

MCDR INSPECTION REPORT FOR THE PERIOD OF 2023-24

1) Name of Inspecting officer:	Mr. Vikrant Khedikar
2) Designation	Senior Assistant controller of mines
3) Accompanying mine official with designation	1. Sanjay Singh (HOD Mines) 2. Arbind Kr Jha (Mines Manger) 3. Shekhar Kr Sinha (Geologist)
4) Date of Inspection	19/04/2024

Sl. No.	Particulars	Details
1.	Name of the Mines	Muralipahari Limestone Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	53.378 Ha Forest: Nil Non Forest : 53.378
3.	Mine code	38BHR22015
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/209/2011
5	Name of the lessee, Address, Phone, email and fax number	M/s Dalmia Cement Bharat Limited P.O-Banjari, Dist- Rohtas, Bihar 821303
6	Village	Muralipahari
7	Taluka/Mandal	Rohtas/Dehri-On-Sone
8	District	Rohtas
9	Pin code	821303
10	State	Bihar
11	Post Office	Banjari
12	Nearest Police Station	Rohtas
13	Nearest Railway station	Dehrirohtas
14	Date of Grant of Mining Lease	02.01.1992
15	Date of Execution	02.01.1992
16	Date of Opening of Mine	02.01.1992
17	Date of First Renewal, if applicable and its period & expiry	02.01.2012 to 01.01.2032
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	-
20	Name of the Nominated Owner with Address, phone, email ,fax number and date of appointment	Venkatesan Thyagarajan, 01 Prithvi Avenue, 2 nd Street, Abirampuram, Chennai 9318353155
21	Name of the Mine Agent with Address, phone email, fax number and date appointment in mines.	Sanjay Kumar Singh Muralipahari Limestone Mines, PO-Banjari, Dist: Rohtas, Bihar M-9318353155 DOA:02/05/2019 Singh.sanjay7@dalmiacement.com
22	Name of the Mines Manager with Address, Phone, email, fax number and date of appointment	Arbind Kumar Jha Muralipahari Limestone Mines, PO-Banjari, Dist: Rohtas, Bihar M-9318353156 DOA:09/01/2023 jha.arbind@dalmiacement.com
23	Name of the mining engineer, qualification and total experience with Address, phone, email, fax number and date of appointment in Mines.	Dharmendra Singh Muralipahari Limestone Mines, PO-Banjari, Dist: Rohtas, Bihar M-9337195815 DOA:02/05/2019 Singh.dharmendra@dalmiacement.com
24	Whether Geologist and Mining Engineer appointed in Mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	15/03/2022
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	27/11/1998
27	Mineral(s) granted in lease and proved for mining	Limestone
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanized, 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.)

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
1a	Backlog of previous year	Nil	Nil	-
1b	Exploration over lease area for Geological axis 1 or 2.	No proposal during the FY	Nil	Nil
1c	Exploration Agency & Expenditure in lakh Rupee during the year	Nil	Nil	Nil
1d	Balance area to be explored to bring Geological axis in 1 or 2	No proposal during the FY	Nil	Nil
1e	Balance reserves as on 01.04.2024	-	5563336.93 Tonnes	Nil
1f	General remarks of inspecting officer on geology, exploration etc.	-	-	The deposit is a part of Rohtas Limestone in Semi Group of Vindhyan sub group.

Development

Sl.No	Item	Proposals (2023-24)	Actual work (2023-24)	Remarks
2a	Location of development w.r.t lease area	N2729770 -2730100N E801300 – 801800E	N2729700 -2730110N E801200 – 801680 E	
2b	Separate benches in top soil, overburden and mineral (Rule 15)	No Top Soil in the mine however separate benched proposed in the OB and mineral.	Separate benches area formed in OB and mineral.	
2c	Stripping ratio or ore to OB ratio	1:1.16	1:4.95	
2d	Quantity of topsoil generation in m ³	NIL	NIL	
2e	Quantity of overburden generation in m ³	564498	2162006	Nil

2f	General remarks of inspecting officer on development etc.	-	-	Dump workings under MC rule 12(1)(k) shall be amended in mining plan along with the necessary statutory permission from other authorities.
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Exploitation

Sl.No	Item	Proposal(2023-24)	Actual Work(2023-24)	Remarks
3a	Number of pits proposal for production	01	01	
3b	Quantity of ROM mineral production proposed	1110424	1098974	
3c	Recovery of salable/usable mineral from ROM production	90%	90%	
3d	Quantity of mineral reject generation	111043	Nil	
3e	Grade of mineral reject generation and threshold value declared	CaO-34% Min MgO-5% Max	Analysis Report Attached in MP CaO-26.98, MgO-7.93	
3f	Quantity of sub-grade mineral generation	No proposal	Nil	
3g	Grade of sub-grade mineral generation	No Proposal	Nil	
3h	Manual/Mechanized method adopted for segregating from ROM	Mechanized	Mechanized	Nil
3i	Any analysis or beneficiation study proposed & carried	Nil	Nil	Nil

	out for sub-grade mineral and reject					
3j	Provision of drilling & blasting in mineral benches	Spacing-4m provision kept in proposal under following parameter; Burden-3m Depth-6-8m Dia-32mm to 115mm		same as proposal		Nil
3k	Provision of mining machineries in mineral benches	provision kept in proposal deploying; 3 Drilling Rig 5 Excavators 13 Dumpers		same as proposal		Nil
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	height of benches in overburden and ore proposed to be kept at 6m		same as proposal		Nil
3m	Total area covered under excavation/pits	Mining - ha 31.55		Mining – ha 31.55		
3n	Ore to OB ratio for the pit/mine during the year	1:1.16		1:4.95		
3o	Total area put in use under different heads at the end of year	Mining	31.55 ha	Mining	31.55 ha	
		Waste Dump	12 ha	Waste Dump	12 ha	
		Mineral Beneficiation Plant	0 ha	Mineral Beneficiation Plant	0 ha	
		Mineral Storage	0 ha	Mineral Storage	0 ha	
		Tailing Pond	0 ha	Tailing Pond	0 ha	
		Roads, Conveyors, pipeline, electric line	0.1 ha	Roads, Conveyors, pipeline, electric line	0.1 ha	
		Infrastructure	0.01 ha	Infrastructure	0.01 ha	
		Township	0 ha	Township	0 ha	
		Topsoil	0 ha	Topsoil	0 ha	
		Effluent Treatment Plant	0 ha	Effluent Treatment Plant	0 ha	
		Others (Magazine, Rainwater harvesting, Back Filling Area1)	0 ha	Others (Magazine, Rainwater harvesting, Back Filling Area-1)	0 ha	
		Green Belt	1.139 ha	Green Belt	1.1 ha	
3p	Production of ROM mineral during last five-year period, as applicable	2019-20	999750 MT	2019-20	555792.73 MT	
		2020-21	995670 MT	2020-21	999870.3 MT	
		2021-22	999968 MT	2021-22	986965.76 MT	
		2022-23	999131 MT	2022-23	928974.82 MT	
		2023-24	1110424 MT	2023-24	1098974.4 MT	

3q	General remarks of inspecting officer on method of mining etc.		Fully Mechanized opencast mining has been practiced.	Nil
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Solid Waste Management-Dumping

Sl.No	Item	Proposal (2023-24)	Actual Work(2023-24)	Remarks
4a.	Separate dumping of topsoil, OB & mineral reject (Rule 32,33)	Separate stacking of OB and Mineral	Separate stacking of OB and Mineral	Nil
4b	Location of topsoil, & OB & mineral reject dumps (Give coordinates with mRL)	OB & Mineral Reject 1. N2729935.94- N2730417.47 E801416.29-E801962.14 2. N2729533.11- N2729920.91 E801340.96-E801829.47	OB & Mineral Reject 1. N2729935.94- N2730417.47 E801416.29- E801962.14 2. N2729533.11- N2729920.91 E801340.96- E801829.47	Nil
4c	Number of dumps within lease area and outside lease area	03 (Within Lease Area)	03 (Within Lease Area)	Nil
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	1. N2729935.94- N2730417.47 E801416.29-E801962.14 2. N2729533.11- N2729920.91 E801340.96-E801829.47 3. N2729651.19- N2729728.86 E801112.55-E801190.53	N2729935.94- N2730417.47 E801416.29- E801962.14 2. N2729533.11- N2729920.91 E801340.96- E801829.47 3. N2729651.19- N2729728.86 E801112.55- E801190.53	Nil
4e	Number of active & alive dumps	02	02	Nil
4f	Number of dead dumps	00	00	Nil
4g	Number of dumps stabilized	00	00	Nil
4h	Whether Retaining wall or garland drain all along dumps are there	1.Retaining wall of 992m & Garland drain of 1220m in Coordinates from N2729800- N2730128 :E801127- E801376 2.Retaining wall of 1333m	Retaining wall & Garland drain not made as per proposal.	Violation under Rule 11(1) of MCDR,2017 has been issued on

		& Garland drain of 1372m in Coordinates from N2729526- N2729900 :E801335- E801800		22/04/2024.Its compliance is awaited.
4i	Length of Retaining wall or garland drain all along dump	1.Retaining wall of 992m & Garland drain of 1220m in Coordinates from N2729800- N2730128 :E801127- E801376 2.Retaining wall of 1333m & Garland drain of 1372m in Coordinates from N2729526- N2729900 :E801335- E801800	Retaining wall & Garland drain not made as per proposal.	Violation under Rule 11(1) of MCDR,2017 has been issued on 26/04/2024.Its compliance is awaited.
4j	Number of settling ponds	Nil	Nil	Nil
4k	Specific comments of inspecting officer on waste dump management	During 2022-23,As per page 51,Para 6.2.2.2.2& page 52,Para 6.2.2.2.3 of Approved Review of Mining Plan, Retaining wall of 992m & Garland drain of 1220m in Coordinates from N2729800-N2730128 & E801127-E801376 not made 2.Retaining wall of 1333m & Garland drain of 1372m in Coordinates from N2729526- N2729900 & E801335- E801800 not made .Therefore, Violation under Rule 11(1) of MCDR,2017 has been issued on 26/04/2024..Its compliance is awaited.		Violation under Rule 11(1) of MCDR,2017 has been issued on 26/04/2024. Its compliance is awaited.

Solid Waste Management-Backfilling

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Part backfilling has been proposed	backfilling done as per proposal	Nil
5b	Area under backfilling of mined out area	1.61	1.61	Nil

5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Nil	Nil	Nil
5d	Total area fully reclaimed & rehabilitated	1.61 Ha in FY	1.5 Ha (at the end of FY-2023-24)	Nil
5e	General remarks of inspecting officer on backfilling, reclamation etc.		Backfilling carried out as per proposal.	Backfilling carried out as per proposal.

Progressive Mine Closure Plan

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	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	Annual Report on PMCP to be submitted in time.	Annual Report on PMCP submitted in time along with Annual Return.	As per management annual return will be submitted within the stipulated time.
6b	Management of worked/mined out benches			
	i) Area available for rehabilitation (ha)	1.7 Ha	1.7 Ha	Nil
	ii) Afforestation done (ha)	0.297	0.297	Nil
	iii) No. of sapling planted during the year	446	2000	Nil
	iv) Cumulative no. of plants	8446	7000	
	v) Any other specific method of rehabilitation	Nil	Nil	Nil
	vi) Cost incurred on watch & care during the year		180000/-	Nil

6c	Compliance on reclamation and rehabilitation by back filling i) Voids available for backfilling (LxBxD) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	Nil Nil 446 Nos Nil Nil	Nil Nil 2000 Nos Nil Nil	Nil Nil Nil Nil
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	NA 446 Nos Nil Nil	NA 2000 Nos Nil Nil	Nil Nil Nil
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Environment monitoring to be done quarterly under EPA.	Environment monitoring is carried out quarterly through own as well as private agency.	Nil
6f	General remarks of inspecting & progressive closure operations.	Nil	Survival rate was 50% & 55% within mining lease respectively.	Survival rate was 50% within mining lease which can be improved

Mineral Conservation

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	999381 Tonnes	999124 Tonnes	Nil
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical	Whole ROM is processed in captive

				plant. Sorting is not practiced
7c	Different grade of mineral sorted out at mines	Limestone & Reject Shale	Limestone & Reject Shale	Nil
7d	Any beneficiation process at mines	Nil	Nil	Nil
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	Entire ROM is transported to crusher installed in Dalmia Cement Plant.	999124 Tonnes has been achieved during 2022-23 against 999131MT of proposal.	Nil

Environment

Sl.No	Item	Proposal (2023-24)	Actual Work (2023-24)	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	Nil	Nil	Nil
8b	Concurrent use or storage of topsoil	Nil	Nil	Nil
8c	Separate dumps for overburden, waste rock rejects and fines (Rule 33)	Separate dumps for OB, waste rock, rejects proposed.	Dumping done as per proposal	Nil
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	Use of OB, waste rock, rejects proposed for restoring the land to its original use.	OB, waste rock, reject used for restoring the land to its original use. 1.61 ha area has been backfilled during 2023-24.	Nil
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	Proposed	OB, waste rock, reject used for restoring the land to its original use. 1.61 ha area has been backfilled during 2023-24.	Nil
8f	Baseline information on existence of plantation & additional plantation done (Rule 42)	446 saplings proposed for plantation during the year.	2000 saplings planted during the year.	Nil
8g	Survival rate	60%	50%	Can be improved
8h	Water sprinkling on roads to control airborne dust	Yes, it is proposed for water sprinkling on haul roads.	Observed during Inspection	Nil

8i	General remarks of inspecting officer on aesthetic beauty in and around mines area.		Surrounding area beyond lease area is green. River Sone is passing nearer to the eastern side of lease area. The aesthetic beauty around mines can be improved by gap plantation.	Nil
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Compliance of Rule 45

Sl.No	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	Monthly return for 2023-24 submitted, As declared by mine management annual return will be submitted within the stipulated time.	Nil	Monthly return for 2023-24 submitted, As declared by mine management annual return will be submitted within the stipulated time.
Sl.No.	Item			Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mining Engineer: Shri Dharmendra Kumar Singh, Geologist: Shri Shekhar Kumar Sinha, Manager: Mr. Arvind Kumar Jha	Mining Engineer: Shri Dharmendra Kumar Singh, Geologist: Shri Shekhar Kumar Sinha, Manager: Mr. Arvind Kumar Jha	Mining Engineer and Geologist and Mines Manager are employed.
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Annual return to be submitted as per rule 45 of MCDR 2017	As declared by mine management annual return will be submitted within the stipulated time.	Nil
9d	Scrutiny of Annual return on afforestation	Annual return to be submitted as per rule 45 of MCDR 2017	As declared by mine management annual return will be submitted within the stipulated time.	Nil
9e	Scrutiny of Annual return on mineral reject generation (Grade & Quantity)	Annual return to be submitted as per rule 45 of MCDR 2017	As declared by mine management annual return will be	Nil

			submitted within the stipulated time.	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Annual return to be submitted as per rule 45 of MCDR 2017	As declared by mine management annual return will be submitted within the stipulated time	Nil
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost.	Annual return to be submitted as per rule 45 of MCDR 2017	As declared by mine management annual return will be submitted within the stipulated time	Nil
9h	Scrutiny of Annual return on fixed assets	Annual return to be submitted as per rule 45 of MCDR 2017	As declared by mine management annual return will be submitted within the stipulated time	Nil
9i	Scrutiny of Annual return on mining machineries	Annual return to be submitted as per rule 45 of MCDR 2017	As declared by mine management annual return will be submitted within the stipulated time	Nil

Details of violations observed during current inspection and compliance position of violation pointed –

1. Violation observed: - MCDR- 2017 Rule 11(1) on date 19/04/2024.

Vikrant Murlidhar Khedikar
Senior Assistant Controller of Mines
23rd April 2024