

**INDIAN BUREAU OF MINES**  
**MINES CONTROL AND CONSERVATION OF MINERAL DIVISION**  
**MCDR INSPECTION REPORT**  
**Guwahati Regional Office**

Mine code: 38MEG03015

Mine file No: IBM/GHY/MEG/JNH/LST-14

Date of Inspection: 08.09.2022

**1.0 GENERAL**

SN	Particulars	Details
1	Name of the Mine	Umsoo Mootang Block-V Limestone Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	128.52 Ha. Forest: 128.52 Ha. Non Forest: 0
3	Mine Code	38MEG03015
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/929/2011
5	Name of the lessee, Address, phone, email and fax number	M/s Dalmia Cement (Bharat) Limited
6	Village	Thangskai
7	Taluka/Mandal	Narpuh
8	District	East Jaintia Hills
9	Pincode	793210
10	State	Meghalaya
11	Post office	Lumshnong
12	Nearest police station	Lumshnong
13	Nearest Railway station	Badarpur
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	Venkatesan Thyagarajan, M/s Dalmia Cement (Bharat) Limited, Umsoo Mootang, Village : Thangskai, P.O. Lumshnong, District: East Jaintia Hills, Meghalaya- 793210. Email: <a href="mailto:t.venkatesan@dalmiacement.com">t.venkatesan@dalmiacement.com</a> Date of appointment : 18.05.2018
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Sanjay Kumar, M/s Dalmia Cement (Bharat) Limited; Umsoo Mootang, Village : Thangskai, P.O.: Lumshnong, District: East Jaintia Hills, Meghalaya- 793 210. Email- <a href="mailto:kumar.sanjay@dalmiacement.com">kumar.sanjay@dalmiacement.com</a> Mob: 9612159689 ;Date of Appointment:12.07.2013
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Shishupal Singh, M/s. Dalmia Cement (Bharat) Limited, Umsoo Mootang, Village : Thangskai, P.O.-Lumshnong, District : East Jaintia Hills, Meghalaya - 793210. <a href="mailto:Email-singh.shishupal@dalmiacement.com">Email-singh.shishupal@dalmiacement.com</a> Mob:7085099840, Date of Appointment: 16.05.17

SN	Particulars	Details
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Shishupal Singh, B.E. (Mining), Experience: 21 Years M/s Dalmia Cement (Bharat) Limited, Umsoo Mootang, Village : Thangskai, P.O. Lumshnong, District : East Jaintia Hills, Meghalaya. 793210. <a href="mailto:Email-singh.shishupal@dalmiacement.com">Email-singh.shishupal@dalmiacement.com</a> Mob:7085099840; Date of Appointment: 16.05.17
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes <b>Geologist:</b> Chandrashekhar Sharma, Experience-18 Years, Date of Appointment: 19.11.2018 <b>Mining Engineer :</b> Shishupal Singh, B.E. (Mining), Experience: 22 yrs. Date of Appointment: 16.05.17
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	1. MP-319(3)/2009 MCCM(CZ)/MP-33; dtd 29.01.10 2. MOM-IBM/GHY/MEG/JNH/LST/MP-84 dtd. 29.08.17
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	IBM/GHY/MEG/JNH/LST/MP-84 dated 09.09.2021
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive	Captive

**Scientific Mining:** Compliance of proposals of approved mining plan/scheme of mining. –

### Exploration

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Nil	
1b	Exploration over lease area for Geological axis 1 or 2.	6 Boreholes 03 Nos. 180m 03Nos.150m Total-330m	6 Nos of Core borehole, Total- 621m drilling	The core boreholes were supposed to drilled till the end of mineralization as per approved RoMP, however it has not been done yet on the field.
1c	Exploration Agency & Expenditure in lakh Rupees during the year	6 Boreholes	M/s Synergy Geotech Pvt. Ltd. Nagpur Total-32.24 Lac.	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserves as on 01.04.2022	2021-22: 94414926 MT	2021-22: 93021330 MT	
1f	General remarks of inspecting officer on geology, exploration etc.	The core boreholes were supposed to drilled till the end of mineralization as per approved RoMP, however it has not been done yet on the field.		

## 2.0 DEVELOPMENT

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	<b>Easting</b> E434401 to E434935 <b>Northing</b> N2785765 to N2785464	<b>Easting</b> E434322 to E435026 <b>Northing</b> N2785960 to N2785320	Lessee has gone beyond the development area of approved RoMP close to BH-29.
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Yes, Topsoil-Nil OB-705 mRL to 703 mRL Sandstone-703mRL to 649 mRL Mineral Reject-685mRL to 676 mRL Limestone-694mRL to 640 mRL	Yes, Topsoil-Nil OB -708 mRL to 703mRL Sandstone-703mRL to 649 mRL Mineral Reject-685mRL to 676 mRL, Limestone-694mRL to 640 mRL	
2c	Stripping ratio or ore to OB ratio	1 : 0.56	1 : 0.28	
2d	Quantity of topsoil generation in m3	Nil	Nil	
2e	Quantity of overburden generation in m3	OB-21270 Sandstone-548360, Mineral Reject- 354064	OB-255800 Sandstone-134741, Mineral Reject-Nil	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	As per the approved RoMP , the proposed pit was to be extended up to E-435920, N2785630 however in inspection it was found mining has gone beyond the proposed limits of almost 50 mtrs in the eastern direction.		

## 3.0 EXPLOITATION

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1	1	
3b	Quantity of ROM mineral production proposed	1661123	1393596	
3c	Recovery of saleable/usable mineral from ROM production	100%	100%	
3d	Quantity of mineral reject generation	No proposal	Nil	
3e	Grade of mineral reject generation and threshold value declared	Threshold Value 34% CaO 5% MgO	Threshold Value 34% CaO 5% MgO	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No proposal	Nil	
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanised	Mechanised	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No proposal	Nil	

3j	Provision of drilling & blasting in mineral benches	Drilling dia:110mm Hole depth:9m Spacing: 4.5m Burden :3.5m Hole Charge: 6.5 Ton/kg  Blasting method :Slurry /Emulsion/ANFO/Ratio of primer/booster charge and ANFO/column charge will be 10-20:90-80.  MS delay detonators /Nnonel/Relays with cordex detonating fuse/electric detonator	Drilling dia:110mm Hole depth:9m Spacing: 4.5m Burden :3.5m Hole Charge: 6.5 Ton/kg  Slurry/Emulsion/ANFO/ Ratio of primer/booster charge & ANFO/column charge : 10-20:90-80,  MS delay detonators /Nonel/Relays with cordex detonating fuse/electric detonator.	
3k	Provision of mining machineries in mineral benches	Hyd Excavator 3.1m <sup>3</sup> .-02 Hyd Excavator 1.6 m <sup>3</sup> -01 Dumper 35 MT-03 Dumper 28 MT-08 Drill Mc.-110mm-02 Rock Breaker-01 Dozer-01 Compactor-01 Water Tanker-01 Explosive van-01 HSD Tanker-01	Hyd Excavator 3.1m <sup>3</sup> .-02 Hyd Excavator 1.6 m <sup>3</sup> -01 Dumper 35 MT-03 Dumper 28 MT-06 Drill Mc.-110mm-02 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	OB-6m, Ore-9m	
3m	Total area covered under excavation/ pits	22.47 ha	23.45 Ha.	Violation letter is being sent.
3n	Ore to OB ratio for the pit/mine during the year	1: 0.56	1: 0.28	
3o	Total area put in use under different heads at the end of year	43.94 Ha.	42.58 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	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	Production of ROM upto July 2022 408913.00 MT
3q	General remarks of inspecting officer on method of mining etc.	Production has been done by the lessee as per the proposed proposal in the reporting year. The proposed pit was to be extended up to E-435920, N2785630 however in inspection it was found mining has gone beyond the proposed limits of almost 50 mtrs in the eastern direction. Violation has been pointed out for exceed in area covered under excavation.		

#### 4.0 SOLID WASTE MANAGEMENT-DUMPING

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Yes	Yes	
4b	Location of topsoil, OB & mineral reject dumps	<b>Topsoil - Nil</b> <b>OB Dump -</b> N2785471, E435895 N2785157, E435096 <b>Sandstone dump</b> N2786540, E434480 N2786247, E435096 <b>Mineral reject dump</b> N-2785619, N-2785463, E-435479 ,E-435739	<b>Topsoil - Nil</b> <b>OB Dump -</b> N2785471, E435895; N2785157, E435096 <b>Sandstone dump</b> N2786232, E434560; N2786352, 434752 <b>Mineral reject dump</b> N2785619, N2785463; E435479 , E-435739	
4c	Number of dumps within lease area and outside lease area	WML: 2 Nos.	WML: 2 Nos.	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	<b>Topsoil dumping- Nil</b> <b>OB &amp; mineral reject</b> N2786540, E435628 N2785350, E434480	<b>Topsoil dumping- Nil</b> <b>OB &amp; mineral reject</b> N2786350, E434560 N2785160, E435897	
4e	Number of active & alive dumps	2	2	
4f	Number of dead dumps	Nil	Nil	
4g	Number of dumps stabilised	Nil	Nil	
4h	Whether Retaining wall or garland drain all along dumps	Yes	Yes	
4i	Length of Retaining wall or garland drain all along dump	Retaining wall :200m Check Dam:0.000m Garland Drain:200m	Retaining wall :200m Check Dam: 0.00 m Garland Drain:200m	
4j	Number of settling ponds	1	2	
4k	Specific comments of inspecting officer	Lessee has carried out the work as per the proposal envisaged during the reporting year.		

#### 5.0 SOLID WASTE MANAGEMENT-BACKFILLING

SN	Item	Proposals	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No proposals	Nil	
5b	Area under backfilling of mined out area	No proposals	Nil	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	No proposals	Nil	
5d	Total area fully reclaimed & rehabilitated	No proposals	Nil	

SN	Item	Proposals	Actual work	Remarks
5e	General remarks of inspecting officer on backfilling, reclamation etc	No proposal was envisaged for backfilling & reclamation in the reporting year.		

## 6.0 PROGRESSIVE MINE CLOSURE PLAN

SN	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) Annual PMCP report to be submitted before 1st day of July of every year	Submitted on 16.06.2022	
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	i) NA ii) NA iii) NA iv) NA. v) Nil vi) NA	i) NA ii) NA iii) NA iv) NA. v) Nil vi) NA	
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 v) Any other specific means	i) NA ii) Nil iii) NA iv) NA v) Nil	ii) NA ii) Nil iii) NA iv) NA v) Nil	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i) WML: 425 Nos. of saplings ii) Green Belt: 0.3 Ha iii) Nil	i) WML: 425 Nos. of saplings ii) Green Belt: 0.4 Ha iii) Nil	
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Air, Noise and Water quality monitoring will be done during the year within the lease area	Monitoring is being carried out , Within the limits	
6f	General remarks of inspecting officer on PMCP compliance & progressive	The lessee has carried out afforestation and environmental monitoring as per the proposal envisaged during the reporting year.		

## 7.0 MINERAL CONSERVATION

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Produced ROM will be directly sent to the Crusher from the mine	Produced ROM was directly sent to the Crusher from the mine	

	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	
7c	Different grade of mineral sorted out at mines	Not proposed	Nil	
7d	Any beneficiation process at mines	Not proposed	Nil	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No proposal for mineral beneficiation was proposed during the reporting year.		

## 8.0 ENVIRONMENT

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Yes	Yes	
8b	Concurrent use or storage of topsoil	Yes	Yes	Partly used in plantation work
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Yes	Yes	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Nil	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposal	Nil	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	Yes, proposed for plantation of 340 nos saplings covering an area of 0.2725 Ha.	Yes, Plantation WML - 595 Nos OML - Nil Total = 595 nos Survival rate: 78.48% Area covered WML = 0.2725 Ha	Plantation was carried out in the Safety zone
8g	Survival rate	No proposals	60.00%	
8h	Water sprinkling on roads to control airborne dust	Water Sprinkling on Haul roads was proposed.	Water sprinkling by water tanker over haul roads has been carried out.	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Lessee has planted 595 nos. of saplings within the mining lease. Water sprinkling has been carried out in the haul roads to minimize the fugitive dust emission. This sustains the aesthetic beauty of the mine area.		

## 9.0 COMPLIANCE OF RULE 45

SN	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly Return submitted up to : Aug 2022 Annual Return submitted for FY 2020-21		
SN	Item	Details given in A.R.	Observation of I/O	Remarks

9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	<b>Mining Engineer:</b> Shishupal Singh <b>Geologist:</b> C.S. Sharma <b>Manager:</b> Shishupal Singh	<b>Mining Engineer:</b> Shishupal Singh <b>Geologist:</b> C.S. Sharma <b>Manager:</b> Shishupal Singh	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 21.69 Ha. Temp. Dump: 17.56 Ha. Infrastructure & Road : 1.76 Ha Green Belt: 0.81 Ha. Total: 43.94 Ha.	Pit: 23.45 Ha. Temp. Dump: 16.46 Ha. Infrastructure & Road: 1.76 Ha. Green Belt: 0.91 Ha. Total: 42.58 Ha.	
9d	Scrutiny of Annual return on afforestation	WML: 425( 0.3 Ha)	WML: 850(0.4 Ha.)	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock-0.00 Production-1393596.00 Dsipatch-1393596.00 Closing Stock-0.00 There is no separate stock for graded ore	Opening Stock-0.00 Production-1393596.00 Dsipatch-1393596.00 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	Ex-mine price: 324.00	Ex-mine price: 324.00	
9i	Scrutiny of Annual return on fixed assets	Rs. 711525195/-	Verified from the asset register and found correct.	
9k	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	

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

1. Earlier pointed out violation has been complied.
2. Violation pointed out in the current inspection are as under:
  - A. Rule 11(1): 1.
    1. It was proposed that 06 Nos. of exploratory holes will be drilled till the end of mineralization in the year 2021-22, however drilling work has not been completed in the field.
    2. As per the approved RoMP , the proposed pit was to be extended up to E-435920, N2785630 however in inspection it was found mining has gone beyond the proposed limits of almost 50 meters in the eastern direction
    3. The proposed total area covered under excavation/ pits for the year 2021-22 was envisaged to be 22.47 Ha. however it has gone beyond the limit and is 23.45 Ha.

*Vikas*  
26/9/22

(Vikas Kumar), ACOM  
Name of Inspecting Officer with Designation and Date