Scrutiny Comments on examination of Modification of Mining Plan with PMCP of Periyanagalur Limestone Mine over an area of 35.96 Ha in Periyanagalur Village, Ariyalur Taluk & District, Tamil Nadu, submitted by M/s The RAMCO Cements Limited under rule Rule 17(3) of MCR, 2016

Mine Code – 38TMN24039 / Group – A / Non-Forest / Date of Inspection 07/07/2021

Cover, Introduction & General:

- 1. Page 2 The reason for execution of Mining Lease Deed on 20.08.2003 over an extent of only 35.96 Ha, despite having grant vide G.O. (3D)No.2 Industries (MMA2) Department dated 13.01.2003 over an extent of 36.29.5 Ha, as mentioned in G.O. (Ms) No. 77 dated 26.07.2018, shall also be recorded here.
- 2. <u>Page 3</u> The names & villages of the mines listed at nos. 1, 6 & 7 in the table titled Details of Leases held by the company shall also be provided.
- 3. <u>Page 4</u> The Name, Address & Contact Details of the Nominated Owner shall be provided in the Address Section.
- 4. <u>Page 4</u> Annexure 18 referred to here with reference to the copies of the experience certificates of the Qualified Person is non-existent. The number shall be rectified.
- 5. Page 10, Section 3.4 Although multiple violations have been issued by IBM against the mine in the past, "Nil" has been mentioned in this section as the "Status of Compliance of Violations pointed out by IBM". This should be rectified & copies of violation letters issued & the compliance positions thereof shall be enclosed in the annexures & discussed here elaborately.
- 6. All tables should be numbered and, if possible, titled as well.

Part-A:

- 7. Pages 14 & 15, Section 1.e The date(s)/year(s) of drilling of all the exploratory boreholes shall also be provided along with other details. Apart from the 17 boreholes tabulated on page 15, it is stated that two additional boreholes for a meterage of 173 mts have been drilled on the eastern side the ML boundary, but the details of the same have neither been furnished here nor in Annexure-7. Complete details of the same shall be provided in the final copy.
- 8. Pages 17, 19, 20 & 21 The date as on which the reserves as mentioned in the tables on each of these pages and elsewhere stand shall be mentioned explicitly atop each of the respective tables.
- 9. Pages 19 & 20, Pre-feasibility Mineral Resource (Barrier Zone)(221) & (Locked Up Ore)(221) There are summation errors in the TOTAL tonnage figures for both the tables. The same shall be rectified & corrected values be substituted in the succeeding Total Reserves & Resources Abstract table & elsewhere throughout the document. Soft copies of all calculations shall be provided in excel format in the CDs.
- 10. <u>Page 21, Section 1.1.b, Cut-off Grade</u> Chemical Analysis Report of Representative Samples obtained either from a government laboratory or a third-party NABL-accredited laboratory shall also be furnished here.
- 11. <u>Page 21, Section 1.1.c, Conversion Factor</u> Documentary basis for the stated values of Tonnage Conversion Factor shall be recorded & enclosed as annexure.
- 12. <u>Page 23</u> The Diameter of Blastholes has been proposed to be 110 mm in the table while the same has been proposed as 106 mm in the text below and on the next page. Moreover, a total of 2,500 holes with 120 T/hole yield have been envisaged to be drilled every year to produce 0.3 MTPA of Limestone while the weekly number of holes proposed to be blasted has been stated to be 150 per week which would amount to 7,800 holes per year (52 weeks) which is inconsistent with the earlier estimate of 2,500 holes per year. These inconsistencies shall be removed in the final copy of the document. The tentative year-wise explosives' consumption for the plan period shall also be discussed here.
- 13. <u>Page 24 & 25</u> The number of working days per year used for the calculation has not been stated. The Size/Capacity of Tippers has been specified in a wrong unit of M³/Hr. Moreover,

- the number of drilling machines, excavators, tippers, etc. required for meeting the excavation & transportation requirements have also not been worked out. Proper estimation of machinery requirement shall be furnished in the final copy of the document.
- 14. <u>Page 26</u> The table for In-situ Tentative Excavation shall be provided first with Volumetric Units (Cu. M.) & then with Quantitative units (tonnes). Moreover, the table shall also show the now elapsed first three years in rows above those for the remaining years. Reasons for not proposing any development during the plan period shall also be recorded in Section 2.A.(c).
- 15. Page 28 The Production Quantity figure for the year 2021-22 mentioned in the tables on Pages 26 through 28, and elsewhere, if any, shall not be exclusive of the 7,192 Tons of Limestone excavated during the month of April 2021 as stated on this page but be inclusive of any quantity excavated during the current Financial Year (2021-22) so as to avoid incongruities at the time of reconciling the said figures from the Annual Return & the Approved Production Quantity for the year. Details of actual excavation carried out in the current FY, if any, need not be mentioned in this document.
- 16. <u>Page 28, Section 2.A.(e)</u> This section shall be discussed elaborately providing all the details sought.
- 17. <u>Page 29, Section 3</u> The existing as well as proposed drainage system shall be discussed here in details mentioning the types, dimensions & locations of the systems already in place & those envisaged for the plan period.
- 18. Page 29, Section 4 It shall be discussed elaborately why no proposal for removal of top-soil has been made in this plan period whether all the top soil has already been removed or the areas having top-soil are not planned to be exploited during the plan period shall be mentioned clearly. Overburden, Waste & Mineral Reject generation shall also be discussed here and if they are not to be generated, the reasons for the same shall be recorded. The table provided here shall have rows for the now elapsed years of the existing approved plan period above those for the remaining years as well.
- 19. <u>Page 32</u>, <u>Section 5.d</u> Physical & Chemical Specifications of the Ore stipulated by the plant consuming the output of the mine shall be discussed here.
- 20. <u>Page 32</u>, <u>Section 7</u> Employment Potential of the project across employment categories viz. Highly-Skilled, Skilled, Semi-Skilled & Unskilled, shall also be briefly discussed here.
- 21. <u>Pages 36 & 37</u> The dates of Air Quality, Noise Level & sample collection for Surface Water Quality & Ground Water Quality Tests shall also be provided along with the results of the respective tests.
- 22. Page 56, Section 8.6, Financial Assurance An area of 0.17 Ha has been claimed as been fully reclaimed & rehabilitated & is being discounted from the computation for Financial Assurance. As no area of the mine has been fully reclaimed & rehabilitate as of now, the same shall not be discounted. Although afforestation has been proposed for the plan period, no additional area requirement has been shown in the "Green Belt" head at Sl. No. 8. The area shown in the "Others" head at Sl. No. 13 shall be specified and, if needed, its break-up be provided. The table shall be revised accordingly & Financial Assurance for a total area of 35.96 Ha be provided at the applicable rate in original.

Part - B:

23. The Consent Letter & the Undertaking shall be signed by the nominated owner of the mine.

Annexures:

- 24. Copies of approval letters for all the plans/schemes of this lease approved by IBM till date shall be enclosed in a separate annexure.
- 25. <u>Annexure 7</u> The Borehole Litho-logs submitted in this annexure have no authenticity. At least 10% of the drilled Borehole samples shall be analysed either through a government laboratory or a third-party NABL-accredited laboratory.

- 26. <u>Annexure 8</u> Copies of Environment Testing Reports for Core & Buffer zones, conducted by an NABL accredited agency, during the last four quarters shall be enclosed.
- 27. <u>Annexure 9</u> The Board Resolution enclosed here does not specifically designate the nominee as the Nominated Owner of the mines. The resolution shall accordingly be modified to reflect this requirement.
- 28. Annexure 12 Proofs of Identification for the Qualified Person shall also be enclosed.
- 29. Copies of latest & valid Explosives' Magazine, Van, Procurement & Blaster's Licenses shall be enclosed as a separate annexure.

Plates:

- 30. Soft copies of .KML files for the lease boundary & other surface features shall be provided in the CD and in email.
- 31. <u>Plate 2</u> Authenticated Lease Plan of State Government shall be submitted replacing the Lease Plan submitted in Plate 2.
- 32. <u>Plates 3</u> Boundary Pillar Numbers shall be shown on either or both of these plates. Portions of other leases shown in the Surface Plan & other plans shall be erased.
- 33. <u>Plates 4 & 5</u> No Exploratory Boreholes appear to have been drilled in the Southern & the South-Western Blocks of the lease. Further, the Eastern extent of the Northern Block also appears to be inadequately explored. Moreover, the already drilled boreholes terminate in the ore zone thereby failing to establish the depth persistence of mineralization. The entire lease area shall be proposed to be explored till extended depths of mineralization as required under Minerals (Evidence of Mineral Content) Rules, 2015 within the first year of the proposed plan period. The Geological Plans & Sections in these plates as well as text at relevant locations throughout the document shall be revised accordingly.
- 34. <u>Plate 4</u> The Ultimate Pit Limit has not been drawn in this plan. The same shall be drawn & indexed properly.
- 35. <u>Plates 5 & 8</u> The Current & Ultimate Pit Limit Profiles have been drawn on various sections with various colors which are, at times, the same for both & do not match with the ones indicated against them in the index. The UPL hasn't even been drawn as benches on a few sections. The Safety Barrier has been drawn on a few sections in colors that do not match with its respective index color. All the features shall be drawn with distinct colors for each of them that shall match with their respective index.
- 36. <u>Plates 4, 5, 6, 7 & 8</u> A Longitudinal Section shall be shown across each of the pits & the respective cross-sections be drawn marking the bench-wise mean-distance used for reserve & resource estimation as well as for yearly production estimates.
- 37. <u>Plate 12</u> A <u>"Reclamation Plan"</u> shall be submitted outlining the year-wise reclamation & afforestation activities proposed during the plan period instead of an "<u>Environment Management Plan"</u>.
- 38. <u>Plate 14</u> The Financial Assurance Plan shall be drawn showing only the outlines of all the items under the Financial Assurance Table at the end of the plan period in different colours and be referenced in the index accordingly.

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