

INDIAN BUREAU OF MINES
MINES CONTROL AND CONSERVATION OF MINERAL DIVISION
MCDR INSPECTION REPORT

Guwahati Regional Office

Mine file No: IBM/GHY/MEG/JNH/LST-16(A)

Mine code: 38MEG03003

Date of Inspection: 06.09.2022

1.0 GENERAL

SN	Particulars	Details
1	Name of the Mine	KHUB-I LIMESTONE MINE
2	Total Lease Area (Ha) with breakup of Non-forest and forest land	Total Lease Area: 4.96 Ha. Forest: Nil; Non-Forest: 13.58 Ha.
3	Mine Code	38MEG03003
4	IBM Registration Number under rule 45 of MCDR, 1988	IBM/5471/2011
5	Name of the lessee, Address, phone, email and fax number	STAR CEMENT 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	20.12.2004
15	Date of Execution	17.01.2005
16	Date of opening of Mine	24.01.2005
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	PANKAJ KEJRIWAL Star Cement Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, pankajkejriwal@hotmail.com Date of appointment: 11.11.2020
21	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	D. V. RAMANAYYA Star Cement Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, Mobile No. 94901-88024 dvramanayya@starcement.co.in Date of appointment: 11.01.2018
22	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines	D. V. RAMANAYYA Star Cement Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, Mobile No. 94901-88024 - dvramanayya@starcement.co.in Date of appointment: 11.01.2018

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	Rajeev Ranjan Qualification: B.E in Mining Engineering Experience: 9 years Star Cement Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, Mobile No. 73401-56429 rranjan16@gmail.com Date of appointment: 01.10.2021
24	Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44.	Yes Geologist: Hijam Rakesh Singh Date of appointment: 19.02.2022 Qualification : M.Sc (Earth Science) Mining Engineer Rajeev Ranjan Date of appointment: 01.10.2021 Qualification: B.E in Mining Engineering
25	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Mining Plan: Letter No.314(3)/2010-MCCM(CZ)/MP-37, Dated 12.10.2004 Modification of Approved Mining Plan: Period: 2018-19 to 2019-20 Letter No. IBM/GHY/MEG/EJNH/LST/86, Dated 19.06.2017
26	Date of Approval of Scheme of Mining/Modified Scheme of Mining with five-year period and specific condition in approval letter, if any.	Review of Mining Plan: Period: 2021-22 to 2025-26 Letter No. IBM/GHY/MEG/EJNH/LST/ROMP-86, dated 28.11.2019
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.	Nil	Nil	
1c	Exploration Agency & Expenditure in lakh Rupees during the year	Nil	Nil	
1d	Balance area to be explored to bring Geological axis in 1 or 2	Nil	Nil	
1e	Balance reserves as on 01.04.2022		558291	
1f	General remarks of inspecting officer on geology, exploration etc.	As however no proposal has been envisaged in the current RoMP for the reporting year i.r.o of exploration up to end of mineralization, lessee needs to comply with the provision of Rule 12(4) of MCDR (Amended as on 03.11.2021).		

DEVELOPMENT

SN	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t. lease area	Easting 436467 - 436608 Northing 2783312 - 2783437	Easting 436500 - 436584 Northing 2783347 - 2783434	
2b	Separate benches in topsoil, overburden and mineral (Rule 15)	Nil	Nil	
2c	Stripping ratio or ore to OB ratio	1 : 0.0	1 : 0.0	
2d	Quantity of topsoil generation in m ³	Nil	Nil	
2e	Quantity of overburden generation in m ³	Nil	Nil	
2f	General remarks of inspecting officer on development of pit w.r.t. type of deposit etc.	The lessee has carried out development per proposal envisaged in the RY. The working was proposed from 470-464 RL, however it was found during inspection that the working level was fully submerged with water (~ 35000 m ³) and there no provision of removal of water as such.		

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	1,30,286.88	1,30,263.91	
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	No proposal	Nil	
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	Spacing: 4m Burden: 3m Hole Dia: 115 mm Detonating fuse and delay detonators will be used for sequential blasting.	Spacing: 4m Burden: 3m Hole Dia: 115 mm Detonating fuse and delay detonators used for sequential blasting.	
3k	Provision of mining machineries in mineral benches	Yes	Backhoe: 2.6m ³ Dumper: 25 MT Dozer: 90 HP	
3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Yes Ore: 6m	Yes Ore: 6m	

3m	Total area covered under excavation/ pits	4.34 ha	4.34 Ha.	
3n	Ore to OB ratio for the pit/mine during the year	1: 0.0	1: 0.0	
3o	Total area put in use under different heads at the end of year	4.34 ha.	4.34ha.	
3p	Production of ROM mineral during last five-year period, as applicable	2017-18:1,84,252.50 MT 2018-19: 2,48,098.20 MT 2019-20:, 1,78,090.50 MT 2020-21: 1,05,993.88 MT 2021-22: 1,30,286.88 MT	2017-18:1,78,110.26MT 2018-19:2,47,177.17MT 2019-20:1,77,980.31MT 2020-21:1,05,849.84 MT 2021-22: 1,30,263.91 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.		

4.0 SOLID WASTE MANAGEMENT-DUMPING

SN	Item	Proposals	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject (Rule 32, 33)	Nil	Nil	
4b	Location of topsoil, OB & mineral reject dumps	Nil	Nil	
4c	Number of dumps within lease area and outside lease area	Nil	Nil	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Nil	Nil	
4e	Number of active & alive dumps	Nil	Nil	
4f	Number of dead dumps	Nil	Not applicable	
4g	Number of dumps stabilised	Nil	Not applicable	
4h	Whether Retaining wall or garland drain all along dumps	Nil	Not applicable	
4i	Length of Retaining wall or garland drain all along dump	Nil	Not applicable	
4j	Number of settling ponds	Nil	Not applicable	
4k	Specific comments of inspecting officer	As there is no OB and Top Soil Presently, generation of OB and Soil was Nil. 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	
5e	General remarks of inspecting officer on backfilling, reclamation etc	As there is no OB and Top Soil Presently, generation of OB and Soil was Nil. Lessee has carried out the work as per the proposal envisaged during the reporting year.		

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 23.06.2022 by email	Submitted by email on 23.06.2022
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) Plantation 7.5mtrs safety zone of lease boundary. vi) NA	i) NA ii) NA iii) NA iv) NA v) Plantation in 7.5mtrs safety zone of lease boundary. vi) Rs. 16200.00	
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	i) 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) 7.5mtrs Barrier Area ii) 0.12 ha iii) Nil	i) 7.5 mtrs Barrier Area (ii) 0.12 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	
7b	Method of grade-wise mineral sorting i.e. manual or mechanical	Not proposed	Nil	
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)	Nil	Not applicable	
8b	Concurrent use or storage of topsoil	Nil	Not applicable	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	Nil	Nil	
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)	Within lease-150 Nos.	Within lease-180 Nos.	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 180 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 : July 2022 Annual Return yet to be submitted for FY 2021-22		
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	Mining Engineer: Rajeev Ranjan Geologist: Hijam Rakesh Singh Manager: D. V. Ramanayya	Mining Engineer: Rajeev Ranjan Geologist: Hijam Rakesh Singh Manager: D. V. Ramanayya	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Pit:: 4.34 ha Total: 4.34 ha	Pit:: 4.34 ha Total: 4.34 ha	
9d	Scrutiny of Annual return on afforestation	WML: 180 nos. sapling	WML: 180 nos. sapling	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	NA	Nil	
9f	Scrutiny of Annual return on ROM stock and/or graded ore	Production: 1,30,263.910	Production: 1,30,263.910	
9g	Scrutiny of Annual return on sale value, Ex. Mine price & production	Ex-mine price: 272.86	Ex-mine price: 272.86	

	cost		
9i	Scrutiny of Annual return on fixed assets	Rs : 485529608.00	Rs : 485529608.00
9k	Scrutiny of Annual return on mining machineries	1)Back Hoe: 1 2)Tipper:5 3)Rock Drill : 1 4)Air Compressor: 1 5)Other HEMM Machinery:3 6)Explosive Van:1	1)Back Hoe: 1 2)Tipper:5 3)Rock Drill : 1 4)Air Compressor: 1 5)Other HEMM Machinery:3 6)Explosive Van:1

10 - 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 12(4): The provision of Rule -12(4) has not been complied.
 - B. Rule 11(1): The working has been proposed from 470-464 RL, however it was found during inspection that the working level was fully submerged with water (~ 30000 m³) and there no provision of removal of water as such.

Vikas
16/9/22

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