

MCDR INSPECTION REPORT 2023-24

S.N.	Particulars	Details
1	Name of the Mine	Nongtraï Limestone Mine
	Date of Inspection	26 th & 27 th September, 2024
	Name of the Inspecting Officer	Sandeep Kumar Singh, RCOM
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	100 Ha (Forest)
3	Mine code	38MEG04005
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/7411/2011
5	Name of the lessee, Address, phone, email and fax number	Lafarge Umiam Mining Private Limited 3rd Floor, Goenka Tower Morello Compound, Keating Road, Shillong, Meghalaya-793001.
6	Village	Nongtraï
7	Taluk/Mandal	Mawsynram Block, Shella Confederacy
8	District	East Khasi Hills
9	Pin code	793112
10	State	Meghalaya
11	Post office	Shella Bazar
12	Nearest police station	Shella
13	Nearest Railway station	Guwahati
14	Date of Grant of Mining Lease	29.08.2001
15	Date of Execution	03.01.2002
16	Date of opening of Mine	28.03.2003
17	Date of first Renewal, if applicable and its period & expiry	Not Applicable
18	Date of second Renewal, if applicable and its period & expiry	Not Applicable
19	Date of submission of renewal application if Mining Operations are continuing under deemed extension	Not Applicable
20	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	George Chacko Lafarge Umiam Mining Private Limited 3rd Floor, Goenka Tower Morello Compound, Keating Road, Shillong, Meghalaya-793001. Mail: george.chacko@lafargeholcim.com Phone: +91 364 2501115; Fax: +91 364 2505519 Mobile No: 9957173007 DOA: 25th June 2023
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Barun Barua Nongtraï Limestone Mine Lafarge Umiam Mining Private Limited 3rd Floor, Goenka Tower Morello Compound, Keating Road, Shillong, Meghalaya-793001. Mail: barun.barua@lafargeholcim.com Phone: +91 364 2501115; Fax: +91 364 2505519 Mobile No: 9863110700 DOA: 16th June, 2022

22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	Pankaj Nayan Nongtraí, Mawsynram Block, Shella Confederacy, Shella Bazar, East Khasi Hills, Meghalaya-793 112 Mail: p.nayan@lafargeholcim.com Phone: +91 364 2501115 Fax: +91 364 2505519 Mobile No: 8894221341 DOA: 18 th March, 2024
23	Name of the Mining Engineer, Qualification and total experience with Address, phone, email, fax number and date of appointment in mine	Amrit Pegu Nongtraí, Mawsynram Block, Shella Confederacy, Shella Bazar, East Khasi Hills, Meghalaya-793 112 Mail: amrit.pegu@lafargeholcim.com Phone: +91 364 2501115 Fax: +91 364 2505519 Mobile No: 7085099843 DOA: 18 th April, 2024
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.	1. Approval of 1st Mining Plan: 04.03.1999
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	2. Mining Plan – 29.05.2000 3. Mining Plan – 11.10.2002 4. PMCP – 03.06.2006 5. Modification of Mining Plan – 10.09.2007 6. Scheme of Mining – 27.10.2008 7. Scheme of Mining – 04.10.2013 8. Modification of Scheme of Mining – 27.08.2015 9. Modification of Scheme of Mining – 19.06.2017 10. Review of Mining Plan – 07.11.2017 11. Modification of Mining Plan – 02.03.2020 12. Modi. of Review of Mining Plan - 04.12.2020 13. Review of Mining Plan – 13.01.2023 (2023-24 to 2027-28)
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	Non-Captive (Export)

Exploration

S.N.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	NIL	NA	
1b	Exploration over lease area for Geological axis 1 or 2.	No proposal in this year (2023-24)	NA	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	NA	NA	
1d	Balance area to be explored to bring Geological axis in 1 or 2	5.89 ha area under G2 level	None	This area is reserved as biodiversity area as per Supreme Court directive. No proposals are made for further exploration.
1e	Balance reserves as on 01.04.2024	186.91 Million Tones	186.91 Million Tones	
1f	General remarks of inspecting officer on geology, exploration etc.	<p>There were no proposals for drilling exploratory boreholes in the year 2023-24. A small patch of area is in G2 approximately 5.89 ha which is reserved as biodiversity area as per Supreme Court directive.</p> <p>Regionally, the area belongs to Kopili and Shella Formation of Jaintia Group. Limestone deposit belongs to Shella Formation which comprises of alternating limestone and sandstone members, viz, Prang Limestone, Narpuh Sandstone, Umlatdoh Limestone, Lakadong Sandstone and bottom Lakadong Limestone respectively in chronological order from top to bottom.</p> <p>The limestone formation exposed in the ML area belongs to Prang Limestone member. As per the exploration carried out local lithostratigraphic sequence is Prang Limestone underlain by Narpuh Sandstone. To explore the underlying unexposed Limestone bands i.e., Umlatdoh and Lakadong member, it is proposed to drill 24 holes with a cumulative meterage of 6845 in 2025-26.</p> <p>The limestone beds within the ML area show a general dip towards south to south-west and the strike locally veering around WNW-ESE to NW-SE direction. The dips are low in the range of 8° – 15°.</p>		

Development

S.N.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	N 2786870-2787400 E 360560 - 361350	N 2786870-2787389 E 360560 - 361320	Working done between RL 183-130/129 mtr.
2b	Separate benches in	No topsoil and	No topsoil and	As proposed

	topsoil, overburden and mineral (Rule 15)	overburden present.	overburden present. Benching in Limestone is maintained at 10 mts maximum height with minimum 25-30 mtrs bench width	
2c	Stripping ratio or ore to OB ratio	Not Applicable	Not Applicable	No topsoil and overburden present.
2d	Quantity of topsoil generation in m3	Not Applicable	Not Applicable	No topsoil presents. Minor quantity of Trapped soil generated is stored in designated shed for use in Nursery.
2e	Quantity of overburden generation in m3	Not Applicable	Not Applicable	No overburden presents.
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Development as per proposal in Mining Plan. Mine is being worked by forming benches of 8-10 mtr. height and of 7 benches. The mine has been worked upto level 130/129 MRL and top level being 183 MRL. Mechanized mining is being done by deploying drills of 115 mm. diameter and using explosives & blasting and deploying excavators of 2.45 cum and tippers of payload capacity of 25 MT. Approximately 11,000 MT of limestone is raised and dispatched to the crusher on daily basis. In 2024-25, 120 MRL has been opened and operated.		

Exploitation

S.N.	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	1 (One)	1 (One)	
3b	Quantity of ROM mineral production proposed	4,996,045 tons	3,625,071 tons	
3c	Recovery of salable/usable mineral from ROM production	4,996,045 tons	3,625,071 tons	
3d	Quantity of mineral reject generation	Nil	Nil	
3e	Grade of mineral reject generation and threshold value declared	Not Applicable	Not Applicable	
3f	Quantity of sub-grade mineral generation	Not Applicable	Not Applicable	
3g	Grade of sub-grade mineral generation	Not Applicable	Not Applicable	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not Applicable	Not Applicable	

3j	Provision of drilling & blasting in mineral benches	Deep hole drilling and blasting is proposed using 115 mm diameter DTH drilling machines.	Yes, Drilling is being carried out by hydraulically and pneumatically operated 115 mm diameter DTH drilling machines. Conventional blasting using ANFO/Slurry with use of milli second delay/ NONEL and or Electronics Detonator are used to prevent the fly rocks, noise and to reduce ground vibrations.	
3k	Provision of mining machineries in mineral benches	Proposed for using hydraulic excavators of 2.45 m3 bucket capacity	Yes, the hydraulic excavators of 2.45 m3 bucket capacity are presently being used for loading of limestone and transport of limestone by tippers to crusher.	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	10 mtr. bench height was planned	No overburden, only Limestone mineral-Mining Method as proposed in RMP (bench height 8 to 10 mtr.)	No overburden
3m	Total area covered under excavation/pits	45.74 Ha	44.193Ha	
3n	Ore to OB ratio for the pit/mine during the year	Nil	Not Applicable	No overburden in Mines
3o	Total area put in use under different heads at the end of year	Pit = 45.74 Ha Buildings & Road = 6.25 Ha Stock Area: 5.14 Ha Total = 57.13 Ha	Pit = 44.193 Ha Buildings & Road = 6.580 Ha Stock Area: 5.14 Ha Total = 55.913 Ha	
3p	Production of ROM mineral during last five-year period, as applicable	Proposal 2019-20 = 3101430 MT 2020-21 = 2936832 MT 2021-22 = 3700285 MT 2022-23 = 4100390 MT 2023-24 = 4996045 MT	Actual 2019-20 = 2265652 MT 2020-21 = 2232341 MT 2021-22 = 2477094 MT 2022-23 = 3453257 MT 2023-24 = 3625071 MT	
3q	General remarks of inspecting officer on method of mining etc.	During the Review year, 3625071 MT had been produced as against the proposal in RMP of 4996045 MT. (72.6 % achieved)		

Solid Waste Management-Dumping

S.N.	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Not proposed	Not Applicable	

4b	Location of topsoil, OB & mineral reject dumps	Not proposed	Not Applicable	
4c	Number of dumps within lease area and outside lease area	Not proposed	Not Applicable	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Not proposed	Not Applicable	
4e	Number of active & alive dumps	Not proposed	Not Applicable	
4f	Number of dead dumps	Not proposed	Not Applicable	
4g	Number of dumps stabilized	Not proposed	Not Applicable	
4h	Whether Retaining wall or garland drain all along dumps are there	Not proposed	Not Applicable	
4i	Length of Retaining wall or garland drain all along dump	Not proposed	Not Applicable	
4j	Number of settling ponds	Not proposed	Not Applicable	
4k	Specific comments of inspecting officer on waste dump management.	No topsoil and overburden present in the mine and there are no proposal for same in the RMP.		

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	Not proposed	Not Applicable	
5b	Area under backfilling of mined out area	Not proposed	Not Applicable	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32)	Not proposed	Not Applicable	
5d	Total area fully reclaimed & rehabilitated	Not proposed	Not Applicable	
5e	General remarks of inspecting officer on backfilling, reclamation etc.	Backfilling is not in the proposal for review year.		

Progressive Mine Closure Plan

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	Annual PMCP report to be submitted before 1st day of July of every year	Submitted on 30th June, 2024 for the reporting year 2023-24.	Complied

	Annexure-20.			
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 proposal is made.	Not applicable	
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 proposal is made as there is no overburden generated.	Not applicable	
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i. 0.55 ha ii. No 1380 nos.	i. 0.56 ha ii. 1400 nos.	This is development of green belt done as per the proposal in three locations as per approved Review of Mining Plan.
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed to carry out Air, Noise and Water quality monitoring during the year.	Air, Noise and Water quality monitoring carried out as per the proposal during the reporting year.	Complied and within permissible limit.
6f	General remarks of inspecting officer on PMCP compliance & progressive closure operations	The lessee has carried out environmental monitoring as proposed in RMP. During FY 2023-24, green belt development has been carried out at i) barrier zone near boundary pillar no. 1 in the South West direction ii) near ANFO mixing shed in biodiversity Block A iii) barrier zone in western boundary between N2787300 – 200.		

Mineral Conservation

S.N	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Produced ROM will be sent directly to the crusher unit from the mine.	Produced ROM is sent directly to the crusher unit from the mine	Crushers are located outside the lease area. Two crushers of rated capacity 800 TPH & 300 TPH are installed.
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not proposed	Not Applicable	
7c	Different grade of mineral sorted out at mines	Not proposed	Not Applicable	
7d	Any beneficiation process at mines	Not proposed	Not Applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	There is no proposal for mineral beneficiation in the approved Review of Mining Plan. The entire ROM is sent to the crusher and after crushing, to plant through covered long belt conveyor of approx. 17 km length.		

Environment

S. N.	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposal	Not Applicable	
8b	Concurrent use or storage of topsoil	No proposal	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposal	Not Applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposal	Not Applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc.)	No proposal	Not Applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	i. 0.55 ha ii. 1380 nos.	i. 0.56 ha ii. 1400 nos.	
8g	Survival rate	80 %	81 % (within lease)	
8h	Water sprinkling on	Water Sprinkling	Automated Water	A special provision

	roads to control airborne dust	on Haul roads were proposed.	sprinkling along the haul road, Fogger in Crusher and by water tanker in pit and other area has been carried out.	of water cannon is used to suppress the dust before loading from the muck pile and at crusher platform.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area	Drilling machines are equipped with wet drilling arrangements/cyclone dust collectors/bag filters. Greenery can be seen around mines and mine office and greenbelt development has been taken up within the lease area.		

Compliance of Rule 45

S. N.	Item	COMMENTS	Remarks
9a	Status of submission of Monthly and Annual returns	M.R. Submitted up to September-2024 A.R. Submitted for the year 2023-24 on 30-06-2024.	Complied

S.N.	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	1. Amrit Pegu - Mining Engineer. 2. Mairembam Prabindas Singh - Geologist.	Geologist and Mining engineer were present during the inspection.	Information provided
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit = 44.193 Ha Buildings & Road= 6.580 Ha Stock Area: 5.14 Ha Total = 55.913 Ha	Information provided	
9d	Scrutiny of Annual return on afforestation	A total of 1400 nos. of saplings planted within the lease area covering an area of 0.56 ha.	Information provided	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	Nil	No reject generation
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Opening Stock- 13302 MT Production- 3625071 MT. Dispatch- 3625071 MT. Closing Stock- 13302 MT	Information provided	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex. Mine Price: Rs. 793.41/MT Sale Value: Rs 910.77/MT Cost of production: Rs 562.12/MT	Information provided	
9i	Scrutiny of Annual return on fixed assets	Rs. 1368703728	Information provided	
9k	Scrutiny of Annual return on mining machineries	1) Back Hoe: 4 no. 2) Rock Breaker: 3 no. 3) Drilling Machine: 4 no. 4) Front End Loader: 1 no. 5) Dumper: 15 no.	List of Mining machineries used in mines is provided	

		6) Dozer: 1 no. 7) Water Tanker: 1 no. 8) Road Roller: 1 no. 9) Explosive van: 1 no.		
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Details of violations observed during current inspection and compliance position of earlier violation pointed out:

No violation was raised in the last inspection. Earlier violations had been complied. This inspection is carried out for verification of MCDR compliance, submitted 5 Star Rating Templates.

Date: 15.10.2024


Sandeep Kumar Singh
Regional Controller of Mines
Indian Bureau of Mines, Guwahati Region