position of reserve as on 31.03.2023 111-25.662 million tonnes, 121-3.345 million tonnes	As reported in AR 2022-23.
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	Northern side & southern side of the lease area.	Northern side & southern side of the lease area.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Benches proposed in mineral .	As per proposal.	Nil

2c	Stripping ratio or ore to OB ratio	2022-23 : 1:0.017	2022-23 : 1:0.066	Nil
2d	Quantity of topsoil generation in m3	2022-23: 6993	2022-23: 6937	Nil
2e	Quantity of overburden generation in m3	2022-23: 27972.02	2022-23: 27184.62	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			No issue observed related to mine development.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2022-23: 2 Pits (North pit & South Pit)	2022-23: 2 Pits (North pit & South Pit)	Nil
3b	Quantity of ROM mineral production proposed	2022-23: 23,50,000 T	2022-23: 23,30,786.01 T	Nil
3c	Recovery of sailable/usable mineral from ROM production	2022-23: 1800000 tonnes	2022-23: 1788728.01 tonnes	Nil
3d	Quantity of mineral reject generation	No proposal during the year	Not generated during the year	Nil
3e	Grade of mineral rejects generation and threshold value declared.	No proposal	Not applicable as no mineral reject generated during the year.	Nil
3f	Quantity of sub grade mineral generation.	2022-23: 5,50,000 tonnes	2022-23: 5,42,058 tonnes	
3g	Grade of sub grade mineral generation	CaO:39.91%	CaO: 38.50%`	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 proposal	None	Nil
3j	Provision of drilling and blasting in mineral benches	Yes, proposed	As per proposal	Nil
3k	Provision of mining machineries in mineral benches	Using Hyd. Excavator, Drill machine, Dozer and Tipper.	As per proposal	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	2022-23: 46.178 Ha.	2022-23: 45.94 Ha.	Up to year 2022-23.
3n	Ore to OB ratio for the pit/mine during the year.	2022-23 : 1:0.017	2022-23 : 1:0.066	Nil
3o	Total area put in use under different heads at the end of year	It is proposed that at the end of mining plan period i.e 2022-23 total area put to use under different heads-143.249 Ha.(Including plantation)	At the end of year 2021-22 total area put ot use under different heads- 140.896 hect. (Including plantation)	Nil
3p	Production of ROM mineral during the last five year period as applicable	2018-19: 19,09,129.50 T 2019-20: 18,57,868.03 T 2020-21: 19,67,443.32 T 2021-22: 23,50,000 T 2022-23: 23,50,000 T 2023-24: 20,22,602.66 T	2018-19: 14,92,276.13 T 2019-20: 13,27,998.85 T 2020-21: 15,43,237.06 T 2021-22: 20,75,834.25 T 2022-23: 23,30,786.01 T 2023-24: 5,30,481.91 T (up to 17.07.2023)	Nil

3q General remarks of inspecting officers on method of mining etc. Open cast fully mechanised mining method adopted which 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 proposal of interstitial clay/waste & Subgrade mineral.	Separate dumping of interstitial clay/waste & subgrade mineral.	Nil
4b	Location of topsoil, OB and mineral reject dumps	2022-23: Top soil :Use for Plantation Interstitial clay/waste dump : Between section lines ML 20 to ML21 Subgrade : Between section lines MLB to ML1 & ML5 to ML7	2021-22: Top soil use for plantation Interstitial clay/waste dump : Between section lines MLB to ML1 & ML5 to ML7.	Interstitial clay/waste dumping has not been carried out on proposed location during the year 2022-23 but RMP has been approved for the period 2023-24 to 2027-28 vide dated 27.01.2023. Currently Interstitial clay/waste dumping is being carried out as per proposal.
4c	Number of dumps within lease area and outside of lease area	02 Subgrade dump 03 Interstitial clay/waste dump	02 Subgrade dump 03 Interstitial clay/waste dump	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.	All dumps are active	All dumps are active	Nil
4f	Number of dead dumps.	No proposal	Nil	Nil
4g	Number of dumps established.	No proposal	None	Nil

4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Garland drain was there.	Nil
4i	Length of Retaining wall or garland drain all along dumps	2022-23: 148m	2022-23: 148m garland drain	Nil
4j	Number of settling ponds	No proposal	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management			No issue observed 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.	Not proposed	Nil	Nil
5b	Area under backfilling of mined out area	No proposal	Nil	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Proposed for plantation	Used for plantation	Nil
5d	Total area fully reclaimed and rehabilitated	No proposal	Nil	Nil
5e	General remarks of inspecting officers on backfilling and reclamation etc.			Pits are active hence backfilling has not been carried out.

Progressive Mine Clousre Plan:

Sl.No.	Item	Propasals	Actual work	Remarks
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6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	PMCP report shall be submit up to 1 july for the previous financial year.	PMCP report for the year 2021-22 submitted on time.	Timely submission.
6b	Area available for rehabilitation (ha) .	2022-23: 2.0 hect.	2022-23: 2.8 hect.	Nil
6c	afforestation done (ha).	2022-23: 2.0 hect.	2022-23: 2.8 hect.	Nil
6d	No. of saplings planted during the year	2022-23: 2000 nos.	2022-23: 5785 nos.	Nil
6e	Cumulative no .of plants	Not specified	65936 nos. up to year 2022-23.	Nil
6f	Any other method of rehabilitation	No proposal	None	Nil
6g	Cost incurred on watch and care during the year	Rs.3,75,000	Rs.6,32,760	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	None	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	None	Nil
6j	Compliance on reclamation and rehabilitation by backfilling (iii)Afforestation on on backfilled area	No proposal	None	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	However rain water accumulated at the pit bottom	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	2022-23: 2000 nos.	2022-23: 5785 nos.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	2022-23: 2.0 hect.	2022-23: 2.8 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)	Regular monitoring proposed.	Regular monitoring is being carried out.	Nil
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.			PMCP compliances is satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Cement grade limestone will be disptached to captive cement plant & sabgrade mineral will be stack at designated place.	As per proposal	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.	Cement grade & subgrade	Cement grade & 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 was observed related to mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes proposal given for separate removal & utilisation of top soil.	As per proposal	Nil
8b	Concurrent use or storage of topsoil	Concurrent use in plantation	As per proposal	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Proposal given for waste dump & subgrade dumps	Separate dumping of waste & subgrade.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	None	Nil

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	None	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	2000 nos. sapling proposed over an area 2.0 ha during the year 2022-23.	5785 nos. sapling planted over an area 2.8 hect. area during the year 2022-23.	Nil
8g	Survival rate	Not specified	91%	As reported in AR 2022-23.
8h	Water sprinkling on roads to control airborne dust	Proposed	Water sprinkling was observed.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			Aesthetic beauty is good 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 & annual return to be submitted.	Monthly & annual return of the mine is being submitted on time as per time line of MCDR 2017.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Sh. Nandkishor Dhaker, Geologist: O P Sharma, Mine Manager: Sh. Ramesh Chandra Vyas	Found Ok	Nil
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in AR 2022-23.	Seems corrected	Nil

9d	Scrutiny of Annual return on afforestation	No. of trees planted : 5785 (Inside lease area)	Seems corrected	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Subgrade: 5,42,058 tons	Seems corrected	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM Stock-Nil, Graded Stock-1999514 T	Same details has also been reported under Subgrade heading in itm 3 of Part V.	Email sent to the party vide dated 30.10.2023 to report subgrade stock at one place only.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Cost of producton & exmine price shown-Rs. 234.14 per ton	Seems to be correct.	Nil
9h	Scrutiny of Annual return on fixed assets	Fixed assets. Rs. 401606781	Seems to be correct.	Nil
9k	Scrutiny of Annual return on mining machineries	Machineries details given	Found correct.	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