

TEXT

- 1.0 Mining plan to be prepared strictly as per the prescribed format given in "IBM manual for appraisal of Mining Plan – 2014".
- 2.0 A brief write-up on the cement plant to which the mine is supplying limestone to be given broadly indicating the capacity of the plant in terms of clinker and cement production, raw material consumption pattern, pre and post clinkerization process & CAPEX/OPEX of the plant (for the FY 2016-17) in a tabular format.
- 3.0 The review of mining plan w.r.t reclamation & environment control measures shall be duly supported with photographs with date, wherever possible.
- 4.0 Under the review of control of noise/ ground vibrations, the monitored figures of blast induced ground vibration levels & air over pressure levels in respect of (i.r.o) the primary blasts conducted may be enclosed at Annexure.
- 5.0 The document does not spell about any time bound program of exploration during the next 5 years period. A firm time bound exploration program may be given so as to delineate the limestone extent (depth wise). The depth of the proposed boreholes should be such that it delineates the underlying sand stones. This will facilitate a firm ultimate pit design with a realistic conceptual plan.
- 6.0 A fresh re-assessment of the resources/ reserves needs to be carried out. The ore zone has been delineated much below the depth of the existing boreholes. No extrapolation shall be carried out beneath the depth of the existing boreholes. The resources/ reserves shall be estimated as per the extant provision given in 'Evidence of Mineral Contents Rules 2015'.
- 7.0 Level wise & section wise resource/ reserve figures to be reported.
- 8.0 A feasibility study shall be annexed for the UNFC categorisation of reserves/ resources.
- 9.0 Necessary supporting documents shall be provided to justify the tonnage conversion factor taken in the report.
- 10.0 A separate table to be given clearly indicating the year wise production quantity in tonnes.
- 11.0 Life of the mine to be re-defined on the basis of the re-assessed reserves and accordingly the sequence of development of the mine till it reaches its ultimate stage shall be given in the chapter on conceptual mine planning.
- 12.0 Existing productivity of major HEMM along with crusher shall be reported.
- 13.0 As both 2-shift/ 3-shift working has been proposed, details of the machinery calculations shall be given for both the above two mode of mining operations.
- 14.0 An illumination survey of the mine shall also be incorporated in the Annexure and any proposal to improve the illumination standards shall be discussed.
- 15.0 The details of construction of check dams/ settling tanks etc shall be given along with their design in the chapter on mine drainage. The mode of disposal of surface run-off water at the conceptual stage 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 be shown in the conceptual plan.
- 16.0 The detailed procedure of blending the diluted ore in the upper benches with clean limestone from lower benches shall be discussed.
 - 17.0 The raw meal feed quality of the cement plant to which the mine is captive to shall be indicated in terms of % CaO and LSF (lime saturation factor).
 - 18.0 The flow sheet of the crushing/ screening/ long distance belt conveying shall be given alongwith material balance for both the existing operational plant as well as for the proposed plant.
 - 19.0 The manpower required for both 2-shift / 3-shift operations shall be given in a tabular format.
 - 20.0 A risk assessment report along-with disaster management plan of the mining unit shall be enclosed duly approved by the management of the mine/ competent authority.

ANNEXURE:

- 1.0 Undertaking from each of the board of directors of the company shall be enclosed regarding their working in other organisations.
- 2.0 Copy of the permission taken from DGMS under regulation 106 (2)(b) of MMR - 1961.
- 3.0 Copy of Form-J & Form-K in respect of the existing boreholes sunk in the mine.
- 4.0 Previous working experience certificate of the Qualified Person to be enclosed.
- 5.0 Copy of the excerpts from the exploratory report shall be enclosed (duly certified) i.r.o the ore recovery factors being considered in the report.
- 6.0 Copy of the ground vibration study report being conducted at the mine.
- 7.0 A copy of the surface water drawl permission taken from the competent authority to be enclosed.
- 8.0 All pages of the annexure shall be signed by the qualified person.

PLATES:

1.0 General:

- 1.1 The name of the nominated owner shall be invariable given in all the plates of the document.
- 1.2 The period of review of the mining plan shall also be given in all the plates of the document.
- 1.3 The key plan/ surface plan / environment plan & financial assurance plan shall invariably be signed by the surveyor of the mine along-with the mining engineer employed in the mine.
- 1.4 The geological plan/ sections shall also be duly signed by the geologist of the mine.
- 1.5 The surface plan shall also be signed by the manager of the mine.
- 1.6 All plates shall be signed by the Qualified person.

2.0 Key plan:

- 2.1 Key plan shall be prepared strictly as per the extant provisions specified under rule 32(5)(a) of MCDR 2017.
- 2.2 A periphery of 5km from the lease boundary shall be shown in the key plan.
- 2.3 The population figures reported in a separate table shall be shown in the drawing itself at its appropriate location.

3.0 Authenticated lease plan to be enclosed.

4.0 Surface plan:

- 4.1 Boundary pillar co-ordinates shall be shown in a tabular format.
- 4.2 All the surface features lying within the mining lease (ML) boundary shall only be shown.
- 4.3 Existing surface features to be updated as on 30.9.17.
- 4.4 Quantity of limestone in each stock piles with their top & bottom mRL shall be shown.
- 4.5 The diverted forest boundary shall be shown in the surface plan.

5.0 Geological plan/ sections:

- 5.1 The pit profile shall be updated in the geological plan/ sections along with the exposed geological features.
- 5.2 UPL shall be shown in the geological plan/ section.
- 5.3 UNFC shall be re-visited after carrying out the re-assessment/ feasibility study and accordingly reflected in the plans/ sections.
- 5.4 Proper syntax/ code shall be used to indicate the ore continuity beneath the bottom of the drilled boreholes.
- 5.5 CaO%/ lithology shall be shown in the borehole logs in the geological sections.

6.0 Mine development/ production plan & sections:

- 6.1 The proposed development schedule shall take into account the mined out ore as on 30/9/17.
- 6.2 CaO%/ lithology shall be shown in the borehole logs in the mine development/ production sections.
- 6.3 UPL shall also be shown in the plan/ sections.

7.0 Environment plan:

- 7.1 Environment plan shall be prepared strictly as per the extant provisions specified under rule 32(5)(b) of MCDR 2017.
- 7.2 Only the existing surface features to be shown in the environment plan.
- 7.3 Existing afforestation & reclamation carried out shall be shown.
- 7.4 Contours at larger intervals should be shown in the area falling between 60m & 500m boundary.

8.0 Reclamation plan/ sections:

8.1 The proposed plantation & reclamation shall be indicated in a tabular form indicating the proposed year of carrying out the above said activity/ area to be covered (ha.)/ no. of saplings to be planted/ species of saplings to be planted along with location of the activity. The table should be given separately for reclamation & afforestation program proposed.

9.0 Financial assurance plan:

9.1 The existing/ proposed usages under different categories shall be coded in different colours and reported in index.

10.0 Apart from the above, all corrections as marked in one copy of the submitted text/ annexure/ plate is being returned herewith for its suitable in-corporation in the document.