

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

MCDR INSPECTION REPORT

Gandhinagar regional office

Mine file No : RAJ/CHT/LST-7

Mine code : 38RAJ09010

- (i) Name of the Inspecting : **DJ03**) **DILIP JAIN**
Officer and ID No.
- (ii) Designation : Senior Mining Geologist
- (iii) Accompanying mine : Sri Somnath Banerjee, Mine Manager, Sri Rajesh Singh,
Official with
Designation
- (iv) Date of Inspection : 01-NOV-22
- (v) Prev.inspection date : 30-SEP-21

PART-I : GENERAL INFORMATION

1. (a) **Mine Name** : **SITARAMJI KA KHERA**
- (b) **Registration NO.** : **IBM/378/2011**
- (c) Category : A Fully Mechanised
- (d) Type of Working : Opencast
- (e) Postal address
- State : RAJASTHAN
- District : CHITTORGARH
- Village : Sitaramji Ka Khera
- Taluka : Nimbahera
- Post office : Mangrol
- Pin Code : 312620
- FAX No. : 07727006120
- E-mail : somnath.banerjee@nuvoco.in
- Phone : 09893497199
- (f) Police Station : Mangrol
- (g) First opening date : 21-MAY-15
- (h) Weekly day of rest : SUN
2. Address for : VILLAGE- SITA RAM JI KA KHERA
correspondance : DISTT- CHITTORGARH
RAJASTHAN
3. (a) Lease Number : RAJ5429
- (b) Lease area : 602
- (c) Period of lease : 50
- (d) Date of Expiry : 07-JUL-43
4. Mineral worked : LIMESTONE Main

5. Name and Address of the

Lessee : LAFARGE INDIA PVT. LTD.
 VILLAGE BHAVLIYA TAHSIL
 NIMBAHERA DIST.
 CHITTORGARH (RAJ.)
 CHITTORGARH RAJASTHAN
 Phone:
 FAX :

Owner : Mr. Ujjwal Batria
 Equinox Business Park
 Towers-3 East Wing, 4th
 Floor, Bandra Kurla
 Complex, LBS Road, Kurla
 West, Mumbai MUMBAI
 (SUBURBAN) MAHARASHTRA
 Phone:
 FAX : 02266306511

Agent : Sanjay Kumar Tyagi
 Nuvoco Vistas Corp. Ltd,
 Village - Bhawaliya, Tehsil
 - Nimbahera, Chittorgarh
 CHITTORGARH RAJASTHAN
 Phone: 9685013131
 FAX : 9685013131

Mining Engineer
 Name : Rajesh Goyal, Full Time
 Qualification : BE (Mining)
 Appointment/ : 07-MAY-17
 Termination date

Geologist
 Name : Mrinmoy Chakraborty, Full Time
 Qualification : M.Sc. (Applied Geology)
 Appointment/ : 28-MAR-16 12-JAN-19
 Termination date

Geologist
 Name : Rajesh Singh, Full Time
 Qualification : M. Tech in Applied Geology
 Appointment/ : 01-FEB-19
 Termination date

Manager
 Name : SOMNATH BANERJEE
 Qualification :
 Appointment/ : 10-AUG-15
 Termination date

6. Date of approval of Mining :
Plan/Scheme of Mining

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 the previous year 2020-21.	Not applicable as no proposal.	NIL.
1b	Exploration over lease area for geological axis 1 or 2	No proposal of exploration for reporting year (RY) 2021-22.	No exploration during the reporting year (RY) 2021-22.	NIL.
1c	Exploration Agencies and Expenditure in lakh rupees during the year	Not in proposal.	Not applicable as no proposal.	NIL.
1d	Balance area to be explored to bring Geological axis in 1 or 2	Not in proposal.	Not applicable as no proposal.	NIL.
1e	Balance reserve as on 01/04/20	A total reserve and resource of 72.26 and 31.50 million Tonne respectively as on 31/01/2018.	A total reserve and resource of 62.91 and 31.50 million Tonne respectively as on 01/04/2022.	NIL.
1f	General remarks of inspecting officers on geology, exploration etc	No proposal of exploration during reporting year.	Not applicable as no proposal.	Geologically the area belongs to Vindhyan Super group of rocks.

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	Northing: 2733683 - 2734671 Easting: 467328 - 467798	Northing: 2734552 - 2734715 Easting: 467403 - 467621	NIL.

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	Separate removal of top soil, OB/Waste and Mineral.	Top soil, OB/Waste and mineral removed separately.	NIL.
2c	Stripping ratio or ore to OB ratio	1:0.12 CuM/CuM	1:0.006 CuM/CUM	Violation of rule 11(1) of MCDR, 2017 issued.
2d	Quantity of topsoil generation in m3	1500 m3	9462.6 m3	Violation of rule 11(1) of MCDR, 2017 issued.
2e	Quantity of overburden generation in m3	12000 CuM or 30000 MT	5966 CuM or 14914 MT	Violation of rule 11(1) of MCDR, 2017 issued.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc	Opencast method of development has been proposed.	Development as per proposal.	Proposed method of development 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	2.60 million tons.	2.56 million tons.	NIL.
3c	Recovery of sailable/usable mineral from ROM production	100%	100%	NIL.
3d	Quantity of mineral reject generation	Screen Reject - 80000 MT	Screen Reject -5183 MT	NIL.
3e	Grade of mineral rejects generation and threshold value declared.	CaO < 34%	CaO < 34%	NIL.
3f	Quantity of sub grade mineral generation.	200000 Ton	NIL.	No sub-grade generation as anticipated.
3g	Grade of sub grade mineral generation	CaO - 34 to 40% SiO2 - 16 to 18%	Not applicable as no Sub-grade generation.	NIL.

3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	Crushing and Screening.
3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	No beneficiation study proposed.	Not applicable as no proposal.	NIL.
3j	Provision of drilling and blasting in mineral benches	The drilling of blast holes is proposed by down the hole drill machines of 115 mm. diameter operated by compressed air. For blasting slurry cap sensitive explosives, ANFO and SME to be used.	Drilling and blasting are done as per the proposal. Slurry cap sensitive explosives & ANFO is used for blasting.	NIL.
3k	Provision of mining machineries in mineral benches	Drill machine, Air Compressor, Excavator, Dumpers, Dozer, Rock Breaker, Water Tanker etc.	Drill machine, Air Compressor, Excavator, Dumpers, Dozer, Rock Breaker, Water Tanker etc.	NIL.
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Height of Bench proposed - 10 mts.	Height of Benches has been maintained as per proposal.	NIL.
3m	Total area covered under excavation/pits	43.70 hectare at the end of the plan period i.e. 2022-23.	30.82 hectare at the end of the RY i.e.2021-22.	NIL.
3n	Ore to OB ratio for the pit/mine during the year.	1:0.12 CuM/CuM	1:0.006 CuM/CUM	Violation of rule 11(1) of MCDR, 2017 issued.
3o	Total area put in use under different heads at the end of year	An area of 74.87hectare at the end of 2022-23.	An area of 58.01 hectare by the end of 2021-22.	NIL.

3p	Production of ROM mineral during the last five year period as applicable	2017-18: 2600000 2018- 19:2600000 2019-20: 2600000 2020-21: 2600000 2021-22: 2600000	2017-18: 2298004 2018-19: 2272531 2019-20: 2162337 2020-21:2279977 2021-22: 2560671	All figures in metric tons.
3q	General remarks of inspecting officers on method of mining etc.	Opencast method of Mining has been proposed.	Opencast method of mining is being in practice.	Proposed method of mining is suitable for 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)	Concurrent use of top soil and separate staking/dumpin g of screen reject and waste/OB.	Top soil generated used for plantation purpose and separate staking/dumping of screen reject and waste/OB.	NIL.
4b	Location of topsoil, OB and mineral reject dumps	Waste and mineral reject dumping proposed in northern side of lease area between block B and near boundary pillar F1 respectively.	Dumping of waste and Mineral reject has been carried out as per proposal.	NIL.
4c	Number of dumps within lease area and outside of lease area	Waste Dump:02 Screen reject and Sub-grade dump: 02	Waste Dump:01 Screen reject dump: 02	NIL.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside UPL.	Outside UPL.	NIL.
4e	Number of active and alive dumps.	Waste Dump:02 Screen reject and Sub-grade dump:02	Waste Dump:01 Screen reject dump: 02	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 & Garland drain are proposed	Not constructed as no topsoil and Mineral reject generation.	NIL.
4i	Length of Retaining wall or garland drain all along dumps	Retaining Wall- 90 Garland Drain - 325 m	Retaining Wall- Nil Garland Drain - Nil	Not constructed as no topsoil and Mineral reject generation.
4j	Number of settling ponds	No proposal.	Not Applicable	NIL.
4k	Specific comments of inspecting officer on waste dump management	Separate dumping of OB and screen reject.	As per proposal.	No issue related to waste dumping.

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.	Not Applicable.	NIL.
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	Concurrent use of top soil for plantation.	Top soil generated used for plantation purpose.	NIL.
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 part or full extraction of mineral.	Not applicable as no proposal.	No area matured for backfilling.

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).	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 2021-22 has been submitted.	NIL.
6b	Area available for rehabilitation (ha) .	No proposal.	Not Applicable.	NIL.
6c	afforestation done (ha) .	1.0 hectare.	1.0 hectare.	NIL.
6d	No. of saplings planted during the year	2000 nos of saplings.	3820 nos. within ML & 2502 nos. outside ML.	NIL.
6e	Cumulative no .of plants	Not Specified.	46093 number of saplings	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. 24.54 Lakh (as reported during mine inspection)	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	2000 nos of saplings.	3820 nos. within ML & 2502 nos. outside ML.	NIL.
6n	Compliance of rehabilitation of waste land within lease (ii) Area rehabilitation (ha)	1.0 hectare.	1.0 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 as per Environment Clearance and SPCB.	Parameters are being monitored as per proposal.	NIL.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.	An area of 1.0 hectare with 2000 nos of saplings has been proposed to plant.	A total, of 3820 number of saplings have been planted over an area of 1.0 hectare including gap filling plantation.	PMCP compliance is satisfactory.

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM processing through Crushing and Screening.	ROM is being processed through Crushing and Screening.	NIL.

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	Mechanized (Crushing and screening)	Mechanized (Crushing and screening)	NIL.
7c	Different grade of mineral sorted out at mines.	Cement Grade limestone and Screen reject.	Cement Grade limestone and Screen reject.	NIL.
7d	Any beneficiation process at mines	No other than Crushing Screening.	Not applicable.	NIL.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues	ROM processing through Crushing and Screening.	ROM is being processed through Crushing and Screening.	No issue related to mineral conservation.

Environment:

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Separate removal of top soil.	Top soil generated used for plantation purpose.	NIL.
8b	Concurrent use or storage of topsoil	Concurrent use of top soil for plantation.	Top soil generated used for plantation purpose.	NIL.
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Separate dumping of OB/Waste, Sub-grade and screen reject.	OB/Waste, screen reject have been stacked separately.	NIL.
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 1.0 hectare with 2000 nos of saplings has been proposed to plant.	An area of 1.0 hectare with 3820 nos of saplings has been planted.	NIL.
8g	Survival rate	No proposal.	75%	NIL.
8h	Water sprinkling on roads to control airborne dust	Regularly during transportation of limestone.	Regular water spraying is being done.	NIL.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Total 1000 nos of saplings were proposed to plant in 1.00 hectare area.	A total, of 3820 number of saplings have been planted over an area of 1.0 hectare including gap filling plantation.	The general aesthetic beauty in and around lease area is satisfactory.

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: Mr. Rajesh Kumar Goyal Geologist: Mr. Rajesh Singh Manager: Mr. Somnath Banerjee	Manager, Mining Engineer and Geologist have been appointed.	NIL.

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pits: 30.82 ha. Waste Disposal: 4.3 ha Plant, Buildings, Road etc. : 7.36 ha. Others (Plantation, Stock): 15.53 ha.	Found in order.	NIL.
9d	Scrutiny of Annual return on afforestation	3820 nos. Within ML & 2502 nos. outside ML.	Found in order.	NIL.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	Screen reject quantity has been furnished under Mineral reject.	Screen reject quantity has been furnished under Mineral reject.	NIL.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM stock: NIL and Limestone stock: 148608.920 MT	ROM stock: NIL and Limestone stock: 148608.920 MT	NIL.
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	Ex Mine Price and cost of production: Rs 217.24/tons.	Appears in order.	NIL.
9h	Scrutiny of Annual return on fixed assets	Value of Fixed Assets: Rs. 274687086.00	Found in order.	NIL.
9k	Scrutiny of Annual return on mining machineries	Back Hoe, Dozer, Dumper, Drilling Machine, Water Tanker, Pumps, Crusher etc.	Back Hoe, Dozer, Dumper, Drilling Machine, Water Tanker, Pumps, Crusher 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)	08-DEC-22	26-DEC-22			

Date :

(DILIP JAIN)

Indian Bureau of Mines