

भारत सरकार /GOVERNMENT OF INDIA खान मंत्रालय /MINISTRY OF MINES

भारतीय खान ब्यूरो /INDIAN BUREAU OF MINES

ग्वाहाटी क्षेत्रीय कार्यालय/GUWAHATI REGIONAL OFFICE

क्षेत्रीय खान नियंत्रक का कार्यालयाOFFICE OF THE REGIONAL CONTROLLER OF MINES

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Date: 26.2.2020

No.IBM/GHY/MEG/EJH/LST/MP-88

To,

Sri Prem Kumar Bhajanka (Nominated Owner)

M/s Star Cement Meghalaya Ltd.

Vill. Luhmsnong, PO-Khliehriat, East Jaintia Hills Dist.

Meghalaya - 793210

Sub: Scrutiny Comments on the submitted draft on Mining Plan along with Progressive Mine Closure Plan in respect of Brishyrnot Limestone Deposit over an area of 42.051 Hectares in Brishyrnot Village, East Jaintia Hills district of Meghalaya State, of M/s. Star Cement Meghalaya Limited, submitted under Rule 16(1) of MCR 2016.

Ref: Your letter no. SCML/IBM/42.051/2019-20/2401 dtd. 24.1.2020

Sir.

Please refer to your letter on the subject cited above, the submitted draft on Mining Plan along with Progressive Mine Closure Plan in respect of Brishyrnot Limestone Deposit over an area of 42.051 Hectares in Brishyrnot Village, East Jaintia Hills district of Meghalaya State, of M/s. Star Cement Meghalaya Limited, submitted under Rule 16(1) of MCR 2016, has been examined in this office on the basis of the site inspection done on 28th & 29th of January 2020 by Sri S. K. Mohapatra, Senior Mining Geologist.

The scrutiny comments made on the submitted Mining Plan along with Progressive Mine Closure Plan, are enclosed herewith as **Annexure-I**. In this regard you are advised to rectify the deficiencies and submit **final three hard bound copies of text & plans** along with the softcopy in **two DVD**'s to this office within <u>15 (Fifteen)</u> days from the date of issue of this letter for further necessary action. Invariably the softcopy of the text & plans shall also to be sent to our e-mail id: <u>ro.guwahati@ibm.gov.in</u>. The text shall be in MS word format and plans in Auto CAD and JPG format.

The para- wise clarification indicating the manner in which the deficiencies have been attended should invariably be given while submitting the Mining Plan along with Progressive Mine Closure Plan. No further extension of time in this regard will be entertained and the document will be considered for rejection if not submitted within the above due date and deficiencies not attended properly.

Encl: As above.

Yours faithfully,

(P. K. Bhattacharjee) Regional Controller of Mines

Copy to: (1) The Controller of Mines (EZ), Indian Bureau of Mines, Kolkata – for kind information.

(2) Sri. Hijam Rakesh Singh/ Patel Suraj Singh, QPs, email- hijamsingh@starcement.co.in – for further necessary action.

(P. K. Bhattacharjee) Regional Controller of Mines Scrutiny Comments on Draft Mining Plan with Progressive Mine Closure Plan of Brishyrnot Limestone Deposit-I over an area of 42.051 Ha. in village Brishyrnot, Taluka-Khliehriat, Dist- East Jaintai Hills, Meghalaya of M/s. Star Cement Meghalaya Limited, prepared by Sri Patel Suraj Singh & Hijam Rakesh Singh (Qualified Persons) under Rule 13 of MCR 2016 & 23 of MCDR 2017.

Inspected By: S. K. Mohapatra (SMG)

TEXT

- 1.0 In the introduction chapter a brief history of the applied mining lease area to be given depicting all instances/ court cases (if any) etc. with documentary evidence from the grant of the prospecting license in a chronological order.
- 2.0 The applied area is about 1.46 km from Narpuh Wildlife Sanctuary. An undertaking to be enclosed from the nominated owner citing that 'all clearances from the concerned authorities of Central & State Govt. shall be taken prior to commencement of mining operations'.
- 3.0 Physiography and drainage pattern of the applied area needs to be reviewed on account of the revised authenticated map of the applied ML area.
- 4.0 Pillar numbers and respective co-ordinates of the applied mining lease area furnished under 3.13; at page no. 6 are not matching with the co-ordinates furnished in the authenticated map. The same needs correction at all relevant plans & sections.
- It may be noted that the course of river/ nallah as shown in the authenticated map is in variance to factual ground condition. The merger point of the nallah with the river has not been shown. Also the distance of river/ nallah boundary from pillar No. 9/35 is not factual as revealed from the photographs submitted for pillar no. 9/35. Therefore, it is advised that the safety zone of 50m be taken all along the applied lease boundary and not from the river boundary. The total resources/reserve needs to be re-assessed in respect of the above authenticated map by incorporating the above safety zone & strictly following the norms of UNFC and complying with the requirements of The Minerals (Evidence of Mineral Contents) Rules 2015. Details of the calculations made in this regard to be provided duly supported with all relevant plans & sections.
- 6.0 Details of the resources blocked under different reasons may be spelt out categorically along with details of the calculations duly supported with relevant plans & sections.
- The mine workings are proposed on a steep hill and above a perennial water source. Also, now as per the letter dtd. 11.10.2019 of PCCF, Meghalaya, the applied lease area is only 250 m away from the eco-sensitive zone. The mine shall be therefore developed in the form of a trench with benches both towards the footwall as well on the hang wall side. A full bench of min. 6 m height shall be invariably present towards the nallah/ river side so that during persistent rains any debris/ fines can't escape the mine and fall into the nallah/ river. The benches shall have the minimum width as per the statutes made in this regard vis a vis the machinery proposed to be deployed. Where width is not available restricting the development of mines in the above manner; no proposal shall be given at all. All slimes shall be arrested inside the mines in a sump and the water collected in the sump shall be pumped out and taken to the plant premises for its use. There shall be zero discharge in any from the mine to the nallah/ river below the slopes. Check dams shall also be proposed on the normal course of flow of water from the hill to bottom in order to arrest the free flow of solids, if any. All check dams shall be constructed prior to commencement of production operations. An undertaking to be enclosed from the nominated owner citing that 'there will be zero discharge from the mine'.
- 8.0 As the applied area is just 250m from the eco sensitive zone, alternate method of mining shall be proposed other than conventional drilling & blasting viz. Surface miner etc to adopt a safe & secured mining methodology.
- 9.0 The mining quantity at the start shall be restricted to a bare minimum quantity followed with attaining a rated capacity in stages. The evacuation of the ore from the mine to the plant may also be clearly described. The expected pollutants load on account of the above mining operations along with

- its transportation to the plant premises may be quantitatively predicted & reported. Steps shall also be suggested for the remedial measures to protect the environment.
- 10.0 The year wise proposal should be clearly demarcated on the development plans and sections. A proposal for carrying out a slope stability study from a scientific/ research institution needs to be incorporated during the 1st year of the plan period.
- 11.0 Approach haul road for transport of minerals needs to be clearly shown in the development plans and sections.
- 12.0 In respect of the submitted mine development and production plan/ sections; the bench height, width, bank slope angle, name of the section along which development has been proposed, direction of advancement, top RL, bottom RL, quantity of ROM, generation of waste, stripping ratio, etc needs to be reviewed and reproduced properly considering the comments cited from sl.no. 4 to 10.
- 13.0 A detail indicating the boundary extent of the ultimate pit limit, ultimate slope angle, bottom pit limit needs to be reviewed and reproduced considering the comments cited from sl.no. 4 to 10.
- 14.0 Details of construction of retaining wall/ garland drain/ settling tanks/ check dams etc shall be given along with their design in the chapter on mine drainage. The mode of disposal of surface run-off water shall be discussed indicating the schematic route showing its discharge with proposed provisions of check dams/ settling tanks/ water quality monitoring stations etc. The proposal shall also to be shown in the reclamation plan. The cited point needs to be reviewed and reproduced considering the comments cited from sl.no. 5 to 10.
- 15.0 The tree density of the applied ML area duly certified by a competent authority needs to be enclosed.
- 16.0 Original copy of Consent letter/Undertaking/Certificates from the nominated owner needs to be furnished.
- 17.0 Copy of the DGPS survey report carried out by the applicant needs to be annexed alongwith the document.
- 18.0 Borehole logs need to be signed by the Geologist who has conducted the logging and QAQC.
- 19.0 Copy of the surveyor's certificate who has conducted the topographical survey of the applied ML area and has prepared the surface plan needs to be enclosed.
- 20.0 All annexure furnished in the document need to be signed by the qualified persons.

PLATES:

1.0 Key plan:

- 1.1 Key plan shall be prepared strictly as per the extant provisions specified under rule 32(5) (a) of MCDR 2017.
- 1.2 Topo-sheet number of the area needs to be furnished..
- 2.0 One original copy of the authenticated applied mining lease area map need to be enclosed.

3.0 Surface plan:

- 3.1 Surface plan needs to be prepared based on the authenticated applied lease area map.
- 3.2 Co-ordinates of boundary pillars furnished in the surface plan are not matching with the co-ordinates of authenticated applied lease area map.
- 3.3 All topographical features needs to be shown as per the revised boundary of the authenticated map.
- 3.4 Date of survey furnished in the surface plan and respective plans and sections needs to be verified and rectified accordingly.

4.0 Geological plan/ sections:

- 4.1 Geological plan and sections needs to be prepared based on the authenticated applied lease area map.
- 4.2 Co-ordinates of boundary pillars furnished in the geological plan are not matching with the co-ordinates of authenticated map.

- 4.3 Litho units have not been properly shown in the geological plan, needs to be review and reproduced properly.
- 4.4 UNFC codes needs to be shown in both geological plan and sections on account of the comments cited at sl.no. 5 & 7 above.

5.0 Mine development/ production plan & sections/ dump plans & sections/ conceptual plan/ sections:

- Year wise development plans and sections needs to be prepared based on the authenticated applied lease area map.
- 5.2 Proposed haul road needs to be shown in the year wise development plans.
- 5.3 Proposal of retaining wall/garland drains/ check dams etc to be shown in the year wise development plans.
- 5.4 Conceptual plan and sections needs to be revised in line to the comments cited at sl.no. 5 & 7.

6.0 Environment plan:

- 6.1 Environment plan needs to be prepared based on the applied lease area boundary as shown in the authenticated map.
- 6.2 Environment plan shall be prepared strictly as per the extant provisions specified under rule 32(5) (b) of MCDR 2017.
- 6.3 All existing surface features to be shown in the environment plan.

7.0 Reclamation plan/ sections:

- 7.1 Reclamation plan needs to be prepared based on the applied lease area boundary of authenticated map.
- 7.2 The water management plan showing the position of garland drains/ retaining walls/ check dams/ settling pits etc should be clearly indicated as per the revised map submitted.

8.0 Progressive Mine Closure plan:

- 8.1 Progressive mine closure plan needs to be prepared based on the applied lease area boundary of authenticated map.
- 8.2 Financial assurance table needs to be furnished in the plan.