

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

MCDR INSPECTION REPORT

Ajmer regional office

Mine file No : RAJ/SRH-7/LST-1

Mine code : 38RAJ24001

- (i) Name of the Inspecting : **G021**) **D R GURJAR**
Officer and ID No.
- (ii) Designation : Sr. Asst. Contrl. Mines
- (iii) Accompanying mine : Shri Praveen Lodha, Mines Manager
Official with
Designation
- (iv) Date of Inspection : 08-AUG-23
- (v) Prev.inspection date : 23-SEP-22

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **LAKSHMI CEMENT**
- (b) **Registration NO.** : **IBM/4816/2011**
- (c) Category : A Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : RAJASTHAN
- District : SIROHI
- Village : BASANTGARH
- Taluka : PINDWARA
- Post office : JAYKAYPURAM
- Pin Code : 307019
- FAX No. : 02972- 244417
- E-mail : lcwmines@lc.jkmail.com
- Phone : 02972- 242267
- (f) Police Station : Pindwara
- (g) First opening date : 02-DEC-81
- (h) Weekly day of rest : MON
2. Address for : J K Lakshmi Cement Works, village Basantgarh
correspondance Teh- Pindwara, District Sirohi, (Raj.)-307019
3. (a) Lease Number : RAJ0017
- (b) Lease area : 390.63
- (c) Period of lease : 50
- (d) Date of Expiry : 06-OCT-50
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : J K LAKSHMI CEMENT LTD.
 JAYKAYPURAM, SIROHI
 SIROHI RAJASTHAN
 Phone:
 FAX :

Owner : Shri A. K. Shukla
 Nehru house, 4 Bahadur Shah
 Jafar Marg, New Delhi DELHI
 DELHI
 Phone: 011-33001112
 FAX :

Agent : Dr.S.K.Saxena
 Qtr, No. J, Jay kay Puram,
 Basantga Distt Sirohi, Raj
 307019 SIROHI RAJASTHAN
 Phone: 8059777444
 FAX :

Mining Engineer
 Name : Shri B. L. Garg, Full Time
 Qualification : Dip. & AMIE
 Appointment/ : 15-APR-16
 Termination date

Geologist
 Name : Dr.A.D.Saxena, Full Time
 Qualification : M.Sc Geo, PhD,
 Appointment/ : 01-NOV-20
 Termination date

Manager
 Name : P. Lodha
 Qualification : B.E.(mining)
 Appointment/ : 07-JUN-10
 Termination date

6. Date of approval of Mining	:	Existing rule 11 MCDR1988	15-FEB-93
Plan/Scheme of Mining	:	Modif.of approved Mining Plan	29-APR-03
	:	Mining Scheme rule 12 MCDR1988	17-FEB-05
	:	Modif.approved Mining Scheme	24-JAN-06
	:	Mining Scheme rule 12 MCDR1988	13-JAN-11
	:	Mining Scheme rule 12 MCDR1988	02-FEB-15
	:	MP review under 17(1) MCR 2016	24-DEC-19
	:	MP modif under 17(3) 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	During the year 2021-22, exploration was proposed by way of drilling 50 bore holes(2750m).	During the year 2021-22, exploration drilling of 50 bore holes(2750m) carried out as per proposal.	No backlog of previous year
1b	Exploration over lease area for geological axis 1 or 2	During the year 2022-23, exploration was proposed by way of drilling 50 bore holes(2750m).	During the year 2022-23, exploration was proposed by way of drilling 50 bore holes(2750m).	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not specified	Agency-M/s Udaipur Mintech Pvt Ltd. Expenditures- Rs.3781250	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	During the year 2022-23, it was proposed to cover 116.57 hect. lease area under G1 level up to depth of 372mRL level.	During the year 2022-23 total 116.57 hect area covered under G1 level.	Total lease area- 390.625 hect. Mineralized area- 212.57 hect. Total mineralised area has been covered under G1 level up to depth of 372mRL level during the year 2021-22 & 2022-23.
1e	Balance reserve as on 01/04/20	As per approved Modification of RMP dated 27.01.2023 ,the position of reserve on 01.11.2022 was 327.409 million tonnes.	Balance reserves as on 01.04.2023 323.874 million tonnes.	However the figure of reserve not reported correctly in AR 2022-23, hence show cause notice for Rule 45(7) of MCDR 2017 issued vide letter dated 04.09.2023.
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	During 2022-23 As per proposal. North West , Central & East side of the lease area proposed to be worked.		Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal of top Soil & O/B benches. Only mineral benches proposed.		Nil
2c	Stripping ratio or ore to OB ratio	2022-23: 1: 0.27	2022-23: 1: 0.23	Nil
2d	Quantity of topsoil generation in m3	No proposal of top soil generation during the reporting year 2022-23. No top soil generated during the year 2022-23.		Nil
2e	Quantity of overburden generation in m3	2022-23: 576923 cubic mts	2022-23: 502322 cubic mts	IB/Face reject
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Mine development has been carried out within proposed limit.

Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	2022-23: One	2022-23: One	Nil
3b	Quantity of ROM mineral production proposed	Year 2022-23: 8000000 Tonnes	Year 2022-23: 7413426 Tonnes	Nil
3c	Recovery of sailable/usable mineral from ROM production	2022-23: 7524947 tonnes	2022-23: 6700176 tonnes	Nil
3d	Quantity of mineral reject generation	2022-23: 500006.70 tonnes	2022-23: 713250 tonnes	Screen Reject generation

3e	Grade of mineral rejects generation and threshold value declared.	CaO < 32%	CaO < 30%	Screen Reject Quality
3f	Quantity of sub grade mineral generation.	No proposal	No subgrade generated during the year 2022-23.	Nil
3g	Grade of sub grade mineral generation	Not applicable as no proposal	Not applicable.	Nil
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Nil
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No proposal during the reporting year	None during the year	
3j	Provision of drilling and blasting in mineral benches	Yes	9mts deep Drilling by IBH-10 For Blasting Site mix , TLD, Down the hole etc. are being utilised as per proposal.	Nil
3k	Provision of mining machineries in mineral benches	Yes	Drilling by IBH-10, L&T shovel of 4 Cubic mts , back Hoe of 2.6 Cu.m. and 1.4 Cu.m. capacity etc. are using as per proposal	Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes	Yes, as per proposal	Nil
3m	Total area covered under excavation/pits	170.21 Hect.	170.28 Hect.	Nil
3n	Ore to OB ratio for the pit/mine during the year.	2022-23: 1: 0.27	2022-23: 1: 0.23	Nil

3o	Total area put in use under different heads at the end of year	It was proposed that total 249.42 ha area put in use under different heads at the end of year 2024-25.	At the end of the year 2022-23, total 245.38 hect area used under different heads.	Nil
3p	Production of ROM mineral during the last five year period as applicable	2018-19: 11.860 million tonnes 2019-20 : 11.860 million tonnes 2020-21: 8.00 million tonnes 2021-22: 8.00 million tonnes 2022-22: 8.00 million tonnes 2023-24: 9.00 million tonnes	2018-19: 6.97 million tonnes 2019-20 : 7.078 million tonnes 2020-21: 6.719 million tonnes 2021-22: 7.52 million tonnes 2022-23: 7.41 million tonnes 2023-24: 2.22 million tonnes(up to 31 Jul 2023)	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)	No top soil proposal. Mineral rejects and IB/Face reject dumping at separate place.	No top soil was generated during the reporting year. Mineral rejects and IB/face reject have been dumped at separate place.	Nil

4b	Location of topsoil, OB and mineral reject dumps	Top soil- No proposal, Screen reject- E299190 to E299302 & N 2732527 to N2732952 IB/Face reject:E 299450 to E 300560 & N2732420 to N 2731200	Top soil- Not generated Screen Reject dump- Within proposed limit. IB/Face reject- E 299450 to E 300620 & N2732600 to N 2731200	Deviation occur in the location of face reject/IB dump with respect to proposal during the year, Violation was already issued for face reject/IB dump location during the previous inspection, subsequently Modification of RMP has already been approved vide dated 27.01.2023 for the year 2023-24 to 2024-25.
4c	Number of dumps within lease area and outside of lease area	Two dumps within lease area	Two dumps within lease area	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Screen reject dump is outside of UPL. Some portion of waste dump lies within UPL limit.	Screen reject dump is outside of UPL. Some portion of waste dump lies within UPL limit. In due course of time it will be rehandled.	Nil
4e	Number of active and alive dumps.	Two	Two	Nil
4f	Number of dead dumps.	No proposal	None	Nil
4g	Number of dumps established.	No specific proposal during the reporting year	None during the year	A part of screen dump 6.50Hect area stabilized.
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Garland drain observed.	During the year 2022-23, total 80m retaining wall was proposed along the screen reject dump, but no such retaining wall was observed during the inspection, hence violation of Rule 11(1) of MCDR 2017 is being issued.

4i	Length of Retaining wall or garland drain all along dumps	2022-23: Retaining wall: 80 Mtr Garland drain:75 Mtr	Year 2022-23: Garland drain:75 Mtr	During the year 2022-23, total 80m retaining wall was proposed along the screen reject dump, but no such retaining wall was observed during the inspection, hence violation of Rule 11(1) of MCDR 2017 is being issued.
4j	Number of settling ponds	No proposal	None	Nil
4k	Specific comments of inspecting officer on waste dump management			During the year 2022-23, total 80m retaining wall was proposed along the screen reject dump, but no such retaining wall was observed during the inspection, hence violation of Rule 11(1) of MCDR 2017 is being issued.

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	None	Nil
5b	Area under backfilling of mined out area	No proposal	None	Nil
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	No proposal.	No top soil generated during the year 2022-23.	
5d	Total area fully reclaimed and rehabilitated	No proposal.	Not applicable as no proposal.	Nil

5e	General remarks of inspecting officers on backfilling and reclamation etc.	Area not matured for backfilling.
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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(2) 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 timely.	Nil
6b	Area available for rehabilitation (ha) .	No such proposal given	Not applicable	Nil
6c	afforestation done (ha).	2022-23: 1.0 hect (virgin area)	2022-23: 2.0 hect. (1 hect. virgin area + 1 hect. over dump area.)	Nil
6d	No. of saplings planted during the year	2022-23: 2000 nos.	2022-23: 3000 nos.	Nil
6e	Cumulative no .of plants	No specific proposal	225720 nos. upto the 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 lakh	Rs. 6.5 lakh	Nil
6h	Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (Lx B x D	No proposal	Not applicable as no proposal	Nil
6i	Compliance on reclamation and rehabilitation by backfilling (ii) Voids filled by waste / tailings	No proposal	Not applicable as no proposal	Nil

6j	Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on backfilled area	No proposal	Not applicable as no proposal	Nil
6k	Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir	No proposal	Not applicable as no proposal	However rain water accumulated at pit bottom.
6l	Compliance on reclamation and rehabilitation by backfilling (v) any other specific means.	No proposal	Not applicable as no proposal	Nil
6m	Compliance of rehabilitation of waste land within lease (i) afforestation	2022-23: 2000 nos.	2022-23: 3000 nos.	Nil
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	1 hect. virgin area	1 hect virgin area +1 hect. dump area	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)	Monitoring proposed.	Regular monitoring is being carried out as per conditions of EC.	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
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7a	ROM Mineral dispatch or grade-wise sorting within lease area	After crushing & screening of ROM mineral, the usable limestone feed to captive cement plant.	After crushing & screening of ROM mineral, the usable limestone feed to captive cement plant.	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	No grade wise sorting proposal was given during reporting year.	None	Nil
7c	Different grade of mineral sorted out at mines.	Not applicable as no proposal.	Not applicable	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.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No topsoil generation proposal during the year 2022-23.	No top soil generated during the year.	Nil
8b	Concurrent use or storage of topsoil	No proposal.	Not applicable as no generation of top soil during the year 2022-23.	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate waste and screen reject dump were proposed.	Seperate waste and screen reject dump observed.	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal given during the reporting year.	None	Nil

8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal during the year.	None	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year, 2000 nos.plantation proposed	3000 nos. plantation have been planted during the year. Cumulative Plantation up to year 2022-23: 225720 nos.	Nil
8g	Survival rate	No specific proposal	60%	As per AR 2022-23.
8h	Water sprinkling on roads to control airborne dust	Regular sprinkling of water on haul roads was proposed.	Regular sprinkling of water on haul roads is being carried out.	Nil
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			The general aesthetic beauty is satisfactory in and around mines area.

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	Shri B.L.Garg, Found Correct. Mining Engg, Dr.A.D.Saxena, Geologist Shri Praveen Lodha, Mine Manager		In AR 2022-23 following discrepancies observed:1)Under item 1(Exploration) of Part-V, the figures of expenditure on exploration during the reporting year is same as cumulative.2)Under item 2(Reserve & Resources) of Part-V, Under depletion of reserve during the year only usable/salable quantity of limestone mineral has been depleted whereas balance reserve as on 31.03.2023 should be calculated after depleting ROM production, hence violation of Rule 45(7) of MCDR 2017 issued vide dated 04.09.23.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Details given in annual return.	Details seems to be correct.	Nil
9d	Scrutiny of Annual return on afforestation	Within Lease 3000 Outside lease : 400	Seems corrected	AR 2022-23.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	No mineral reject generated during the year.	No mineral reject reported in the return.	However screen reject generation are there which was not reported in AR 2022-23, hence show cause notice of Rule 45(7) of MCDR 2017 issued vide letter dated 04.09.2023.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM & Grade wise stock-Nil	Seems corrected	Nil

9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Production cost per tonne & Ex mine price - 291.95	It is captive mine. Information seems corrected.	Nil
9h	Scrutiny of Annual return on fixed assets	Value of Fixed assets reported- Rs. 53389969	Seems corrected	Nil
9k	Scrutiny of Annual return on mining machineries	Details given in AR 2022-23.	Seems corrected	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)	04-SEP-23		MCDR17 Rule 45(7)	04-SEP-23	
MCDR17 Rule 45(7)(a)	04-SEP-23				

Date :

(D R GURJAR)

Indian Bureau of Mines