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MCDR INSPECTION REPORT

Name of Inspecting officer and Designation- Vikas Kumar, ACOM; Date of Inspection-05.09.2023

| S. N. | Particulars | Details |
|-------|--|--|
| 1 | Name of the Mine | UmsooMootang Limestone Mine (DCBL) Block-V |
| 2 | Total Lease Area (Ha) with breakup of Non-forest and forest land | Total Lease Area 128.52 Ha Forest Land. |
| 3 | Mine code | 38 MEG 03015 |
| 4 | IBM Registration Number under rule 45 of MCDR, 1988 | IBM/929/2011 |
| 5 | Name of the lessee, Address, phone, email and fax number | Name of the lessee:- M/s Dalmia Cement (Bharat) Limited Address of Registered office: M/S Dalmia Cement (Bharat) Limited, Dalmiapuram, Tamilnadu |
| 6 | Village | Dalmiapuram, |
| 7 | Taluk/Mandal | Nil |
| 8 | District | Tiruchirapalli |
| 9 | Pincode | 621 651 |
| 10 | State | Tamilnadu |
| 11 | Post office | Dalmiapuram |
| 12 | Nearest police station | Kallakudi |
| 13 | Nearest Railway station | KallakudiPalanganatham |
| 14 | Date of Grant of Mining Lease | 14/12/2016 |
| 15 | Date of Execution | 21/12/2016 |
| 16 | Date of opening of Mine | 12/07/2017 |
| 17 | Date of first Renewal, if applicable and its period & expiry | NA |
| 18 | Date of second Renewal, if applicable and its period & expiry | NA |
| 19 | Date of submission of renewal application if Mining Operations are continuing under deemed extension | NA |
| 20 | Name of the Nominated Owner with Address, phone, email, fax number and date of appointment | Sh. Venkatesan Thyagarajan M/s Dalmia Cement (Bharat) Limited Village : Thangskai,P.O. Lumshnong, District: East Jaintia Hills, Meghalaya.793 210. Date of appointment: 18.05.2018 |
| 21 | Name of the Mine Agent with Address, phone, email, fax number and date of appointment | Raju Ranjan Prasad M/s Dalmia Cement (Bharat) Limited, Village : Thangskai,P.O. Lumshnong, District : East Jaintia Hills, Meghalaya. 793 210. Email- prasad.raju@dalmiacement.com Mob: 9862088558 Date of Appointment:-28.09.2022 |
| 22 | Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines | Sh.Shishupal Singh M/s Dalmia Cement (Bharat) Limited, Village : Thangskai, P.O. Lumshnong, District : East Jaintia Hills, Meghalaya. 793210. Email-singh.shishupal@dalmiacement.com Mob:7085099840, Date of Appointment: 16.05.2017 |
| 23 | Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine | Sh.Shishupal Singh,B.E. (Mining), 21 Years experience M/s Dalmia Cement (Bharat) Limited, Village : Thangskai,P.O. Lumshnong, District : East Jaintia Hills, Meghalaya. 793210. Email-singh.shishupal@dalmiacement.com Mob:7085099840, Date of Appointment: 16.05.2017 |
| 24 | Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44. | Yes. Mining Engineer:- Sh. Shishupal Singh, B.E. (Mining), Experience: 21 Years, Date of appointment:-16.05.2017 Geologist : Prasenjit Chatterjee; Experience: 9 years Date of appointment:-04.04.2023 |

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| 25 | Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any. | 1. MP-314(3)/2009 MCCM(CZ)/MP-33 date 29.04.2010 2. MOM-IBM/GHY/MEG/JNH/LST/MP-84 date 29.08.17 3.ROMP- IBM/GHY/MEG/JNH/LST/MP-84,Date:09.09.2021 |
| 26 | Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any. | N.A. |
| 27 | Mineral(s) granted in lease and proved for mining | Limestone |
| 28 | Method of Mining(Open cast, Underground) | Open cast Working |
| 29 | Category (Fully Mechanised, Others or Manual) | Fully mechanized |
| 30 | Captive/ Non captive | Captive |

Scientific Mining: Compliance of proposals of approved mining plan/scheme of mining. (Duplication of information in existing TMIS data sheets and draft write up has been avoided.)

Exploration

| S.N. | Item | Proposals | Actual work | Remarks |
|------|--|---|---|---|
| 1a | Backlog of previous year | 2022-23-No exploration proposal But in the year 2021-22-6 Borehole (3 NOS. NQ CORE (200MX200M)-180M & 3 Nos. DTH (100MX100M)- 150M) Total 330 m drilling | In the financial year 2021-22, 6 BH has been done. (DBH-1, 7, 19, 25, 33A, 38). Now till depth mineralization Core Bore Hole is going on. 3 Boreholes (DBH-41,42, 43) has been done in the year 2023-24 and remaining 3 core boreholes are in process for the year 2023-24. | Full Exploration not completed yet. Violation u/r 11(1) of MCDR-2017 already issued and is under process of compliance. |
| 1b | Exploration over lease area for Geological axis 1 or 2. | Nil during 2022-23. 10.52 Ha of G2 level area to be explored in G1 level. | Exploration to completed for converting G2 level area to G1 level. | Exploration drilling under progress. |
| 1c | Exploration Agency & Expenditure in lakh Rupees during the year | No such details available in approved RMP. | | |
| 1d | Balance area to be explored to bring Geological axis in 1 or 2 | 10.52 Ha | Exploration to completed for converting G2 level area to G1 level. | |
| 1e | Balance reserves as on closing of 16.03.2023 | 91,256,393 MT (91.256 Million Tonnes) | 91,865,322 MT (91.769 Million tonnes) | 93,021,330 MT (93.021 Million Tonnes) balance reserves as on 01.04.2022. |
| 1f | General remarks of inspecting officer on geology, exploration etc. | A total of 81 nos of core bore holes have been drilled for a total meterage of 6317.54 m from. Exploratory drilling for converting G2 level explored area to G1 level of exploration started but yet to complete. | | |

Development

| S.N. | Item | Proposals | Actual work | Remarks |
|------|---|--|---|---|
| 2a | Location of development w.r.t. lease area | N 2785515-2785850, E 434400- 434935 (Development 2022-23). N 2785375-2785816, E 434306-434935 (ROM Mining 2022-23). | Both Development and production has not been carried out in the proposed ML area as approved in the Review of Mining Plan for 2022- 23. | Violation issued on 28.04.2023 u/r 11(1) of MCDR_2017 for deviation during previous inspection. |
| 2b | Separate benches in | To maintain separate | Separate Benches | |

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| | topsoil, overburden and mineral (Rule 15) | benches of overburden and mineral as per rule | of Overburden and mineral are being maintained. | |
| 2c | Stripping ratio or ore to OB ratio | 1:0.288 | 1:0.72 | |
| 2d | Quantity of topsoil generation in m3 | NIL | NIL | |
| 2e | Quantity of overburden generation in m3 | 246725.5m ³ | 407928.5 m ³ | |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | Lessee has developed fresh area for mining due to which OB generation is more. Violation already issued on 28.042023 u/r 11(1) of MCDR_2017 for deviation during previous inspection. | | |

Exploitation

| S.N. | Item | Proposals | Actual work | Remarks |
|------|---|--|---|--|
| 3a | Number of pits proposed for production | one | One | As per proposal |
| 3b | Quantity of ROM mineral production proposed | 1747410 MT(2022-23 FY) | 1218895 MT | |
| 3c | Recovery of salable/usable mineral from ROM production | 91.71% | 100% | Mining done in different area in comparison to proposed area due to which no Mineral reject was generated and blended. |
| 3d | Quantity of mineral reject generation (Ton) | 407851.20 T | 0 | Due to deviation in mining area as approved in RMP, MR has not generated. Violation issued on 28.042023 u/r 11(1) of MCDR_2017 for deviation in mineral reject generation. |
| 3e | Grade of mineral reject generation and threshold value declared | CaO- 37.74%, MgO-6.77% | - | Not generated |
| 3f | Quantity of sub-grade mineral generation | NIL | NIL | |
| 3g | Grade of sub-grade mineral generation | NIL | NIL | |
| 3h | Manual / Mechanized method adopted for segregating from ROM | Mechanized | No segregation carried out. | |
| 3i | Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject | Not applicable. | N.A. | |
| 3j | Provision of drilling & blasting in mineral benches | Drill Machine-110mm-02 Drill Machine-110 mm/18- 01 Drill hole Dia: 110 mm Hole depth :9 m Spacing : 4.5 m Burden: 3.5 m Blasting Method: Slurry/ Emulsion/ANFO/Ratio of Primer/ booster charge and ANFO/column charge will be 10-20:90-80, MS delay detonators/ nonel/ Relays with cordex | During 2022-23 Drill Machine-110mm-02 Drill Machine-110 mm/18-01 Drill hole Dia: 110 mm Hole depth :9 m Spacing : 4.5 m Burden: 3.5 m Blasting Method: Slurry/ Emulsion/ANFO/Ratio of Primer/ booster charge and ANFO/column charge will be 10-20:90-80, MS delay detonators/ nonel/Relays with cordex detonating | |

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| | | detonating fuse/electric detonator | fuse/electric detonator | |
| 3k | Provision of mining machineries in mineral benches | Hydraulic Excavator 3.1 cum-02 Hydraulic Excavator 1.6 cum-01 Dumper 35 MT -03 Dumper 28 MT-08 Drill Machine-110mm-02 Drill Machine-110 mm/18- 01 Rock Breaker-01 Dozer-01 Compactor-01 Water Tanker-01 Explosive van-01 HSD Tanker-01 | Hydraulic Excavator 3.1 cum-02 Hydraulic Excavator 1.6 cum-01 Dumper 35 MT -03 Dumper 28 MT-06 Drill Machine-110mm-01 Drill Machine-110 mm/18-01 Rock Breaker-01 Dozer-01 Compactor-01 Water Tanker-01 Explosive van-01 HSD Tanker-01 | |
| 3l | Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM | OB-6m, Ore-9m suitable | OB-6m, Ore-9m | |
| 3m | Total area covered under excavation/pits | 24.66 Ha. | 25.30 Ha. | FY 2022-23 . Due to winning ore from a fresh area. Violation already given in previous inspection. |
| 3n | Ore to OB ratio for the pit/ mine during the year | 1:0.288 | 1:0.72 | |
| 3o | Total area put in use under different heads at the end of year | 51.98 Ha. | 42.63 Ha. | |
| 3p | Production of ROM mineral during last five-year period, as applicable | 2017-18:- 876581.00 MT 2018-19:-1290272.00 MT 2019-20:-1532657.00 MT 2020-21:-1512465.00 MT 2021-22:- 1661123.00 MT 2022-23:- 1747410.00 MT | 2017-18:- 543391.00 MT 2018-19:-1244150.00 MT 2019-20:-1529595.00 MT 2020-21:-1214939.00 MT 2021-22:- 1393596.00 MT 2022-23:- 1156008.00 MT | |
| 3q | General remarks of inspecting officer on method of mining etc. | Ore has been exploited from an fresh area which was not approved in the RMP for the year 2022-23.Mechanized Mining is being carried out by deploying heavy earth moving machineries and with the help of deep hole drilling and blasting. | | |

Solid Waste Management-Dumping

| S.N. | Item | Proposals | Actual work | Remarks |
|------|--|---|---|--|
| 4a | Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) | Separate dumping of topsoil, OB & mineral reject proposed. OB-X-435657-435450, Y-2785404-2785200 Waste -X-434807-434474, Y-2786225-2786247,Mineral Reject- X-435587-435446, Y-2785705-2785635 | Separate dumping of OB(Sandy soil) & waste done during 2022-23. OB- X-435490-435736, Y-2785218-2785391 Waste-X-434680-434760, Y-2786224-2786357 | 1. It has been observed that the dump made beyond the places as per approved mining plan .In this regard violation has been served on 22.09.2023 under Rule 11(1) of MCDR. |
| 4b | Location of topsoil, OB & mineral reject dumps | OB-X-435657-435450, Y-2785404-2785200 Waste -X-434807-434474, Y-2786225-2786247,Mineral Reject- X-435587-435446, Y-2785705-2785635 | Location of OB & mineral reject dump is in the area as approved in the RMP. OB- X-435490-435736, Y-2785218-2785391 Waste-X-434680-434760, Y-2786224-2786357 | |

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| 4c | Number of dumps within lease area and outside lease area | Within lease area 3 dumps present 1) Red soil dump, 2) Sandstone dump, 3) Mineral reject dump | Within lease area 3 dumps present 1) Red soil dump, 2) Sandstone dump, 3) Mineral reject dump | Dump exist outside lease area . In this regard violation has been served on 22.09.2023 under Rule 11(1) of MCDR. |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Within the UPL | Within the UPL | Dump exist outside lease area . In this regard violation has been served on 22.09.2023 under Rule 11(1) of MCDR. |
| 4e | Number of active & alive dumps | Within lease area 3 active dumps present 1) Red soil dump, 2) Sandstone dump, 3) Mineral reject dump | Within lease area 3 active dumps present 1) Red soil dump, 2) Sandstone dump, 3) Mineral reject dump | All dumps are active. |
| 4f | Number of dead dumps | NIL | NIL | |
| 4g | Number of dumps stabilized | NIL | NIL | |
| 4h | Whether Retaining wall or garland drain all along dumps are there | During 2022-23 Retaining wall (200m length)and Garland drain (200m length) proposed in Part of the dump in 0.02 Ha area and 0.02 Ha area | Retaining wall- 540 mt, Garland drain- 711mt exist | |
| 4i | Length of Retaining wall or garland drain all along dump | During 2022-23 Retaining wall of 200M(L) x 1 m(B) x 1.50 m(H) Garland drain-200M(L) x 1 m(B) x 1 m(H) | Retaining Wall- 121mt(L)X 1mt(B) x 1.50 mt (H) Prepared Along Toe of the Dump, Garland Drain- 166mt | |
| 4j | Number of settling ponds | 1 | 2 | |
| 4k | Specific comments of inspecting officer on waste dump management. | Waste dump management with proper terracing has been done. Retaining wall and garland drain is being constructed in phase wise manner along the waste dump. dump has been made outside the lease . Violations served under Rule 11(1) on 22.09.2023. | | |

Solid Waste Management-Backfilling

| S.N. | Item | Proposals | Actual work | Remarks |
|------|--|--|---|---|
| 5a | Status on part or full extraction of mineral from mined out area before starting backfilling | No such proposal approved. | Mineral is yet to be mined out. | As of now no part of the lease area is matured to start back filling. |
| 5b | Area under backfilling of mined out area | No such proposal approved. | Nil | -do- |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | No such proposal approved. | Whenever topsoil generation is there it is being utilised for green belt development in 7.5m safety zone area.During 2022-23 there is no top soil generation. | |
| 5d | Total area fully reclaimed & rehabilitated | No such proposal Approved. | Nil | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc | Mineral is yet to be mined out, hence no part of the lease area is matured to start back filling, reclamation. | | |

Progressive Mine Closure Plan

| S.No | 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. | As per rule 26 (2) PMCP report to be submitted before 1 st day of July every year | Annual report on PMCP submitted along for 2022-23 on 29.06.23 | |

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| 6b | Management of worked/mined out benches i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year | No such proposal approved. i) NA ii) NA iii) NA iv) NA v) NA vi) NA | i) NA ii) NA iii) NA iv) NA v) NA vi) NA | Mineral yet to exhaust and the mining activity is in dynamic stage. Hence, no rehabilitation of mined out benches. |
| 6c | Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir iv) Any other specific means | No such proposal approved. i) NA ii) NA iii) NA iv) NA v) NA vi) NA | i) NA ii) NA iii) NA iv) NA v) NA vi) NA | -do- |
| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation | No such proposal approved. | No waste land within the ML hence no Rehabilitation of waste land. | |
| 6e | Compliance of Environmental monitoring (core zone & buffer zone) | Quarterly Monitoring for ambient Air, Noise and water quality. | Monitoring is being carried out for ambient air, Water, Noise level and results are within the limits. | |
| 6f | General remarks of inspecting officer on PMCP compliance & progressive closure operations | Mineral yet to exhaust and the mining activity is in dynamic stage. Hence, no reclamation and rehabilitation by back filling and rehabilitation of mined out benches have been done. Lessee is doing environmental monitoring at regular interval. | | |

Mineral Conservation

| S.N. | Item | Proposals | Actual work | Remarks |
|------|--|--|--|---------|
| 7a | ROM Mineral dispatch or grade- wise sorting within lease area | No such proposal approved. | ROM sent to crusher from mine. The entire ROM was dispatched to the captive plant. No mineral reject has been generated. | |
| 7b | Method of grade-wise mineral sorting i.e. manual or mechanical | No such proposal approved. | Entire ROM is dispatched to crusher. No mineral sorting done during 2022-23. | |
| 7c | Different grade of mineral sorted out at mines | No such proposal Approved. | Nil | |
| 7d | Any beneficiation process at mines | No such proposal approved as entire Limestone is directly usable. | Nil | |
| 7e | General remarks of inspecting officer on Mineral conservation & beneficiation issues | Violation has been issued u/r 11(1) for not producing the Mineral reject and also for not achieving the blending as approved in theRMP for 2022-23 in previous inspection. | | |

Environment

| S.N. | Item | Proposals | Actual work | Remarks |
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| 8a | Separate removal and utilization of topsoil (Rule 32) | To be removed separately. | Nil | |
| 8b | Concurrent use or storage of topsoil | Topsoil to be used for plantation and additional quantity to be stored. | Nil | |
| 8c | Separate dumps for overburden, waste rock, rejects and fines (Rule 33) | Separate dump proposed for waste, reject, OB. | Within lease area 3 dumps are present 1) Red soil dump 2) Sandstone dump 3) Mineral reject dump | |
| 8d | Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use | No such proposal approved. | Nil as no part of the lease area is matured to start backfilling. | |
| 8e | Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc) | No such proposal approved. | Nil | |
| 8f | Baseline information on existence of plantation & additional plantation done (Rule 41) | During 2017-18 to 2022-23 it was proposed to plant 2850 nos plant in 7.5m safety barrier zone over an area of 1.8 Ha area. | i) No of trees planted during the year:- 865 (WML), 715 (OML) ii) Total no of trees at the end of the year:- 2845 (WML), 3591 (OML) | |
| 8g | Survival rate | NA | WML- 75 % | |
| 8h | Water sprinkling on roads to control airborne dust | Yes | Yes, Static Water sprinkler and water tanker 12KL capacity is used for to control the airborne dust | |
| 8i | General remarks of inspecting officer on aesthetic beauty in and around mines area | Lessee is carrying out plantation within the mining lease and out side the mining lease to improve the aesthetic beauty in and around the mining lease. | | |

Compliance of Rule 45

| S.N. | Item | COMMENTS | | Remarks |
|------|---|--|--|--|
| 9a | Status of submission of Monthly and Annual returns | M.R. Submitted up to August-23. Annual return for FY2022-23 submitted. | | |
| S.N. | Item | Details GIVEN in A.R.-2022-23 | Observation of I/Officer (2022-23) | Remarks |
| 9b | Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager | Shri Shishupal Singh, Mining Engineer & Mines Manager. Shri C.S. Sharma, Geologist | Mining Engineer: Shishupal Singh Geologist: Prasenjit Chatterjee | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Pit : 21.69 Ha. Temporary dump: 17.56 Ha. | Pits - 25.30 Ha. Reclaimed area - NIL Dumps- 17.341 | Violation u/r 11(1) of MCDR- 2017 issued for not mining as per the approved proposal in 2022-23 during previous inspection |
| 9d | Scrutiny of Annual return on afforestation | Saplings : 425 nos. (0.3Ha.) within Lease | Saplings: 865 within Lease | . |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | Nil | Nil | During 2022-23 Nil tonnes of mineral reject has been generated. |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Opening stock-0.00 Production- 1218895.00 T Despatch:- 1218895T | Opening stock-0.00 Production- 1218895.00 T Despatch:- 1218895T | |

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| | | Closing Stock- 0.00 There is no separate stock for graded ore. | Closing Stock- 0.00 There is no separate stock for graded ore. | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | Production Cost- Rs. 374.50 Rupees/ton | As reported by Lessee the cost/tonne is Rs. 374.50. | |
| 9h | Scrutiny of Annual return on fixed assets | ₹ 809885002 | As reported by Lessee the value of fixed assets is Rs. ₹ 809885002 | |
| 9i | Scrutiny of Annual return on mining machineries | 1. Shovel-1 2. Backhoe-2 3. Dumper-6 4. Tipper-3 5. Rock drill-2 6. Air compressor-2 7. Crusher-1 8. Dozer-1 | 1. Shovel-1 2. Backhoe-2 3. Dumper-6 4. Tipper-3 5. Rock drill-2 6. Air compressor-2 7. Crusher-1 8. Dozer-1 | |

Details of violations observed during current inspection and compliance position of earlier violation pointed out:-

The previous violation issued u/r 11(1) is still pending and compliance under progress.

During the current inspection violation letter has been issued for violating the provisions of rule 11(1) of MCDR-2017.

(Vikas Kumar)

(Name of inspecting officer with designation and date)