

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: 38MEG03017

Date of Inspection: 05.09.2022

1.0 GENERAL

| SN | Particulars | Details |
|----|--|---|
| 1 | Name of the Mine | WAH- PYNKON LIMESTONE MINE-II |
| 2 | Total Lease Area (Ha) with breakup of Non-forest and forest land | Total Lease Area: 13.58 Ha. Forest: Nil; Non-Forest: 13.58 Ha. |
| 3 | Mine Code | 38MEG03017 |
| 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 | Pincode | 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 | 04.01.2017 |
| 15 | Date of Execution | 10.01.2017 |
| 16 | Date of opening of Mine | 21.09.2017 |
| 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 | DINESH CHANDRA SINHA Star Cement Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, Mobile No. 8974010167 dineshsinha@starcement.co.in Date of appointment: 21.09.2017 |

| 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 | SH. NAREDLA PRAKASH Qualification: B.E in Mining Engineering Experience: 12 years Star Cement Limited, Village/P.O./P.S. – Lumshnong East Jaintia Hills Dist., Meghalaya, Mobile No. 6304497016, 7729819424 nani.prime@gmail.com Date of appointment: 15.04.2019 |
| 24 | Whether Geologist and Mining Engineer appointed in mines satisfy the rule 42 & carrying out their duties as per rule 43 & 44. | Yes, Geologist- Patel Suraj Singh Date of appointment: 21.09.2017. Qualification : M.Sc.(Geology) Mining Engineer - NAREDLA PRAKASH Date of appointment : 15.04.2019 Qualification : BE (Mining) |
| 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. IBM/GHY/MEG/JNH/LST/MP-69, dated 11.05/2015 Modification of Approved Mining Plan: Period: 2018-19 to 2020-21 Letter No. IBM/GHY/MEG/JNH/LST/MP-69, dated 24.01.2019 |
| 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/JNH/LST/MP-69, dated 23.02.2021 |
| 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 | | 4518988 | |
| 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 upto end of mineralization, lessee needs to comply with the provision of Rule 12(4)of MCDR (Amended as on 03.11.2021). | | |

2.0 DEVELOPMENT

| SN | Item | Proposals | Actual work | Remarks |
|----|---|---|--|---------|
| 2a | Location of development w.r.t. lease area | Easting 438462 , 438286 Northing 2783180, 2783030 | Easting 438539 ,438306 Northing 2783166 , 2783064 | |
| 2b | Separate benches in topsoil, overburden and mineral (Rule 15) | Nil | Not Applicable | |
| 2c | Stripping ratio or ore to OB ratio | 1: 0.0 | 1: 0.00 | |
| 2d | Quantity of topsoil generation in m3 | Nil | Not applicable | |
| 2e | Quantity of overburden generation in m3 | Nil | Not applicable | |
| 2f | General remarks of inspecting officer on development of pit w.r.t. type of deposit etc. | The lessee has carried out development s per proposal envisaged in the RY.The lessee has not worked out as per the MDDPA agreement as executed with the State govt. | | |

3.0 EXPLOITATION

| SN | Item | Proposals | Actual work | Remarks |
|----|---|-------------|-------------|--|
| 3a | Number of pits proposed for production | 1 | 1 | The mining has been carried out in a single pit |
| 3b | Quantity of ROM mineral production proposed | 678105 MT | 49245.53 MT | Proposed production could not be achieved due to present EC restriction. |
| 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 Nonel technology as well as detonating fuse and delay detonators are using for sequential blasting. | |
| 3k | Provision of mining machineries in mineral benches | Yes | Excavator: 2.6m ³ Dumper: 25 MT Backhoe: 2.6m ³ 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 | 2.71 | 2.01 | |
| 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 | 2.71 | 2.01 | |
| 3p | Production of ROM mineral during last five-year period, as applicable | 2017-18: 41,647.50 2018-19: 41,493.01 2019-20: 6,47,073.84 2020-21: 6,78,123.58 2021-22: 6,78,105.00 | 2017-18: 41,019.57MT 2018-19: 40,632.01 mt 2019-20: 49,141.64MT 2020-21: 49,085.83MT 2021-22: 49,245.53MT | Production planned as per anticipated EC quantity however failure to get EC resulted in less production. |
| 3q | General remarks of inspecting officer on method of mining etc. | Proposed production could not be achieved due to present EC restriction (49,275 TPA). Production planning was envisaged in the RoMP as per anticipated EC quantity however failure to get upgraded EC resulted in less production. Achieved production is ~ 7.26% of targeted production. | | |

4.0 SOLID WASTE MANAGEMENT-DUMPING

| SN | Item | Proposals | Actual work | Remarks |
|----|--|-----------|-------------|---------|
| 4a | Separate dumping of topsoil, OB & mineral reject (Rule 32, 33) | Nil | NA | |
| 4b | Location of topsoil, OB & mineral reject dumps | Nil | NA | |
| 4c | Number of dumps within lease area and outside lease area | Nil | NA | |
| 4d | Location of dumps w.r.t. ultimate pit limit (Rule 16) | Nil | NA | |
| 4e | Number of active & alive dumps | Nil | NA | |
| 4f | Number of dead dumps | Nil | NA | |
| 4g | Number of dumps stabilised | Nil | NA | |
| 4h | Whether Retaining wall or garland drain all along dumps | Nil | NA | |
| 4i | Length of Retaining wall or garland drain all along dump | Nil | NA | |

| SN | Item | Proposals | Actual work | Remarks |
|----|---|---|-------------|---------|
| 4j | Number of settling ponds | Nil | NA | |
| 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 | Not applicable | The mine was opened on 21.09.2017 and the mine is not mature till date for back filling. So there was no proposal for back filling in RY |
| 5b | Area under backfilling of mined out area | No proposals | Not applicable | |
| 5c | Concurrent use of topsoil for restoration or rehabilitation of mined out area (Rule 32) | No proposals | Not applicable | |
| 5d | Total area fully reclaimed & rehabilitated | No proposals | Not applicable | |
| 5e | General remarks of inspecting officer on backfilling, reclamation etc. | The mine was opened on 21.09.2017 and the mine is not mature till date for back filling. No proposal for back filling in RY was envisaged. | | |

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. | As per rule 26(2) Annual PMCP report to be submitted before 1st day of July of every year | Submitted on 23.06.2022 | 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) Nil vi) NA | i) NA ii) NA iii) NA iv) NA v) Nil vi) Rs. 15750.00 | The mine was opened on 21.09.2017 and no worked out benches were present for reclamation and rehabilitation. Hence no proposal was envisaged in the RY |
| 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 | The mine was opened on 21.09.2017 and no worked out benches were present for reclamation and rehabilitation. Hence no proposal was envisaged in the RY |

| SN | Item | Proposals | Actual work | Remarks |
|----|---|--|---|---------|
| 6d | Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation | i) 7.5mtr (Safety Zone) ii) 0.08ha iii) Nil | i) 7.5 mtr Safety Zone ii) 0.08ha 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 closure operations | 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 | 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 | 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 | 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) | Within ML- 160 | Within ML- 175 | 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 175 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 |
|----|---|--|---|---------|
| | Status of submission of Monthly and Annual returns | Monthly Return submitted : July, 2022 Annual Return submitted for FY 2021-22 | | |
| 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 | Mining Engineer Naredla Prakesh Geologist : Patel Suraj Singh Manager : Dinesh Chandra Sinha | Mining Engineer Naredla Prakesh Geologist : Patel Suraj Singh Manager : Dinesh Chandra Sinha | |
| 9c | Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc. | Pit:2.010 Dump: Nil Reclaimed : Nil | Pit:2.010 Dump: Nil Reclaimed : Nil | |
| 9d | Scrutiny of Annual return on afforestation | WML: 175 nos. | WML: 175 nos. | |
| 9e | Scrutiny of Annual return on mineral reject generation (Grade & quantity) | Nil | Nil | |
| 9f | Scrutiny of Annual return on ROM stock and/or graded ore | Opening Stock-0.00 Production- 49245.00 Dispatch- 49245.00 Closing Stock-0.00 There is no separate stock for graded ore. | Opening Stock-0.00 Production- 49245.00 Dispatch- 49245.00 Closing Stock-0.00 There is no separate stock for graded ore | |
| 9g | Scrutiny of Annual return on sale value, Ex. Mine price & production cost | Ex-mine price: 279.01 | Ex-mine price: 279.01 | |
| 9i | Scrutiny of Annual return on fixed assets | Rs: 485529608 | Rs: 485529608 | |
| 9k | Scrutiny of Annual return on mining machineries | 1) Back Hoe : 2) Dozer: 3)Tipper: 4)Other HEMM: 5)Water Tanker: 6)Air Comp: 7)Rock Drill: 8)Explosive Van: | 1) Back Hoe : 2) Dozer: 3)Tipper: 4)Other HEMM: 5)Water Tanker: 6)Air Comp: 7)Rock Drill: 8)Explosive Van: | |

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

1. Earlier pointed out violation complied.
2. Violation pointed out in the current inspection.
 - a) MDPA conditions on account of production have been found violated.
 - b) Rule 12(4) of MCDR-2017 has been found violated.

Vikas
16/9/22

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