

**INDIAN BUREAU OF MINES
MINERALS DEVELOPEMMENT 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 : **K010**) **Kotriwal B.L.**
Officer and ID No.
- (ii) Designation : Regional Controller Mines
- (iii) Accompanying mine : Shri Praveen Lodha, Mines Manager, Dr.S.K.Saxena
Official with
Designation
- (iv) Date of Inspection : 01-SEP-21
- (v) Prev.inspection date : 29-OCT-20

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 : lcwit@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 : 414.41
- (c) Period of lease : 20
- (d) Date of Expiry : 11-SEP-00
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

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

Owner : S.K.Wali
 J.K.Laxmi Cement Ltd.
 Jaykaypuram, dist: Sirohi
 Rajasthan SIROHI RAJASTHAN
 Phone: 02971-242267
 FAX : 02971-244417

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 Plan/Scheme of Mining	:	Existing rule 11 MCDR1988	15-FEB-93
		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

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 2019-20.	None	No backlog of previous year.
1b	Exploration over lease area for geological axis 1 or 2	No proposal during the year 2020-21.	None	Nil
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not applicable as no proposal during the year 2020-21.	Not applicable.	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal	None	Exploration drilling has been carried for G1 level in the entire lease area. However, 100 boreholes with 5500m were proposed upto depth of 372 mRL or upto end of mineralisation to proven mineralised area for the year 2021-22 and 2022-23.
1e	Balance reserve as on 01/04/20	As per approved document dated 24.12.2019, the position of reserve on 01.04.2019 was 330.119 million tonnes.	Balance reserve as on 01/04/21, 317.040 million tonnes.	Nil

1f	General remarks of inspecting officers on geology, exploration etc	Exploration drilling has been carried for G1 level in the entire lease area. However, 100 boreholes with 5500m were proposed upto depth of 372 mRL or upto end of mineralisation to proven mineralised area for the year 2021-22 and 2022-23.
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Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	During 2020-21, Central, North & North east side of the lease area proposed to be worked.	As per proposal.	Nil
2b	Separate benches in topsoil, overburden and minerals (Rule 15)	No proposal as there is no top Soil & O/B waste.	Not applicable	Nil
2c	Stripping ratio or ore to OB ratio	1:0.27	1:0.22	Nil
2d	Quantity of topsoil generation in m3	No proposal of top soil generation during the reporting year 2020-21.	No top soil generated during the year 2020-21.	Nil
2e	Quantity of overburden generation in m3	576924 M3 waste (Face reject) was proposed during the reporting year 2020-21.	426802 M3 waste (Face reject) was generated during the reporting year 2020-21.	Nil
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			Development of mine pit is satisfactory.

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	Year 2020-21: 8000000 Tonnes	Year 2020-21: 6719330 Tonnes	During the year 2020-21, 8 million tonnes ROM production was proposed, but 6.719 million tonnes ROM production carried out against this proposal which is around 84% of the proposal. Such low achievements in production has substantially changed pit profile effecting all subsequent year also, thereby necessitating of modification in the review of mining plan. Hence, violation of rule 11(1) of MCDR 2017 has been issued vide letter dated 20.09.2021.
3c	Recovery of sailable/usable mineral from ROM production	93.75%	89.96%	Nil
3d	Quantity of mineral reject generation	500000 Tonnes	674413 Tonnes	Nil
3e	Grade of mineral rejects generation and threshold value declared.	2020-21- CaO<34%	CaO- 29%	Nil
3f	Quantity of sub grade mineral generation.	No proposal	No subgrade generated during the year 2020-21	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	None	Nil
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 being utilised 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	174.96 Ha area under excavation upto the year 2024-25 was proposed	162.40 Ha area under excavation was utilised during the year 2020-21	As reported in AR 2020-21.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.29	1:0.32	Nil
3o	Total area put in use under different heads at the end of year	It was proposed that total 249.42ha area put in use under different heads at the end of the plan period i.e. 2024-25.	At the end of the year 2020-21, total 229.04 lha used under different heads.	Nil

3p	Production of ROM mineral during the last five year period as applicable	2016-17: 8.76 million tonnes 2017-18 : 10.22 million tonnes 2018-19: 11.860 million tonnes 2019-20 : 11.860 million tonnes 2020-21: 8.00 million tonnes	2016-17: 6.67 million tonnes 2017-18 : 6.86 million tonnes 2018-19: 6.97 million tonnes 2019-20 : 7.078 million tonnes 2020-21: 6.719 million tonnes	Nil
3q	General remarks of inspecting officers on method of mining etc.			During the year 2020-21, 8 million tonnes ROM production was proposed, but 6.719 million tonnes ROM production carried out against this proposal which is around 84% of the proposal. Such low achievements in production has substantially changed pit profile effecting all subsequent year also, thereby necessitating of modification in the review of mining plan. Hence, violation of rule 11(1) of MCDR 2017 has been issued vide letter dated 20.09.2021.

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 I/B or O/B dumping at separate place.	No top soil was generated during the reporting year. Mineral rejects and I/B or O/B have been dumped at separate place.	Nil

4b	Location of topsoil, OB and mineral reject dumps	Screen Dump-E299266 to E299398 N 2732993 to N2733240, O/B or I/B: 2731200N to 2731832N 299500E to 300100E.	Screen Dump-E299266 to E299398 N2732993 to N2733240, O/B or I/B: 2731200N to 2731832N 299500E to 300100E.	Nil
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.	Dumps proposed for partial stabilization	Partially stabilised	A part of screen dump 6.50Hect area is being stabilized
4h	Whether Retaining wall or garland drain all along dumps are there.	Yes	Yes, as per proposal.	Retaining wall provided as per PMCP
4i	Length of Retaining wall or garland drain all along dumps	Retaining wall: 80Mtr Garland drain:75Mtr	Retaining wall: 80Mtr Garland drain:75Mtr	Nil
4j	Number of settling ponds	No proposal	None	Nil
4k	Specific comments of inspecting officer on waste dump management			No issue was observed related to waste dump management.

Solid Waste Management - Backfilling:

Sl.No.	Item	Propasals	Actual work	Remarks
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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 2020-21	Nil
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.			However, mined out benches shall be reclaimed by method of plantation so that such area can be available for protective Measures for reclamation and Rehabilitation works. Hence violation of rule 11(1) of MCDR 2017 has been issued vide letter dated 20.09.2021.

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 2020-21 has been submitted timely.	Nil
6b	Area available for rehabilitation (ha) .	2.0 Ha	2.0 Ha	Nil

6c	afforestation done (ha).	2 Ha.	2 Ha.	However, during the year 2020-21, Plantation has not been carried out on proposed location,hence violation of rule 11(1) of MCDR 2017 has been issued vide letter dated 20.09.2021.
6d	No. of saplings planted during the year	3000Nos	3000Nos	Nil
6e	Cumulative no .of plants	No specific proposal	222720 nos upto the year 2020-21.	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. 3 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 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	Nil

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	3000 nos	3000 nos	Nil
6n	Compliance of rehabilitation of waste land within lease (ii)Area rehabilitation (ha)	2 Ha.	2 Ha.	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.			During the year 2020-21, Plantation has not been carried out on proposed location.Hence violation of rule 11(1) of MCDR 2017 has been issued vide letter dated 20.09.2021.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
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 2020-21.	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 2020-21	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Seperate waste and screen reject dump were proposed.	Maintained as per proposal.	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 year.	None	Nil
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	During the year, 3000 nos.plantation proposed	3000 nos. plantation have been planted during the year.	Nil
8g	Survival rate	No specific proposal	61.66	As reported in AR 2020-21.
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	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.	Monthly returns upto August, 2021 and Annual returns upto the year 2020-21 have been submitted timely.	Nil
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer-Shri B. L. Garg,,Geologis t- Dr.A.D.Saxena and Manager-Shri P. Lodha.	Details found to be correct	Nil

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Mining: 162.40 ha Mineral storage: 2.26 Ha Roads:4.52Ha Infrastructure : 1.00 Ha OB/Waste dump: 58.98Ha Total: 229.13 Ha	Details seems to be correct.	Nil
9d	Scrutiny of Annual return on afforestation	3000 Nos plantation within mine lease area having survival rate 61.66%.	Details seems to be correct.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Quantity - 674413 MT, Grade- 29% CaO	Details seems to be correct.	Nil
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock of ROM - Nil,Closing Stock of ROM- Nil.	Found to be correct.	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Limestone used in captive cement plant.Ex mine price & Production Cost- 259.62 Rs /MT	Found to be correct.	Nil
9h	Scrutiny of Annual return on fixed assets	Total value of Fixed Assets - Rs 69868016.	It seems to be corrected.	Nil
9k	Scrutiny of Annual return on mining machineries	Details given in Annual Returns 2020-21.	Found to be 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
MCDR17	Rule 11(1)	20-SEP-21			

Date :

(Kotriwal B.L.)

Indian Bureau of Mines