

**Scrutiny comments on the Modified Mining Plan for Yanakandla Limestone Mine over an extent of 322.837 Ha in Meerapuram, Pathapadu & Yanakandla Village, Betamcherla Mandal, Kurnool District of Sree Jayajothi Cements Private Limited after inspection dated 07.10.2020**

**General**

- 1) The document heading needs to be submitted as Modifications in the approved Mining Plan. The lease period and expiry date needs to be mentioned.
- 2) Period of proposals in financial year needs to be submitted.
- 3) In the introduction the ML application related information needs to be deleted. Details information from ML Grant needs to be submitted. The unnecessary items from Introduction chapter need to be removed.

**Location and accessibility**

- 4) At Chapter 2, the block wise area needs to be submitted. Further the latitude and longitude of all corner boundary point/ pillar needs to be submitted.

**Details of approved Mining Plan / Scheme of Mining (If any)**

- 5) Entire review needs to be submitted block wise separately. Review of earlier approved proposal in respect of exploration needs to be submitted in tabular form. Over burden generation was more by 152% in the first two years and nil generation during last three years, the reason for such large deviation needs to be submitted. Review of dump rehandling, environment parameters, land degradation need to be submitted.
- 6) Specify reason and justification for modification at para 3.6. Reason for modification for the previous approved period needs to be submitted at para 3.2.

**Geology and Exploration**

- 7) Co-ordinates and RL of bench mark needs to be mentioned in the text.
- 8) Topography of all the three blocks are different wrt to the last approved one which needs to be propoerly justified. The drainage pattern, vegetation needs to be submitted block wise. Maximum and Minimum temperature during summer and winter and rain fall related information needs to be submitted along with its source.
- 9) Source of Regional Lithological succession needs to be submitted. At page no-30 the reason for not considering the 30 CBH and 8 nos DTH BHs for resource/ reserve assessment needs to be submitted.
- 10) Exploration expenditure made till date needs to be submitted phase wise and block wise.
- 11) At least for 10% of total samples should be analyzed by NABL Laboratory and reports thereof should be annexed.
- 12) The Feasibility report should be prepared as per the UNFC Guideline parameters for Stratiform, Strata bound and Tabular Deposits of Regular Habit (Category-I).
- 13) The Geological section should be prepared in consonance with the BH lithologs and the reserves/ resources should be re-estimated. The lacunas are as follows
  - a) In the Geological Cross Section the limits of Upper Flaggy Light grey Limestone (LGL) and the lower Massive Light Grey Limestone (LGL) occurrence needs to be marked correctly as some part of lower Massive LGL has been considered in the Upper Flaggy LGL.
  - b) Pink Limestone having CaO% above the threshold value of Limestone i.e CaO% > 34% and MgO% < 5% has not been considered for resource estimation. The limit upto which the

Limestone (within the threshold value) found to occur should be demarcated in the Geological cross section.

- c) The depth upto which reserves/ resources have been estimated needs to be demarcated in Geological cross section.
- 14) MRL of last bench of UPL need to be submitted in the text. Cut off grade needs to be submitted for CaO% and SiO<sub>2</sub>%. Safety barrier zone of Roads /cart track , Distance from explosive magazine and permission obtained wrt blasting in Yanakandla block, Distance from habitation of Meerapuram Village in Pathapadu block etc needs to be considered while estimating the reserves, resources.
- 15) The extent of non-mineralised area and mineralised area be demarcated in the plans and accordingly exploration needs to be proposed for the entire potential mineralised area.
- 16) Different type of UNFC code under which the reserves/resources have been considered for estimation need to be mentioned in the Geological cross sections. The lithological nomenclature as per the Bore hole lithologs should be the same in text and also in the Geological Cross section.
- 17) Detailed estimation table of reserves/resources needs to be submitted in text. UNFC category wise Reserves/resources table -15 should be submitted block wise with Grade. Reserves/resources lying in between the cut off and threshold value should be estimated and submitted. The old stockpile lying within the Pathapadu block be considered as mineral reserve and be mentioned in the reserves/resources table.

### Mining

- 18) All the block wise all the existing pits dimension need to be submitted. The existing as well as proposed method for excavation needs to be submitted block wise.
- 19) Blast hole parameters needs to be mentioned in the text.
- 20) In Pathapadu block all the existing old stockpile identification number as per the last approved plan needs to be mentioned in the surface plan. Further the year wise stockpile rehandling needs to be submitted.
- 21) The insitu tentative excavation table be submitted for the five year plan period only and the production proposal from 01.07.20 to 31.03.21 needs to be removed from the insitu tentative excavation table as the same has already been approved in the last plan.
- 22) As the mine Cut Off is SiO<sub>2</sub>%-16% and plant requirement is of SiO<sub>2</sub>% -13.5%, the weighted average grade of proposed mining block for each year needs to be furnished block wise and the mechanism for the grade control for optimum utilization of mineral along with blending techniques needs to be furnished.
- 23) Extent of Mechanization needs to be submitted in the text before the Conceptual Mining in the Mining Chapter.
- 24) a) Conceptual mine Plan to be prepared separately for these three non-contiguous blocks for systematic mining.  
b) Afforestation all along the 7.5 m safety zone, Recovery of ROM, disposal of waste, backfilling of voids, reclamation and rehabilitation, Conceptual Mine planning needs to be submitted. In Pathapadu block dump rehandling of the entire old Limestone dump needs to be proposed.  
c) In the Conceptual Mine Planning details of already approved plan period 2011-12 to 2015-16 and 2016-17 to 2020-21 needs to be removed.

d) Drastic reduction of mining/ production capacity from 2.5 MTPA to 0.064 MTPA from Financial Year 2036-37 onwards for next 26 years needs to be techno economically justified.

#### **Mine Drainage**

- 25) Minimum and maximum depth of water table needs to be submitted for each block separately.
- 26) Local drainage pattern to be submitted for each block.

#### **Stacking of Mineral Reject/Sub Grade material and disposal of waste**

- 27) In Chapter-4 mineral reject/ waste storage has been proposed in 2022-23, 2023-24 without any proposal for generation of waste. The inconsistency observed needs to be attended both in text and Plan.
- 28) The co-ordinates dimension, extent, volume of waste dump needs to be submitted.
- 29) As the Quality of Pink and Green Limestone is above the threshold value the waste dump should be considered as sub grade ore dump and accordingly temporary stock piling be proposed.

#### **Progressive Mine Closure Plan**

- 30) Environmental Management of 1<sup>st</sup> bench in south east direction of Yanakandla Block needs to be proposed.
- 31) In PMCP conceptual plantation proposal should not be submitted.
- 32) Plantation needs to be proposed in the 7.5m safety zone in SE side of the ML along GNSS canal. Year wise plantation with location needs to be proposed.
- 33) Environmental monitoring of Erragudi blocks needs to be proposed.

#### **Plans and Sections**

- 34) Copy of Original lease sketch issued during the time of initial execution needs to be submitted.
- 35) Hatching of Mining Leases of M/s Sree Jayajothi Cements Private Limited in the Key plan should be avoided. Instead it should be demarcated by thick boundary line in red colour.
- 36) Date of Survey heading along with the date needs to be mentioned in surface plan and Surface Geological Plan. Old approved local grid co-ordinates needs to be demarcated along with the UTM grid Coordinates.
- 37) Section line in Surface Geological Plan of Erragudi Block needs to be demarcated and the Geological Cross section needs to be submitted separately.
- 38) The Surface Plan, Financial assurance plan and the Environmental plan of Yanakandla blocks are not in consonance with each other wrt to the dump in SE portion of the block. In the Pathapadu Financial assurance plan certain approach roads needs to be demarcated.
- 39) Contour lines and places of historical importance should be demarcated in the Environmental Plans of all the three blocks.
- 40) Production and Development section should be prepared separately for each year for all the section lines which are cut by the year wise proposed production.
- 41) Few Conceptual longitudinal and transverse sections needs to be prepared for all the blocks and submitted separately.
- 42) All the plans and sections should be prepared and submitted as per the provision of rules 31, 32, 33 & 34 of MCDR, 2017 and signed by the surveyor having Certificate of Competency of Survey from DGMS.

#### **Annexures**

- 43) Copies of Experience certificates in respect of both the qualified persons need to be submitted.

44) The copy of board resolution in respect of Nominated owner needs to be submitted in full.

45) Summarized Bore hole lithologs needs to be submitted.

46) Irrelevant annexures need to be removed.

\*\*\*\*\*