## खान मंत्रालय/MINISTRY OF MINES

# भारतीय खान ब्यूरो /INDIAN BUREAU OF MINES

गुवाहाटी क्षेत्रीय कार्यालय/GUWAHATI REGIONAL OFFICE

क्षेत्रीय खान नियंत्रक का कार्यालय।OFFICE OF THE REGIONAL CONTROLLER OF MINES

दूरभाष सं. : / फॅक्स सं:.0361 2656184,

Tel/Fax – 0361-2656184 E-mail – ro.guwahati@jbm.gov.in House No. 216, 3<sup>rd</sup> Floor, Above IDBI Bank Chandmari, Post – Bamunimaidan, Dist – Kamrup (M), Guwahati, Assam-781021

No.IBM/GHY/MEG/EJNH/LST/MP-93

Date: 19/11/2019

To,

Sri. PK Bagla, Managing Director

M/s. Amrit Cement Limited, Trinity, 226/1, AJC Bose Road, 6<sup>th</sup> Floor

Kolkata - 700 020 E-mail: info@amrit.co.in

Sub: Scrutiny Comments on the submitted draft report on Mining Plan along with Progressive Mine Closure Plan in respect of Mulieh Umlong Limestone deposit over an area of 7.33 Ha. in Mulieh Umlong Village, East Jaintia Hills district of Meghalaya State of M/s. Amrit Cement Limited., submitted under Rule 16(1) of MCR 2016 & 23 of MCDR 2017.

Ref: Your letter No. NIL dated NIL received on dated 7.11.2019.

Sir,

Please refer to your letter on the subject cited above, the submitted draft report on Mining Plan along with Progressive Mine Closure Plan in respect of Mulieh Umlong Limestone deposit over an area of 7.33 Ha. in Mulieh Umlong Village, East Jaintia Hills district of Meghalaya State, submitted under Rule 16 (1) of MCR 2016, has been examined in this office on the basis of site inspection done on 18.11.2019 by Sri S. K. Mohapatra, Senior Mining Geologist.

The scrutiny comments made on the submitted draft report on 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 with requisite Bank Guarantee as financial assurance for the plan period as per Rule 27 of MCDR 2017 (if applicable), to this office within **15 (Fifteen)** 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 Review of Mining 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 please

(2) Sri PK Sen, Qualified Person. Email- <a href="mailto:pksenranchi@gmail.com">pksenranchi@gmail.com</a> – You are advised to first intent to prepare a meaningful document complying all the scrutiny observations made and then submit the final document as per the instructions cited above.

(P. K. Bhattacharjee) Regional Controller of Mines Scrutiny Comments on Draft report for Mining Plan with Progressive Mine Closure Plan of Mulieh Umlong limestone deposit over an area of 7.33 Ha. in village Mulieh & Umlong, Taluka-Khliehriat, Dist- East Jaintai Hills, Meghalaya of M/s. Amrit Cement Ltd., prepared by Sri PK Sen & submitted under Rule 16(1) of MCR 2016 & 23 of MCDR 2017.

**Inspected By: S. K. Mohapatra (SMG)** 

Date of Inspection: - 18.11.2019

#### TEXT

#### **Chapter: Introduction & Cover page**

- 1.0 The introduction chapter details of the earlier PL held by the applicant. A copy of the application along with its acknowledgement for grant of ML to be enclosed.
- 2.0 A brief description of the cement plant may be given indicating the date of commissioning of the cement plant, production of clinker from the plant during the last 5 years & sources of procurement of limestone for the cement plant in a tabular format.
- 3.0 A copy of end use return of the cement plant for the last three (03) years to be enclosed alongwith monthly return for the end use cement plant for the current fiscal.
- 4.0 In the cover page it has not been stated under which rule the PMCP has been submitted.

# **Chapter: General**

- 5.0 An undertaking from each of the board of Directors to be enclosed regarding their working in other organisations, if any.
- 6.0 The name, address alongwith photo Id and address proof of the managing director who has given the consent to be given at chapter I.b.
- 7.0 The minerals which are included in the LOI has not been stated at chapter I.d.
- 8.0 The qualification certificate of the QP is obscure and can't be read. A clear picture of the same may be enclosed.

#### **Chapter: Location & Accessibility**

9.0 It has been stated that the entire ML is a non forest land. The ownership details of the land to be enclosed.

#### **Chapter: Geology & Exploration**

- 10.0 The surface profile of the applied ML area (topography) is not matching with the ground field conditions as observed during the inspection. The different litho units of the applied ML area are not matching with the submitted geological plan. Therefore, the entire area needs to be re-surveyed & re-mapped and there after further work viz. Preparation of cross sections, estimation of resources/ reserves, preparation of year wise development plans etc needs to be carried out.
- 11.0 In the chapter on exploration already carried out it has been stated that 3 Nos. of DTH holes were drilled within the area. However, the prospecting report indicates that 3 Nos. of core boreholes were drilled. The statement is contradictory to the earlier submitted report. This indicates that the report has not been perused by the QP prior to its submission.
- 12.0 It has been stated that the surface plan has been prepared on a scale of 1: 1000 at 2 m contour interval; where as a perusal of the surface plan reflects the contour at 5 m interval.
- 13.0 It has been stated that the geological plan too has been prepared on a scale of 1: 1000 at 2 m contour interval; where as a perusal of the same reflects the contour at 5 m interval.
- 14.0 The purpose of drawing 7 transverse sections with only 3 boreholes is not clear. The prospecting report submitted earlier reflects only 3 transverse sections.

- 15.0 At page no. 16, it has been specified that environment clearance will not be required. The statement needs a re-look.
- 16.0 At page no. 16 itself it has been specified that the mine is eco-friendly. It is to be clarified whether there is already an existing working mine within the applied area.
- 17.0 The reserves/ resources reported are totally in abeyance with the recently submitted geological report prepared for the same area & for the same no. of boreholes. Suddenly the resources under G1 category have been almost tripled in the present submission. A fresh reassessment of the reserves/ resources needs to be carried out. Details of the calculations in this regard to be provided duly supported with the geological plans & sections submitted and strictly complying with the requirements of The Minerals (Evidence of Mineral Contents) Rules 2015.
- 18.0 The details of the resources blocked under different reasons may be spelt out categorically along with the details of calculations in this regard to be provided duly supported with the plans & sections.
- 19.0 The reserves & resources then needs to be categorised under the UNFC system properly citing the exact quantity & quality under different codes.
- 20.0 The cut off considered shall be exactly as cited under the threshold notification of IBM.
- 21.0 No any report has been enclosed to support the feasibility/ pre feasibility axis of the reported resources/ reserves.
- 22.0 Level/ bench wise reserves/ resources established to be enclosed with the document.
- 23.0 No any future proposal has been given to explore the applied area depth-wise. All the 3 Nos. of boreholes have been terminated in limestone only. A time bound future exploration program to be provided to delineate the ore bottom.
- 24.0 A longitudinal geological cross section of the applied area also needs to be enclosed.

#### **Chapter: Mining**

- 25.0 The justification for consideration of the tonnage conversion factor may be enclosed with the report..
- 26.0 The proposed production targets is not commensurate with the available reserves within the ML vis a vis the period of lease. On the basis of present level of proposed excavation the life of the mine on the basis of present reported reserves of approx. 22 lakh tonnes shall be around 7.33 years only. Therefore the year wise production targets needs to be revised taking into consideration the proposed lease period.
- 27.0 All the boreholes (3 Nos.) have ended in limestone only. Vague backfilling proposals have been envisaged from first year onwards which can't be accepted
- 28.0 Stage wise development/ production proposal may be given in light of the comment given at sl.no. 26 along with a suitable plan for management of the wastes generated. The detailed calculation for the year wise production (level wise & section wise) to be enclosed with the report duly supported with relevant plans & sections.
- 29.0 The capacity of the magazine has not been specified in the text. The explosive requirements are likely to change with the proposed changes in the production figures (year wise) as cited at sl.no. 26 above. The same may be therefore be reproduced for the changed scenario.
- 30.0 The details of the calculation of mining machinery to be revised in line to the revised production targets as cited at sl.no. 26.
- 31.0 Extent of mechanisation needs to be recast properly duly supported with proper calculation sheet.
- 32.0 The details furnished under conceptual plan, reclamation and rehabilitation & post mining land use etc need to be recast with respect to the revised 5 year development proposal.

#### **Chapter: Mine Drainage**

33.0 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.

#### **Chapter: Stacking of mineral rejects & disposal of waste**

34.0 All the boreholes (3 Nos.) have ended in limestone only. Vague backfilling proposals have been envisaged from first year onwards which can't be accepted. A scientific plan may be prepared for management of the wastes generated after incorporating the comment cited at sl.no. 26.

## **Chapter: Use of mineral**

35.0 It is stated that the limestone raised from the proposed mine will be sent to the cement plant of Barak valley cement limited for manufacture of clinker & cement. It may be noted that the LOI has been accorded to M/s Amrit Cement Ltd. whereas it has been proposed to dispatch the limestone to M/s Barak Valley Cement Ltd.

#### **Chapter: Processing of ROM & Mineral Reject**

- 36.0 The location of crushing/ screening plant must be shown on the surface plan/ environment plan alongwith a flow sheet indicating the process involved.
- 37.0 The water requirement for different processes needs to be stated.

#### **Chapter: Others**

- 38.0 The manpower deployed shall be reported under skilled, semi skilled & un skilled categories.
- 39.0 The name, address, qualification & length of experience of the geologist & mining engineer appointed for the applied area, if any, may be given.

## **Chapter: PMCP**

- 40.0 The list of flora/ fauna around the lease area may be enclosed as an annexure.
- 41.0 The distance of the narpuh reserved forest from the ML area must be clearly cited.
- 42.0 The tree density of the core & buffer zone must be cited in the report.
- 43.0 A table may be added showing the location of proposed AAQ, Noise quality, Water quality monitoring locations. The same to be clearly reflected in the environment plan, key plan & reclamation plan also.
- 44.0 The year wise details for the proposed plantation to be carried out must be enclosed in a tabular format indicating the species to be planted, no. of saplings to be planted, location of proposed plantation & area covered.
- 45.0 The yearwise reclamation/ rehabilitation proposal needs revision in light of the comments cited at sl.no. 28 above.
- 46.0 It may be clarified whether the applicant shall pay the financial assurance (as per the LOI granted by the State) or shall sign the MDPA with the State Govt.

# **Consents/ Annexure/ General remarks:**

- 47.0 Original copy of Consent letter/Undertaking/Certificates needs to be furnished.
- 48.0 Some of the annexure are obscure. Legible copy of annexure needs to be submitted.
- 49.0 Re- assessed resources/ reserves as per the UNFC system needs to be reported in the feasibility/ pre-feasibility report to be enclosed with the report.
- 50.0 The borehole logs i.r.o all the drill holes present within the ML area must be enclosed and duly signed by the Geologist of the mine.
- 51.0 The mining plan (text/ cover page/ consents/ certificates) must be revised & submitted incorporating all the scrutiny points in the IBM format for Appraisal of Mining Plan 2017.
- 52.0 None of the photographs submitted with the report are clear.

## **PLATES**:

#### General:

- 1. The key plan, surface plan, environment plan & FA plan shall be signed by a mine surveyor.
- 2. The geological plan & sections shall be signed by the geologist.
- 3. The legends/ index shown in all the drawings must be properly correlated with all the corresponding drawings.

#### 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 The applied ML area has still been written as PL area.
- 1.3 Adjoining mining leases needs to be shown.
- 1.4 AAQ / Water quality Monitoring stations are not shown in the core/ buffer zone.
- 1.5 121 kmp milestone to be marked clearly on the plan.
- 1.6 No contour levels have been shown & all the levels indicated must be readable.

# 2.0 Precise area plan of the ML area duly authenticated by the State Govt. needs to be furnished.

#### 3.0 Surface plan:

- 3.1 This plan needs revision in line to the comments specified at sl.no. 10.
- 3.2 It has been stated that the surface plan has been prepared on a scale of 1: 1000 at 2 m contour interval; where as a perusal of the surface plan reflects the contour at 5 m interval.
- 3.3 Map needs to be updated true to the existing ground field positions.
- 3.4 121 kmp milestone not shown on the surface plan.
- 3.5 Instead of applied ML boundary, PL boundary has been stated in the legend.
- 3.6 Local grid has been shown. It is not accepted. Grid on UTM co-ordinates to be shown at 100m interval.

#### 4.0 Geological plan/ sections:

- 4.1 This plan needs revision in line to the comments specified at sl.no. 10.
- 4.2 It has been stated that the geological plan too has been prepared on a scale of 1: 1000 at 2 m contour interval; where as a perusal of the same reflects the contour at 5 m interval.
- 4.3 Instead of applied ML boundary, PL boundary has been stated in the legend.
- 4.4 Local grid has been shown. It is not accepted. Grid on UTM co-ordinates to be shown at 100m interval.
- 4.5 The litho units have not been shown on the geological map.
- 4.6 The purpose of drawing 7 transverse sections with only 3 boreholes is not clear. The prospecting report submitted earlier reflects only 3 transverse sections.
- 4.7 A longitudinal geological cross section of the applied area also needs to be enclosed.
- 4.8 The ultimate pit limit has not been shown on the plan.
- 4.9 Improper UNFC codes have been shown on the geological cross section. No UNFC code has been shown in the geological map.
- 4.10 The geological plan & x-section needs revision on account of all the above reasons as well as the comment cited at sl.no. 17 & 26 above.

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

5.1 The yearwise development section must be revised after incorporating the correction cited at sl.no. 26 above.

- 5.2 The immediate last & proposed bench position must be clearly reflected in all the development sections. However the immediate last position must be shown on a lighter shade.
- 5.3 The immediate last & proposed bench position must be clearly reflected in all the development plans too. However the immediate last position must be shown on a lighter shade.
- 5.4 Vague backfilling has been shown on the conceptual plan. The Conceptual plan and sections also needs to be updated i.r.o the comments as cited at 26 above.

#### 6.0 Environment plan:

- 6.1 Environment plan shall be prepared strictly as per the extant provisions specified under rule 32(5) (b) of MCDR 2017.
- 6.2 All existing surface features and contours within the ML area and 60 mtr radius boundary need to be shown in the environment plan.
- 6.3 All adjoining leases to be shown.
- 6.4 121 kmp milestone to be marked clearly on the plan.
- 6.5 Entire area within the environment plan (incl. 500 m buffer zone) has been shown as non forest land without any basis.

# 7.0 Reclamation plan/ sections:

- 7.1 Reclamation plan needs to be prepared on the revised development proposals
- 7.2 The proposed ambient air / water/ noise quality monitoring stations to be shown.
- 7.3 The reclamation plan to be reviewed in light of the comments cited at 26, 27 & 28 above.
- 7.4 The revised reclamation plan proposal, if any shall duly incorporate the principle that no backfilling shall be allowed over any mineralisation beneath.
- 7.5 A section of the reclamation plan prepared shall also needs to be enclosed after attending point no. 45 as cited above.

# 8.0 Financial assurance plan:

- 8.1 The area already put to use & the future proposals (under different heads) must be shown in clear cut different colours.
- 8.2 The FA plan shall be reviewed in light of the comments cited at 26 above.
- 8.3 The name of the plan to be revised as Progressive Mine Closure Plan (PMCP).