

**1.0 GENERAL**

SN	Particulars	Details
1	Name of the Mine	<b>BRISHYRNOT LIMESTONE MINE-I</b>
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	42.051 Ha. (Total Lease Area) Forest Land : Nil Non-Forest Land: 42.051 Ha.
	Name of Inspecting officer	Sandeep kumar Singh,RCOM
	Date of Inspection:	10.09.24 and 11.09.24
3	Mine Code	38MEG657001
4	IBM Registration Number under rule 45 of MCDR, 2017	IBM/5483/2011
5	Name of the lessee, Address, phone, email and fax number	STAR CEMENT MEGHALAYA LIMITED Village/P.O./P.S. – Lumshnong East Jaintia Hills District, Meghalaya - 793 210
6	Village	Lumshnong
7	Taluka/Mandal	Khliehriat
8	District	East Jaintia Hills
9	Pin Code	793 210
10	State	Meghalaya
11	Post office	Lumshnong
12	Nearest police station	Lumshnong
13	Nearest Railway station	Bardarpur
14	Date of Grant of Mining Lease	01.07.2022
15	Date of Execution	15.09.2022
16	Date of opening of Mine	20.12.2022
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	<b>SH. PANKAJ KEJRIWAL</b> Star Cement Meghalaya Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, E-mail: pankajkejriwal@hotmail.com Date of appointment: 08.02.2021
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	<b>SH. D. V. RAMANAYYA</b> Star Cement Meghalaya Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, Mobile No. 94901-88024 E-mail: dvramanayya@starcement.co.in Date of appointment: 18.12.2022
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	<b>SH. NOHAR SINGH</b> Star Cement Meghalaya Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills District, Meghalaya, Mobile No. 74711-18813 E-mail: noharsingh@starcement.co.in Date of appointment: 01-07-2023

**FOR THE YEAR 2023-24**

**MCDR INSPECTION REPORT OF BRISHYRNOT LIMESTONE MINE-I (42.051 HA.)  
STAR CEMENT MEGHALAYA LIMITED, LUMSHNONG VILLAGE, EAST JAINTIA HILLS DISTRICT, MEGHALAYA-793210**

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	<b>SH. NOHAR SINGH</b> Qualification: B.E in Mining Engineering Total Experience: ____ years Address: Star Cement Meghalaya Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, Mobile No. 74711-18813 E-mail: noharsingh@starcement.co.in Date of appointment: 20.12.2022
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 55 & carrying out their duties as per rule 56 & 57.	SH.PATEL SURAJ SINGH Star Cement Meghalaya Limited Village/P.O./P.S.- Lumshnong, East Jaintia Hills Dist, Meghalaya, Mobile No. 9862571223 <a href="mailto:patelsingh@starcement.co.in">patelsingh@starcement.co.in</a> Date of appointment: 20/12/2022
25	Date of Approval of Mining Plan/ <del>Modified Mining Plan</del> with five-year period and specific condition in approval letter, if any.	<b>Mining Plan:</b> Letter No. IBM/GHY/MEG/EJH/LST/MP-88, dated 14.09.2022  <b>Modified Mining Plan:</b> MCDR-MPCP0CaF1 / 4/2023-GUH-IBM_RO_GUH: 09.06.2023,
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Not applicable
27	Mineral(s) granted in lease and proved for mining	Limestone & Shale
28	Method of Mining (Opencast, Underground)	Opencast
29	Category (Fully Mechanised, Others or Manual)	Fully Mechanised
30	Captive/Non Captive	Captive

**Exploration**

SN	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	Nil	Not Applicable	
1b	Exploration over lease area for Geological axis 1 or 2.	No Proposal	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Not Applicable	No proposal in the year
1d	Balance area to be explored to bring Geological axis in 1 or 2	No Exploration proposal	No Exploration	Area in G1 is 38.858 Ha. as on 31.03.2024 Balance Area to explored : 3.193 Ha
1e	Balance reserves as on start of Mines: as on 01.04.24	--	Reserves (Limestone )	

		(111):14933551 Resource (211) : 36331319 Reserves (Shale): (111):475052 Resource (211) : 94124	
1f	General remarks of inspecting officer on geology, exploration etc.	<p>Past Exploration In the past, the area was covered under regional geological mapping by Geological Survey of India with an aim to delineate the limestone bands and identify limestone blocks suitable for exploration. Further Directorate of Mineral Resources (DMR), Govt. of Meghalaya In <b>Regional</b> :Lumshnong North Block, out of an area of 2.5 sq km, covered by mapping, an area of 1.5 sq km was explored by drilling resulting in estimating 62 million tons of limestone of Middle Sylhet band. The average thickness of limestone encountered in the boreholes is given below: Upper Sylhet (Prang) Limestone:92.65 m Middle Sylhet (Umlatdoh) Limestone :39.65 m Lower Sylhet (Lakadong) Limestone :61.80 m</p> <p><b>Lease area:</b> GEOLOGY: The Max. &amp; Min. elevation of the area varies from 219 mRL to 60 mRL respectively. The lithounit i.e., Limestone formation in the area belongs to Prang limestone unit of the Sylhet unit of Jaintia group (of Meghalaya Shelf) and Shale belongs to Kopili Formation. There is only one band of limestone in this lease area. The thickness of the limestone band as per exploration is 127m. The strike direction of limestone formation in the area is E-W and dipping around 8-15 towards south.area is explored by 16 boreholes drilling upto 1002 mtr. Area of 38.858 lies in G1 level of exploration. There are no drilling proposal in review year in mine in year 23-24.</p>	

**2.0 DEVELOPMENT**

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Extents for pit 2 as per approved plan are N-2784179 to 2784069,E-441704 to E-441488	Pit 2: Easting 441704-442000  Northing:2784069-2784179  Pit 1-E-	Pit area working has exceeded the planned area.violation issued for same in pit 2.

		pit 1-E-440932-441407 N-2783945-2784135	441050-441390 N-2784100-2783950	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Yes	Yes	Benches are developed separately in LST & Shale
2c	Stripping ratio or ore to OB ratio	N/A	N/A	Shale is Used
2d	Quantity of topsoil generation in m <sup>3</sup>	N/A	Nil	Shale is used
2e	Quantity of overburden generation in m <sup>3</sup>	Nil	Nil	Shale is used
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	Shale is Associate mineral and is mined & used since 2023 in plant. Working bench height is upto 7-8mtrs with 21 mtrs width for working. Configuration for UPL benches 9mtrs * 9mtrs Towards south of pit. Pit is well developed in mining benches.		

### 3.0 EXPLOITATION

SN	Item	Proposals	Actual work	Remarks
3a	Number of pits proposed for production	02	02	
3b	Quantity of ROM mineral production proposed	Lst : 2094481.50 Shale : 59673.78	Lst:2006514.2 13 Shale: 59475.10	
3c	Recovery of saleable/usable mineral from ROM production	Nil	Not Applicable	ROM is used
3d	Quantity of mineral reject generation	Not proposed	Not Applicable	
3e	Grade of mineral reject generation and threshold value declared	Not proposed	Not Applicable	
3f	Quantity of sub-grade mineral generation	Not proposed	Not Applicable	
3g	Grade of sub-grade mineral generation	Not proposed	Not Applicable	
3h	Manual/Mechanised method adopted for segregating from ROM	Not proposed	Not Applicable	ROM sent to Crusher
3i	Any analysis or beneficiation study proposed & carried out for sub-grade mineral and reject	Not proposed	Not Applicable	
3j	Provision of drilling & blasting in mineral benches	Yes	Yes	4", Atlas Copco (D-35) DTH is used

				for 9mtrs holes Slurry explosives, Kel Prime, Toe Blast, Super Gel.
3k	Provision of mining machineries in mineral benches	Proposed	Provided	Kobelco 520, Bharat Benz 2828
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed	Suitable	Benches upto 9m are made
3m	Total area covered under excavation/ pits	6.06 Ha	10.60 Ha	Area broken included Road for development
3n	Ore to OB ratio for the pit/mine during the year	Not	Not Applicable	
3o	Total area put in use under different heads at the end of year	Pit: 6.06Ha Road: 0.20	Pit : 10.60 (including Road: 1.00)	Area is exceeded. violation is issued.
3p	Production of ROM mineral during last five-year period, as applicable	2022-23:1021440.90 (Lst) 59673.78 (Shale) 2023-24: Lst:2094481.50 Shale: 59673.78	2022-23: 621293.25 2023-24: LST:2006514.213 Shale : 59475.100	
3q	General remarks of inspecting officer on method of mining etc.	The Mines opened in Dec'22. Mine is worked in two pits. In pit2 working has been done beyond approved proposal for year 23-24 and violation for same is given. Mine is worked in benches having height upto 8mtrs.drilling and blasting is practised in mine for rock exaction.		

**4.0 SOLID WASTE MANAGEMENT-DUMPING**

SN	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	

**FOR THE YEAR 2023-24**

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STAR CEMENT MEGHALAYA LIMITED, LUMSHNONG VILLAGE, EAST JAINITIA HILLS DISTRICT, MEGHALAYA-793210**

<b>SN</b>	<b>Item</b>	<b>Proposals</b>	<b>Actual work</b>	<b>Remarks</b>
4g	Number of dumps stabilised	Not proposed	Not Applicable	
4h	Whether Retaining wall or garland drain all along dumps	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	One Sump pit is maintained
4k	Specific comments of inspecting officer	No dump Management is applicable as no dump are planned in the lease under mine operation		

**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	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	There is no proposal for back filling as it is New operation, more over No waste is generated.		

**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.	--	Report is submitted.	Enclosed with Annual Return submitted on 25.06.2024 and uploaded.
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 proposals	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 proposals	Not Applicable	It is New Mine operation , No waste material is generated for back filling
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	No. of Sapling:1050 Area : 0.40 Ha Green Belt	No. of Sapling:1320 .00 (Inside Mine) Sapling: 150.00 (Out side Mine) Area : 0.42 Ha Green Belt	Green belt is planned in Safety Barrier Zone: 27/35 to 30/35.poor survival rate observed. Violation is issued for same.
6e	Compliance of Environmental monitoring (core zone & buffer zone)	Proposed	Being done	
6f	General remarks of inspecting officer on PMCP compliance & progressive	Green Belt is planned from BP No: 27/35 to 30/35 in south of Pit-1, Fencing is planned for		

SN	Item	Proposals	Actual work	Remarks
				815mtrs in North. Fencing was not done for 815mtrs as proposed.done upto 500 mtr.violation issued for same.

**7.0 MINERAL CONSERVATION**

SN	Item	Proposals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM	Not Applicable	ROM is sent to plant crusher
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	No proposals	Not Applicable	
7c	Different grade of mineral sorted out at mines	No proposals	Not Applicable	
7d	Any beneficiation process at mines	No proposals	Not Applicable	
7e	General remarks of inspecting officer on Mineral conservation & beneficiation issues	No grade wise separation is planned		

**8.0 ENVIRONMENT**

SN	Item	Proposals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	No proposals	Not Applicable	
8b	Concurrent use or storage of topsoil	No proposals	Not Applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	No proposals	Not Applicable	
8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	No proposals	Not Applicable	
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No proposals	Not Applicable	
8f	Baseline information on existence of plantation & additional plantation done (Rule 41)	--	--	
8g	Survival rate	80%	50%(appr)	Violation is issued.
8h	Water sprinkling on roads to control airborne dust	Yes	Done	
8i	General remarks of inspecting officer on aesthetic beauty in and around mines are	Green belt development is in progress. Green belt observed in south of Mines was showing less survival rate upto 50%.violation is issued for same.		



**9.0 COMPLIANCE OF RULE 45**

SN	Item	COMMENTS		Remarks
9a	Status of submission of Monthly and Annual returns	--		Monthly Returns are submitted online upto sept '24 and Annual Returns: 23-24 submitted On 25.06.2024
SN	Item	Details GIVEN in A.R.	Observation of I/Officer	Remarks
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Agent: D.V. Ramanayya Mines Manager: Shri. Nohar Singh, Mining Engineer: Shri Nohar Singh, Geologist: P.Suraj Singh		Details furnished
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit: 6.06 Road: 0.20 Other: 0.51	Pit : 10.61 (including Road) Road: 1.00 Check dam & Green belt: 0.652	Violation issued.
9d	Scrutiny of Annual return on afforestation	Sapling: 1050 Area: 0.42	Sapling : 1320 Area: 0.42	Less survival rate.50%. violation is issued.
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	Nil	No Reject	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Nil	Nil	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production cost	Ex-Mine:236.58 Rs/T COP: 236.58 Rs/T	Value are given in	

			Returns
9i	Scrutiny of Annual return on fixed assets	FA: 671046228	Value are given in Returns
		Land : 588714169.00 Building: 2314446.00 Industrial Plant: 1125585 Machinery: 78892028.00	
9k	Scrutiny of Annual return on mining machineries	List of Machinery: Bach Hoe: 2.60 Cubic mtrs. Dumpers: 30 tonnes Rock Drill: 115 MM Air Compressor : Cum /Mn Explosive Van: 7.5 Tonnes Water Tanker: 10000 litre Dozer : 354HP	List is provided

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

In last inspection violation were issued for rule 26(1) and 34A(3) . both the violation were complied.

In this inspection violation is issued for rule 11(1) for deviation in working , not completing, fencing ,and poor survival rate of plantation.

Date: 15.10.2024

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

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