

INDIAN BUREAU OF MINES
MINERALS DEVELOPEMNT AND REGULATION DIVISION
MCDR Inspection REPORT
Jabalpur Regional office

Mine code:38MPR35353

| | | | |
|-------|---|---|---|
| (i) | Name of Inspecting officer | : | Mr. Madhavrao Sabre |
| (ii) | Designation | : | Sr. Mining Geologist, RO Jabalpur |
| (iii) | Accompanying mine official with Designation | : | Mr. Dinesh Dixit (HOD Mines) & Mr. Amitesh Charan (Mining Engineer) |
| (iv) | Date of Inspection | : | 30.07.2024 |
| (v) | Previous Inspection date | : | 17.03.2023 |

PART-I: GENERAL INFORMATION

| | | | | |
|---|--|---------------------|---|---|
| 1 | (a) | Mine Name | : | Jamuna Limestone Mine |
| | (b) | Registration Number | : | IBM/929/2011 |
| | (c) | Category | : | A, Fully Mechanized |
| | (d) | Type of Working | : | Opencast |
| | (e) | Postal address | : | |
| | | State | : | Madhya Pradesh |
| | | District | : | Satna |
| | | Village | : | Jamuna |
| | | Taluka | : | Rampur Baghelan |
| | | Post Office | : | Jamuna |
| | | Pin code | : | 485115 |
| | | Fax | : | - |
| | | email | : | Email Id: v.karthikeyan@dalmiacement.com |
| | | Phone No | : | Tel: (+91 11)23465100 |
| | (f) | Police Station | : | Rampur Baghelan |
| | (g) | First Opening date | : | 21.07.2021 |
| | (h) | Weekly day of rest | : | Sunday |
| 2 | Address for Correspondence | | | 1 st Floor, Viswanath Tower, Ward No 17, Near Sunshine Hotel, Rewa Road, Kripalpur, Satna, MP-485001. |
| 3 | (a) | Lease Area | : | 89.234 Ha |
| | (b) | Period of lease | : | 50 Years |
| | (c) | Date of Expiry | : | 04.11.2065 |
| 4 | Mineral Worked (Main) | | | Limestone |
| 5 | Name of address of the Lessee with Phone, email and fax number | | | Dalmia Cement (Bharat) Ltd. Regd.Office- Dalmiapuram 621651 (Tamil Nadu) Corporate Office- Dalmia Cement (Bharat) Ltd, 11 th & 12 th floors, Hansalaya Building, 15 Barakhamba Road, New Delhi-110001. Tel:(+91 11) 23465100 Email Id: v.karthikeyan@dalmiacement.com |
| | Name of address of the Owner/Nominated Owner with Phone, email, fax number and Date of appointment | | | Mr. Thyagrajan Venkatesan, Rajendra, 4 th Floor No.1,2 nd Street, Prithvi Avenue, Abhirampuram, Chennai-600018 Email Id: t.venkatesan@dalmiacement.com Phone No: 044-40902112 Date of Appointment- 09.08.2012 |
| | Name of address of the Agent with Phone, email, fax number and Date of appointment | | | Mr. V Karthikeyan, Dalmia Cement (Bharat) Ltd. |

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|---|--|---|
| | | Regd. Office- Dalmiapuram 621651 (Tamil Nadu) Corporate Office- Dalmia Cement (Bharat) Ltd, 11 th & 12 th Floors, Hansalaya Building, 15 Barakhamba Road, New Delhi- 110001 Tel: (+91 11) 23465100 Email Id: v.karthikeyan@dalmiacement.com Date of Appointment: 06.09.2020 |
| | Name of address of the Manager with Phone, email, fax number and Date of appointment | Amitesh Charan, 1 st Floor, Viswanath Tower, Ward No 17, Near Sunshine Hotel, Rewa Road, Kripalpur, Satna, MP-485001. Tel:8763869414 , EmailId:Charan.amitesh@dalmiacement.com . Date of Appointment: 21.06.2024 |
| | Mining Engineer Name Qualification Date of Appointment | Amitesh Charan Degree in Mining Engineering with 17 Years of Experience and having First Class Manager Certificate (R) under MMR 1961. Date of Appointment: 21.06.2024 |
| | Geologist Name Qualification, Date of Appointment | Mr. Malaya Maruta Muduli M.Sc. Geology 10.10.2023 |
| 6 | Date of approval of Mining Plan/Review of Mining Plan etc. | Approved vide letter No. MP/ Satna/ Limestone/ RMP-27/2019-20 dated 24/01/2020 |

PART- II: OBSERVATION/COMMENTS OF INSPECTING OFFICERS

Exploration: (2023-24)

| S. No | Item | Proposals | Actual Work | Remarks |
|-------|---|--|---|---|
| 1a | Backlog of previous year | Nil | Nil | |
| 1b | Exploration over lease area for Geological axis 1 or 2 | Nil | Nil | |
| 1c | Exploration Agency & Expenditure in Lakh Rupees during the year | Not Applicable | Not Applicable | |
| 1d | Balance area to be explored to bring the Geological axis in 1 or 2. | Nil | Nil | |
| 1e | Balance reserves as on 01.04.2023 | <u>Reserves in Tonnes</u> | <u>Reserves in Tonnes</u> Proved (111) - 24.17MT Pre-Feasibility (221): 15.55 MT Indicated (331): 39.72 MT As per Geological report submitted on March 2021 | Entire mineralize area has been explored fully as per UNFC guidelines to G1 level of exploration. |
| 1f | General remarks of Inspecting officer on geology, exploration etc. | <p>The limestone of the lease area belongs to Bhandar group of Vindhyan super group. The area around Jamuna village occupied by Nagod limestone of Bhandar Group. The limestone in these parts is mainly of stromatolitic type with a nodular look. The Nagod limestone formation of Bhandar Group is sandwiched between the underlain Simrawal/Ganurgarh Shale and overlain by Sirbu Shale. The limestone bands of good quality cement grade broadly occur in two horizons, namely upper grey limestone and lower grey limestone and separated by shale band. The general Stratigraphic sequence of the lease area is given below.</p> <p>General Stratigraphic Sequence of the Lease Area: Recent: Alluvium/ Top Soil. Bhandar Group: Faint Grey to Light green Shale, weathered at some places. Grey to dark grey Limestone with intercalation of Shale. Grey Shale. Dark Grey Limestone. Ganurgarh Shale. Mineralized area is completely explored.</p> | | |

Development (2023-24)

| S.N. | Item | Proposals | Actual Work | Remarks |
|------|--|--|---|---|
| 2a | Location of Development w.r.t. lease area | N2717500-N2717850 /E508550-E509000 | N2717400-N2717470/E508400-E508470 | Pits not developed as per proposal violation pointed out. |
| 2b | Separate benches in topsoil overburden and mineral (Rule 15) | Top Soil: 1 Bench Limestone: 2 Bench | Top Soil: 1 Bench Limestone: 1 Bench | |
| 2c | Stripping ratio or ore to OB ratio | 1:0.64 | 0.4 | Violation pointed. |
| 2d | Quantity of topsoil generation in m3 | 25000 | 92.59 | Less quantity produced so violation pointed. |
| 2e | Quantity of overburden generation in m3 | | Nil | violation pointed for deviation. |
| 2f | General remarks of Inspecting officer on development of pit w.r.t type of deposit etc. | Pit not developed as per proposal, Nil OB produced, Top soil produced was also very less in comparison to proposal so violation pointed. | | |

3. Exploitation FY (2023-24)

| S. N. | Item | Proposals | Actual Work | Remarks |
|-------|---|---|----------------|---|
| 3a | Number of pits proposed for production | One | One | |
| 3b | Quantity of ROM mineral production proposed | 449200 | 217 | Violation pointed for deviation. |
| 3c | Recovery of Salable/usable minerals from ROM production | 100 % | 100 % | |
| 3d | Quantity of mineral reject generation | Nil | Nil | |
| 3e | Grade of mineral reject generation and threshold value declared | Not Applicable | Not Applicable | -do- |
| 3f | Quantity of sub-grade mineral generation | Not Applicable | Not Applicable | No Sub grade generated during reporting year. |
| 3g | Grade of sub-grade mineral generation | Not Applicable | Not Applicable | No Sub grade mineral generated during the reporting year. |
| 3h | Manual/Mechanized method adopted for segregation from ROM | Mechanized | Manual | |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | Nil | Nil | |
| 3j | Provision of drilling & blasting in mineral benches | Deep Hole Drilling & Blasting (110 mm dia & 6.5 m depth) | NIL | - |
| 3k | Provision of mining machineries in mineral benches | Hydraulic Excavators- 2 Nos Dumper/Tipper 35 Ton- 4 No Drill machine 100 mm- 1 No Rock Breaker 80 Ton- 1 No Dozer 270 HP – 1 No | Nil | - |

| | | | | | |
|----|--|--|---------------|-------------|--|
| | | Road Grader – 1 No Water Sprinkler – 1 No Diesel Tanker -1 No Explosive Van – 1 No Weigh Bridge – 1 No | | | |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | Yes | Yes | - | |
| 3m | Total area covered under excavation /pits (Ha.) | 2.42 | 0.13 | | |
| 3n | Ore to OB ratio for the pit/mine during the year | 1:0.64 | 1:0.64 | | |
| 3o | Total area put in use under different heads at the end of year | 2.52 | 0.560 | | |
| 3p | Production of ROM mineral during last five-years period, as Applicable | 2021-22 | 108000 | 765.00 | Violation pointed for deviation in production. |
| | | 2022-23 | 417600 | 527.00 | |
| | | 2023-24 | 449200 | 217.00 | |
| | | Total | 974800 | 1509 | |
| 3q | General remarks of inspecting officer on method of mining etc. | Mining operations are in nascent stage. Violation pointed for less production and development. | | | |

4. Solid Waste Management-Dumping (2023-24)

| S.N. | Item | Proposals | Actual Work | Remarks |
|------|---|--|---|---|
| 4a | Separate dumping of topsoil, OB & mineral reject (Rule 32,33) | O/B Waste Storage Area: Nil | Nil | No OB produced for which violation pointed. |
| 4b | Location of topsoil, OB & mineral reject dumps | OB/Waste dump: E509400-E509700, N2717100-N2717400 & 2.50 Ha MR Dump- Nil | Nil | No mineral reject produced during the year. |
| 4c | Number of Dumps within lease area and outside lease area | 1 (Within Lease) | Nil | |
| 4d | Location of Dumps w.r.t. ultimate pit limit (Rule 16) | Nil | Nil | - |
| 4e | Number of Active & Alive dumps | 1 | Nil | - |
| 4f | Number of dead dumps | Nil | Nil | Nil |
| 4g | Number of dumps stabilized | Nil | Nil | Nil |
| 4h | Whether Retaining wall or garland drain all along dumps are there | Nil | Nil | No proposal during the year 2023-24 |
| 4i | Length of Retaining wall or garland drain all along dump | Retaining Wall – Nil Garland Drain - Nil | Retaining Wall – Nil Garland Drain - Nil | No proposal during the year 2023-24 |
| 4j | Number of settling ponds | Nil | Nil | No proposal during the year 2023-24 |
| 4k | Specific comments of inspecting officer on waste dump management | No OB was produced during the year 2023-24 for which violation pointed. | | |

5. Solid Waste Management-Backfilling (2023-24)

| S.N. | Item | Proposals | Actual Work | Remarks |
|------|--|---|-------------|--|
| 5a | Status on part or full extraction of mineral from mined out area before starting backfilling | Nil | Nil | Full extraction of mineral yet to be achieved. |
| 5b | Area under backfilling of mined out area | Nil | Nil | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | Nil | Nil | |
| 5d | Total area fully reclaimed & rehabilitated (Ha) | Nil | Nil | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc | Full extraction of Mineral yet to be achieved so backfilling process is not applicable. | | |

6. Progressive Mine Closure Plan (2023-24)

| S.N. | Item | Proposals | Actual Work | Remarks |
|------|---|--|-----------------|--|
| 6a | Whether Annual report on PMCP submitted on time and correctly-Rule 23E (2). Details should be given in the format as given in Annexure-20 | To be submitted before 1 st July of every year. | Yes, Submitted. | PMCP has been submitted for period 2023-24 on 26.06.2024 . |
| 6b | Area available for rehabilitation (Ha) | Nil | Nil | |
| 6c | Afforestation done (ha) | 0.1 | 0.030 | |
| 6d | No. of saplings planted during the year | 200 | 60 | |
| 6e | Cumulative no. of plants | 800 | 560 | Plant survival is considered at 80% |
| 6f | Any other specific method of rehabilitation | Nil | Nil | |
| 6g | Cost incurred on watch & care during the year | Nil | 110000 | |
| 6h | Compliance on reclamation and rehabilitation by backfilling (i) Voids available for backfilling (L X B X D). | Nil | Nil | No Proposal in 2023-24. |
| 6i | Compliance on reclamation and rehabilitation by backfilling (ii) Void filled by waste/tailings. | Nil | Nil | No Proposal in 2023-24. |
| 6j | Compliance on reclamation and rehabilitation by backfilling (iii) Afforestation on the backfilled area. | Nil | Nil | No Proposal in 2023-24. |
| 6k | Compliance on reclamation and rehabilitation by backfilling (iv) Rehabilitation by making water reservoir. | Nil | Nil | No Proposal in 2023-24. |
| 6l | Compliance on reclamation and rehabilitation by backfilling (v) Any other specific means | Nil | Nil | No Proposal in 2023-24. |
| 6m | Compliance of Rehabilitation of waste land within lease (i) Afforestation | Nil | Nil | No Proposal in 2023-24. |
| 6n | Compliance of Rehabilitation of waste land within lease (ii) Area rehabilitated (ha) Method of rehabilitation | Nil Nil | Nil Nil | No Proposal in 2023-24. |
| 6o | Compliance of Rehabilitation of waste land within lease | Nil | Nil | No Proposal in 2023-24. |

| | | | | |
|----|--|--|-----|-----------------|
| | (iii) Method of rehabilitation | | | |
| 6p | Compliance of Environment monitoring (core zone & buffer zone) | Yes | Yes | Done regularly. |
| 6q | General remarks of inspecting officer on PMCP compliance & progressive closer operations | During the RY 60 saplings were planted, some plantation done out side the lease along road side. | | |

7. Mineral Conservation (2023-24)

| S.N. | Item | Proposals | Actual Work | Remarks |
|------|--|--|-------------|--|
| 7a | ROM mineral dispatch or grade wise sorting within lease area | 449200 | 79.21 | Violation pointed for less production. |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | Mechanical | Manual | |
| 7c | Different grade of mineral sort out at mine | Proper Blending | Nil | |
| 7d | Any beneficiation process at mines | Nil | Nil | |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | Violation pointed for less production. | | |

8. Environment (2023-24)

| S.N. | Item | Proposals | Actual Work | Remarks |
|------|---|---|---|---|
| 8a | Separate removal and utilization of topsoil (Rule32) | 1200 Cum for Protective bund | 92.59 Cum used for protective bund. | |
| 8b | Concurrent use or storage of topsoil | Use- 1200 Storage-26800 | 92.59 Cum Nil | Usage of 92.59 Cum in Plantation and protective bund. |
| 8c | Separate dumps for overburden waste rock, rejects and fines (Rule 33) | Yes | Nil | |
| 8d | Use of overburden, waste rock, rejects and fines dump for restoring the land to its original use | Nil | Nil | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No Proposal in 2023-24 | Nil | |
| 8f | Baseline information on existence of plantation & additional plantation done (Rule 41) | Plantation over 0.10 Ha with 200 Nos of saplings proposed. | Plantation over 0.030 Ha with 60 Nos of saplings planted. | |
| 8g | Survival rate | 80% | 80% | |
| 8h | Water sprinkling on roads to control airborne dust | Water sprinkling is proposed by Water Tanker. | Complied. | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mine area | Till date 560 saplings planted, Top soil produced is used for protective bunds and in plantation. | | |

9. Compliance of Rule 45 (2023-24)

| S.N. | Item | Comments | Remarks |
|------|---|--|---------------------------|
| 9a | Status of submission of monthly and Annual returns | Submitted in stipulated time | AR Submitted on 14/6/2024 |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Yes, Furnished. | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Area under Current Opencast Working- 0.13(Ha). Road, building, Plant – 0.40 Area under PMCP- 0.030 Ha. | |
| 9d | Scrutiny of Annual return on | 60 Saplings planted. | |

| | | | |
|----|--|--|--|
| | afforestation | | |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & Quantity) | Mineral Reject not in Proposal | |
| 9f | Scrutiny of Annual return on ROM stock and/or grade ore | Stock of 1218.180 T | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production costs | Ex Mine price 410.11 | |
| 9i | Scrutiny of Annual return on Fixed assets | Rs 233220177/- is the value of fixed assets at end of 2023-24. | |
| 9k | Scrutiny of Annual return on mining Machineries | Yes furnished. | |

Violation Pointed

Rule 11(1) of MCDR 2017

1. Only 217 tonnes of Limestone production is raised during 2023-24 against the proposed 4,49,200 tonnes .
2. Nil Overburden was generated against the proposal of 124920 m3, thereby distorting the stripping ratio.
3. It was proposed to produce 25000 m3 of top soil during the year, but only 92.59 m3 top soil was produced.
4. It was proposed that height of 6 m and width of 15 m will be maintained in Limestone, but no such benching was observed in the lease area.
5. Stripping ratio proposed was not maintained.
6. Pit was not developed in proposal area for year 2023-24.

Rule 45(7) of MCDR 2017

It was reported that 217 Tonnes of limestone was produced and 90 Tonnes of limestone was dispatched during the year 2023-24. But no machinery was reported in Part V(6).