Scrutiny Comments on examination of Modification of Review of Mining Plan & PMCP of Ramayanpatti Limestone Mine over an area of 31.09 Ha in Ramayanpatti Village, Tirunelveli Taluk & District, Tamil Nadu, submitted by M/s Krishna Mines under Rule 17(3) of MCR, 2016 & Rule 23 of MCDR, 2017

Mine Code - 38TMN15002 / Category - 'A' / Date of Inspection - 26/12/2021

# Cover Page:

- 1. The spelling of the name of the mine & that of the village in which it lies is found to be different here as well as elsewhere in the document from that available in the records in this office. The same shall explained/rectified.
- 2. The block period of the approved document that is being sought to be modified shall also be mentioned along with the modification period.

# **Chapter 1: General Information**

- 3. <u>Para 1.1</u>: The Lease Code shall be mentioned.
- 4. Para 1.1.2: The "Type of Document" shall also be mentioned here as per format.
- 5. <u>Para 1.3</u>: The dates of execution for all the subsequent lease deeds shall also be mentioned.
- 6. <u>Para 1.3.4.1</u>: The validity of the EC shall be mentioned as specified in the EC.
- 7. Para 1.3.5.1: The coordinates of all the boundary pillars shall be provided.

# Chapter 2: Geology & Exploration

- 8. Para 2.1.4.8: The degree & direction of plunge of the ore body shall also be provided.
- 9. <u>Para 2.2.2.13</u>: Bulk Density Test Report & Recovery Test shall be enclosed as a separate annexure.
- 10. Paras 2.2.4.2, 2.2.4.11 & 2.2.4.12: The detailed resource & reserve calculations with Section/Block/Bench-wise dimensions (LxBxH) shall be furnished in the format & the dimensions shall also be shown on the Geological Plan & Sections to enable verification of the same. The soft copy of the calculations shall also be furnished separately as an excel sheet in an annexure.
- 11. Para 2.2.4.13: The Code for "Pre-feasibility Mineral Resource (B)" shall be mentioned as "222".
- 12. Reserve Estimation as per the last approved MP/SOM/ROMP/MMP, as applicable, shall be annexed as a separate annexure.

# Chapter 3: Mineral Beneficiation/Processing

13. <u>Para 3.1</u>: The approx. mineral % in the mineral has been mentioned as 100% while the recovery has been stated as 85% on Pg 20. This mis-match shall be rectified/explained.

#### **Chapter 4: Mining Operations**

- 14. <u>Para 4.2.2.1</u>: The slope of the bench in mineral as well as the overall slope of pit have both been mentioned as 45° while the former has previously been mentioned to be maintained at 80°. This shall be rectified.
- 15. <u>Para 4.2.2.1:</u> 2 benches have been proposed to be worked partially in Over Burden during the year 2021-22 but their corresponding bench parameters have not been provided.
- 16. <u>Para 4.2.2.2</u>: The detailed calculations for the year-wise development & ROM figures shall be furnished in the format. The dimensions (LxBxH) & volumes (product thereof) to be excavated from individual benches (and sections thereof) shall be shown in individual rows & summed up for year-wise sub-totals. The dimensions shall also be shown on separate Year-wise Plan & Sections to enable verification of the same The soft copy of the calculations shall also be furnished separately as an excel sheet in an annexure.
- 17. <u>Para 4.2.2.2</u>: The column heading for the last column of the continued table shall be renamed to "Ore to Waste Ratio (ton/ton)".
- 18. <u>Para 4.3.4</u>: The Total Quantity Handled as per row (F) shall be the summation of A & C as provided in the formula.

- 19. <u>Para 4.5</u>: The unit for Powder Factor shall be rectified to "t/kg". The explosive requirement per month in Waste/Development as shown in Para 4.5.1. shall be re-worked. The "Total ROM proposed to be handled in CuM/annum" used in Para 4.5.2 shall be the highest yearly figure amongst all the plan years.
- 20. <u>Para 4.9</u>: The "Proposed Use of Mineral" shall be either of the options provided right below the table. The "Physical Specifications" shall be the provided correctly.

## <u>Chapter 6: Progressive Mine Closure Plan</u>

- 21. <u>Para 6.2.3.2</u>: The number of plants proposed in both the years is not commensurate with the area proposed to be covered or with the estimated expenditure for the year. The same shall be explained/rectified.
- 22. Para 6.2.11: An area of 1.283 Ha has been envisaged as "Area under the tailing dam" while it was claimed earlier in Para 6.2.10 that no tailings will be generated. No area has been shown as "Area under utility services" while an area of 1.353 Ha has been shown in Para 6.1 for the same out of which only an area of 1.283 Ha has been shown as "Rehabilitated Area under utility services". No area has been shown as non-degraded while an area of 1.931 Ha has been shown in Para 6.1 as well as later here as being Virgin area under green belt. The same shall be explained/rectified.

#### Chapter 7: Financial Assurance

23. Financial Assurance shall be submitted in original in compliance of Rule 27(1) of Mineral Conservation & Development (Amendment) Rules, 2021 & copies of the same shall be enclosed as annexure in the final copy of the document.

### Chapter 8: Review of Previous Proposals

- 24. <u>Para 8.2.2.1</u>: Negative deviation percentages in this section & elsewhere shall be prefixed with a bracketed negative sign.
- 25. <u>Para 8.2.2.2</u>: The grid values/co-ordinates of the lateral extents for excavation shall also be provided here in both the proposed & actual columns. The Vertical extents shall be given in MRLs as well.
- 26. <u>Para 8.2.8.3</u>: The afforestation proposals shall be furnished in terms of area proposed in Hectares as well as number of saplings proposed.

# Annexures:

- 27. Annexure 10: It is stated that the CCOM Circular 2/2010 will be implemented & complied with when any authorized agency is approved by the State Government. The State Government has already authorized some agencies in this respect. An undertaking by the lessee in this respect to comply with the said circular within 180 days shall be furnished along with the final copy of the document, if the same is yet to be complied.
- 28. <u>Annexure 11</u>: The Certificate of Recognition as Qualified Person is no longer valid. The same shall be removed accordingly. Copies of Photo ID & PAN Card of the Qualified Person shall also be enclosed.
- 29. <u>Annexure 12</u>: At least 10% of samples may be analyzed from third party NABL accredited/or department of science & technology (DST) / BIS recognized laboratories or government laboratories for assessing the acceptable levels of accuracy in compliance of M(EMC) Rules, 2015.
- 30. Copy of Valid Permit for contiguous working with adjacent lease areas shall be enclosed in separate annexure.
- 31. Copies of Violation letters issued by IBM, if any, and the compliance thereof shall also be annexed.

#### Plates:

- 32. The Plates shall be numbered & sequenced in the manner outlined in the new format for mining plans issued by IBM.
- 33. <u>Plate 3</u>: All the boundary pillars shall be labelled with their respective pillar numbers. At least three Ground Control Points should be plotted showing respective Bearings & Distances with a few Boundary Pillars. The dumps shown lying outside the lease area shall be deleted in all the plates.
- 34. <u>Plate 7</u>: The legend in this plate shows working areas for an elapsed year. Moreover, the colors indicated in the legend for the remaining years of the plan period do not match with the actual colors used to indicate the working areas. This shall be rectified.
- 35. <u>Plate 8</u>: The bench profile in the south-eastern portion of the lease that is proposed to be backfilled at the end of life of the mine shall be drawn/terraced to reflect the bench positions after such backfilling.
- 36. Progressive Mine Closure Sections shall also be submitted as a separate plate in .pdf or .dwg format as mandated in the new format for mining plans.
- 37. <u>Plate 12</u>: The same Financial Assurance Table & Values shall be used in this plate as the one used for the final year in Chapter 7 of the document. The mis-matches shall be rectified.
- 38. A Geo referenced Cadastral Plan, duly certified by the State Government shall be enclosed.
- 39. In compliance of Rule 34A.(3) of MCD(Amendment)R, 2021, the processed output [digital elevation model (DEM) and Orthomosaic] images obtained from a drone survey of the lease area & upto hundred metres outside the lease boundary carried out within six months shall also be submitted to the Regional Controller of Mines & Controller General, IBM.