

MCDR INSPECTION FORMAT

General

SL. No.	Particulars	Details
1	Name of the Mine	Lanjiberna Limestone & Dolomite Mines
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	873.057 Hects (Non forest area 810.497 Hects & Forest area 62.560 Hects)
3	Minecode	38ORI13014
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/929/2011
5	Name of the lessee, Address, phone, email and fax number	Dalmia Cement (Bharat) Limited Mail Id: purohit.pramod@dalmiacement.com Contact Number : 8280341692
6	Village	Lanjiberna
7	Taluka/Mandal	Rajgangpur
8	District	Sundargarh
9	Pincode	770023
10	State	Odisha
11	Post office	Lanjiberna
12	Nearest police station	Lanjiberna
13	Nearest Railway station	Rajgangpur
14	Date of Grant of Mining Lease	01.03.1990
15	Date of Execution	29.01.1997 (Original Lease Deed) 08.07.2016 (Supplementary Lease Deed) 15.12.2017 (Supplementary Lease Deed over 873.057 Ha)
16	Date of opening of Mine	12.05.1951
17	Date of expiry	29.02.2040
18	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Sri Venkatesan Thygaranjan, Rajendra, 4 th Floor, No.1, 2 nd Street, Prithivi Avenue, Abhirampuram, Chennai-600018 , t.venkatesan@dalmiabharat.com , Phone 9840838888 Date of appointment: 30.10.2018
19	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Omprakash R Khelkar, Dalmia Cement (Bharat) Limited. Lanjiberna Limestone & Dolomite Mines, At/Po- Lanjiberna, Dist_ Sundargarh, 770023

		(Odisha) <u>Email-</u> <u>khelkar.omprakash@dalmiacement.com</u> , Phone-9938199033 Date of appointment: 09.03.2023
20	Name of the Mines Manager with Address, mobile no, email, fax number and date of appointment in mine	Devendra Kumar Deshmukh Dalmia Cement (Bharat) Limited. Lanjiberna Limestone & Dolomite Mines, At/Po- Lanjiberna, Dist_ Sundargarh, 770023 (Odisha) <u>Email-</u> <u>deshmukh.devendradalmiacement.com</u> , Phone-9124522749 Date of appointment: 10.11.2023
21	Name of the Mining Engineer , Qualification and total experience with Address, mobile no, email, fax/phone number and date of appointment in mine	Devendra Kumar Deshmukh BE-Mining & Experience- 16 years Dalmia Cement (Bharat) Limited. Lanjiberna Limestone & Dolomite Mines, At/Po- Lanjiberna, Dist_ Sundargarh, 770023 (Odisha) <u>Email-</u> <u>deshmukh.devendra@dalmiacement.com</u> , Phone-9124522749 Date of appointment: 12.06.2023
`	Name of the Geologist , Qualification and total experience with Address, mobile no, email, fax number and date of appointment in mine	Dr. Udayanath Sahoo, (MSc, M. Phil, Ph. D) Experiences- 20 years Dalmia Cement (Bharat) Limited. Lanjiberna Limestone & Dolomite Mines, At/Po- Lanjiberna, Dist_ Sundargarh, 770023 (Odisha) <u>Email-</u> <u>sahoo.udaya@dalmiacement.com</u> , Phone-9438200240 Date of appointment: 20.10.2010
23	Date of Approval of Mining Plan/Review of Mining Plan/ their modifications with five-year period and specific condition in approval letter, if any.	Mining plan approval date-14/11/2019 From 01/04/2020 to 31/03/2025 (Nothing specific conditions) Mining Scheme rule 12 MCDR1988 27/01/2005 Mining Scheme rule 12 MCDR1988 27/11/2005 Modification. Approved Mining Scheme - 01/02/2007 Renewal under rule 24 MCR1960 07/05/2009 FMCP under 23C(1) 08/02/2012 Modif.of approved Mining Plan 11/01/2013 Mining Scheme rule 12 MCDR1988 25/03/2015

		MP modif under 17(3) MCR 2016 25/01/2018 Modif.approved Mining Scheme 28/08/2019 MP review under 17(1) MCR 2016 14/11/2019 Modification in RMP 17/11/2023
24	Mineral (s) granted in lease and proved for mining	Limestone & Dolomite
25	Method of Mining(Opencast, Underground)	Opencast
26	Category (Fully Mechanised, Others or Manual)	Category A, Fully Mechanized
27	Captive/Non Captive	Captive
28	Present EC Capacity	9580000.0000 (Tonnes)

Exploration: ---

SL.No	Item	Proposals (FY 2023-24)	Actual work	Remarks
1a	Backlog of previous year	During the year 2023-24 ,55 BH have been proposed (5500 Mtrs.)	11 Holes ,1351 mts	Target not achieved as per proposal
1b	Exploration over lease area for Geological axis 1 or 2.	283.59 Ha.	G2 118.41 Hects	Target not achieved as per proposal
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Not Specified	Natural Resources Exploration & Mining Pvt Limited, Bhubaneswar. Rs 32,95,550/-	
1d	Balance area to be explored to bring Geological axis in 1 or 2		471.06 Hects	
1e	Balance reserves as on 01.04.2024		Balance Reserve Limestone 135.832 Million Ton, Dolomite 1.811 Million Ton as on	Balance Reserve Limestone 135.832 Million Ton, Dolomite 1.811 Million Ton as on 01.04.2024

			01.04.2024	
1f	General remarks of inspecting officers on geology, exploration etc			

Development:--

SL.No	Item	Proposals (FY 2023-24)	Actual work during 2023-24	Remarks
2a	Location of development w.r.t. lease area	Pit-1 242685.1700E-244410.8000E 2463653.0000N-2462918.0000N Pit-2 244752.4000E-245917.4000E 2463466.3000N-2462934.2000N Pit-3 245953.0000E-246163.4000E 2463285.1200N-2463121.1200N	Pit-1 242529.8000E-244360.4000E 2463708.1000N-2462917.0800N Pit-2 244495.8700E-245892.0000E 2463468.0300N-2462988.0100N Pit-3 245949.4800E-246131.6000E 2463339.5300N-2463202.7800N	Development carried out within the proposed area
2b	Separate benches in topsoil, overburden and mineral	Separate benches in OB and minerals proposed	Separate benches in OB and minerals maintained	
2c	Stripping ratio or ore to OB ratio	1:0.73	1:1.04	1:1.04
2d	Quantity of topsoil generation in m ³	No proposal for generation of top soil	Nil	No top soil generated
2e	Quantity of overburden generation in m ³	31,19,774	27,33,808	Less waste generated than proposal due to less production of limestone compared to proposal.
1f	General remarks of inspecting officers on geology, exploration etc			The development activities are carried out

				within the proposed area by opencast mining method.
--	--	--	--	---

Exploitation:--

SL.No	Item	Proposals (FY 2023-24)	Actual work	Remarks
3a	Number of pits proposed for production	03 Pits	03 Pits	Lessee has carried out production with the proposed pit
3b	Quantity of ROM mineral production proposed	Limestone 94,99,750 Tons Dolomite 79,100 MT	Limestone 5954719.465 Tons Dolomite 4,408 MT	Less production due to less market demand of cement in captive cement plant
3c	Recovery of salable/usable mineral from ROM production	100%	100% recovery carried out	100% recovery carried out
3d	Quantity of mineral reject generation	6,29,500 Tons	6,75,016 Tons	Mineral reject generated during the year have been utilized by blended judiciously with high grade limestone.
3e	Grade of mineral reject generation and threshold value declared	Threshold Value, CaO \geq 34 % & MgO \leq 5	Avg grade of CaO 35.45 % & MgO =8.85 %	Avg grade of CaO 35.45 % & MgO =8.85 %
3f	Quantity of sub-grade mineral generation	Nil	Nil	Nil
3g	Grade of sub-grade mineral generation	NA	NA	NA
3h	Manual / Mechanised method adopted for segregating from ROM	Fully Mechanized method	Fully Mechanized method adopted	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	No such proposal	NA	NA
3j	Provision of drilling & blasting in mineral benches	Drilling by Hydrolic drill of 102 mm dia Burden-3.2 m Bench Height- 8m	Drilling by Hyd drill of 102 mm dia Burden-3.2 m Bench Height- 8	As per approved mining plan

		Spacing -3.7 m	m Spacing -3.7 m	
3k	Provision of mining machineries in mineral benches	Hydraulic Shovels , Dumpers, dozers, rock drills, Motor Grader, Excavator etc	Hydraulic Shovels , Dumpers, dozers, rock drills, Motor Grader, Excavator Etc	As per approved mining plan
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Bench height proposed is 8 m	Bench height of 08 meter maintained	As per approved mining plan
3m	Total area covered under excavation/pits	162.25 Ha till 31.03.2024	156.285 Ha Till 31.03.2024.	156.285 Ha Till 31.03.2024.
3n	Ore to OB ratio for the pit/ mine during the year	1:0.73	1:1.15	1:1.15
3o	Total area put in use under different heads at the end of year	237.51 ha as on 31.03.2024.	229.626 ha as on 31.03.2024.	229.626 ha as on 31.03.2024.
3p	Production of ROM mineral during last five-years period , as applicable	2018-19 : Limestone = 44,92,750 Dolomite= 46,150 2019-20 Limestone = 65,01,250 Dolomite= 78,950 2020-21 : Limestone = 85,00,000 MT Dolomite= 79,150 MT 2021-22 : Limestone = 89,99,750 MT Dolomite= 78,550 MT 2022-23 : Limestone = 94,96,750 MT	2018-19 : Limestone= 39,47,099 Dolomite = 43,664 2019-20 Limestone = 44,05,692 Dolomite = 17,331 2020-21 : Limestone= 60,99,957 MT Dolomite = 22,991 2021-22 : Limestone= 57,55,505 MT Dolomite = 7,480 MT 2022-23 : Limestone= 54,63,339 MT	Less production due to less market demand

		Dolomite= 74,750 MT 2023-24 : Limestone = 94,99,750 MT Dolomite= 79,100 MT	Dolomite = 3,852 MT 2023-24 : Limestone = 59,54,719.465 MT Dolomite= 4,408 MT	
3q	General remarks of inspecting officers on geology, exploration etc			The lessee has proposed for production for both limestone and dolomite during the reporting year. The lessee has carried out the production proposal well within the proposed location but could not achieved the targeted production during the reporting year.

Solid Waste Management-Dumping:--

SL.No	Item	Proposals (FY 2023-24)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)		Separate dumping of OB carried out.	There is no generation of Top soil during the year.
4b	Location of topsoil, OB & mineral reject dumps	243163-2463201 242524-2463322 244495-2463285	243142-2463572 242524-2462974 244531-2462938	OB dumping as per proposal
4c	Number of dumps within lease area and outside lease area	10 - Inactive 01 – Active Dump	242524-2462974	10 - Inactive 01 – Active Dump

		(within lease area)		(within lease area)
4d	Location of dumps w.r.t. ultimate pit limit	Outside UPL	244531-2462938	
4e	Number of active & alive dumps	Active Dump-01 & 02 Temporary Dump	Active Dump-01 & 02 Temporary Dump	
4f	Number of dead dumps	No such proposal during the year	Not applicable	09 nos dump already stabilized
4g	Number of dumps stabilised	No such proposal	Not applicable	Already stabilized
4h	Whether Retaining wall or garland drain all along dumps are there	No such proposal during the year	Not applicable	Already constructed
4i	Length of Retaining wall or garland drain all along dump	Retaining Wall-140Mtr Garland Drain-140Mtr.	100% completed.	Already constructed
4j	Number of settling ponds	No such proposal	Not applicable	
				Waste dump management is carried out as per the proposal

Solid Waste Management-Backfilling:--

SL.No	Item	Proposals (FY 2023-24)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	Full Extraction proposed	Full Extraction done	As per approved Mining plan.
5b	Area under backfilling of mined out area	8.29	4.2	Back filling is on going
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	No such proposal	Not applicable	No such proposal in the reporting year.
5d	Total area fully reclaimed & rehabilitated	No such proposal	Not applicable	No such proposal in the reporting year.
5e	General remarks of inspecting officers on backfilling and		Soild waste management in the form of backfilling	Soild waste management in the form of

	reclamation etc.		during the reporting year is going on.	backfilling during the reporting year is going on.
--	------------------	--	--	--

Progressive Mine Closure Plan:---

SL.N.	Item	Proposals (FY 2023-24)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). (Hard copy same provided)	As per Rule 26(2) Annual PMCP report to be submitted before 1st day of July of Every Year	Submitted within the stipulated time period for the reporting year.	Submitted within the stipulated time period for the reporting year.
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	No such proposal during the reporting year	No such proposal during the reporting year
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	No such proposal	No such proposal during the reporting year	No such proposal during the reporting year
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No such proposal	No such proposal during the reporting year	No such proposal during the reporting year
6e	Compliance of Environmental monitoring	Periodical monitoring of	Regular Environmental	Regular Environmenta

	(core zone & buffer zone)	environmental parameters are proposed.	monitoring carried out as proposed	1 monitoring carried out as proposed
				.

Mineral Conservation: ---

SL.No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting proposed within lease area.	Blending of low grade with high grade material on day to day basis.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Mechanized	Mechanized	Based on XRF analysis report.
7c	Different grade of mineral sorted out at mines	CaO > 38% & MgO < 7% CaO 34-38% & MgO < 7%	Cement grade Limestone is directly dispatched to captive cement plant after blending	Different grades of minerals are being sorted out based on XRF analysis report and on the same day all minerals are being feeded to crusher with proper blending.
7d	Any beneficiation process at mines	No specific proposal	No beneficiation apart from dry crushing and screening.	No beneficiation apart from dry crushing and screening.
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		The ore produced from mine is being consumed at Captive Plant at Rajganjpur. Plant acceptable grade of ore is +38% CaO and - 7% MgO. No	The ore produced from mine is being consumed at Captive Plant at Rajganjpur. Plant

			beneficiation process was proposed. Only crushing and screening is being carried out.	acceptable grade of ore is +38% CaO and -7% MgO. No beneficiation process was proposed. Only crushing and screening is being carried out.
--	--	--	---	---

Environment:--

SL.No.	Item	Proposals ((FY 2023-24)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	No such proposal	Not applicable	The top soil quantity is negligible and occurring as small isolated pockets which gets mixed up with stone chips and not possible to separate it out.
8b	Concurrent use or storage of topsoil	No such proposal	Not applicable	The stone mixed soils are utilized for plantation on dumps.
8c	Separate dumps for overburden, waste rock, rejects and fines	Separate stacking of OB was carried out and mineral reject of limestone ore were subsequently blended with saleable ore and sent to the lessees own captive plant	Separate stacking of OB was carried out and mineral reject of limestone ore were subsequently blended with saleable ore and sent to the lessees own captive plant	Separate stacking of OB was carried out and mineral reject of limestone ore were subsequently blended with saleable ore and sent to the lessees own captive

				plant
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No such proposal during the reporting year.	No such proposal during the reporting year.	No such proposal during the reporting year.
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposal during the reporting year.	No such proposal during the reporting year.	No such proposal during the reporting year.
8f	Baseline information on existence of plantation & additional plantation done	3625 saplings were proposed within the ML area	14084 saplings have been planted within the ML.	14084 saplings have been planted within the ML.
8g	Survival rate	80%	80%	
8h	Water sprinkling on roads to control airborne dust	Water sprinkling proposed on haul roads to suppress the dust.	Water sprinkling carried out on haul roads to suppress the dust.	

Compliance of Rule 45

SL.No.	Item	COMMENTS		Remarks.
9a	Status of submission of Monthly and Annual returns	As per MCDR 2017, the monthly return is to be submitted before 10th day of every month in respect of the preceding month and AR shall be submitted before the 1st day of July each year for the proceeding financial year		Monthly and Annual returns submitted in due time frame.
S.N.	Item	Details given in A.R. for the year 2023-24	Observation of I/ Officer	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	1. Sri P. Vikram Mines Manager (I/C) 2. Dr Udayanath Sahoo - Geologist.	1. Sri P. Vikram Mines Manager (I/C) 2. Dr Udayanath Sahoo - Geologist. were present	

			during the inspection.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under Pits- 162.25Ha. Waste Dump- 51.05 Ha Infrastructure & Road- 24.21 Ha.	Area under Pits- 156.285 Ha. Waste Dump- 49.131 Ha Infrastructure & Road- 24.210 Ha.	Due to less production
9d	Scrutiny of Annual return on afforestation	3625 saplings were proposed within the ML area	Appears to be correct	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	6,29,500 MT Mineral Reject generated during the reporting year	Appears to be correct	All mineral reject materials have been consumed due to proper & scientific blending.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: - Opening stock : 6,505.230 Production: . 59,54,719.465 Closing Stock: 6,500.00 Process Ore:- Opening stock : 3,04,145.305 Production: 59,54,724.695 Despatch : 59,54,539.000 Closing Stock: 3,04,331.000	Appears to be correct	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex. Mine Price- Rs.415.46/-	Appears to be correct	
9i	Scrutiny of Annual return on fixed assets	Value of Fixed Assets: Rs.224,93,93,100 /-	Appears to be correct	
9k	Scrutiny of Annual return on mining machineries	Rock Drill -6 Nos Shovel Hyd- 4.5 Cum: 4 Nos	Appears to be correct	

		Shovel Hyd- 3.3 Cum: 2 No Shovel Hyd- 3.4 Cum: 7 Nos Dumper- 35 tonne: 4 Nos Dumper- 40 tonne: 16 Nos Dumper- 40 tonne: 16 Nos Dumper- 14.7 cbm :24 Nos Dumper- 17.6 cbm :16Nos Dozer- 4 Nos Water tanker- 3 Nos Road Roller-2 No Front End Loader- 1 No Tractor- 2 No Motor Grader-1 No Explosive van- 2 No Crane-:1 No		
--	--	---	--	--
