Scrutiny comments on examination of draft copy of modified mining plan submitted under Rule 17(3) of MCR'2016 in respect of Udgiri & Dhangarwadi Bauxite Mine of M/s. R.M.Mohite & Co. over an extent of 121.56 Ha. situated in Udgiri & Dhangarwadi Villages, Shahuwadi Taluka, Kolhapur District of Maharashtra State submitted for approval under rule 17(3) of MCR'2016 for block period /approval period of 2016-17 to 2020-21.

### **GENERAL**

- 1. Cover page:- The lease period, expiry date of lease etc. are not given over the cover page.
- 2. The CCOM circular 02/2010 is not implemented as the State Govt. of Maharashtra has already been recognised the agency for DGPS survey.
- 3. Lessee is a Ltd. company/firm. Hence, list of board of directors duly certified by competent authority along with address/contact nos. to be enclosed. Also, Undertaking regarding working/interest of board of directors/partners in other firms/company/organization should be given.
- 4. The copy of resolution of lessee Co.'s Board regarding nominated owner/partner of the mine for authorizing/dealing with lease documents, is not enclosed.
- 5. In introduction the brief history of mine should be discussed from grant of LOI of 1312.41 ha to execution of 121.56 ha in chronological order with supporting documents.
- 6. The certificate from qualified person has to be signed by QP.
- 7. Lease boundary pillars to be maintained as per the lease plan certified by the State DMG, Maharashtra with standard specifications and will be supported with suitable photographs as enclosures.
- 8. Para 3.3: Review of exploration, ROM production, Waste generation, D&P, R&R, and Afforestation etc. to be carried out properly in the tabular form with suitable reason/justifications of % deviation.

## **MINING**

- 9. Sequence of different mining operations should be described in brief here.
- 10. Mine Design parameters to be mentioned in the text. Back-up calculation of Development & Production (D&P) for the proposed period to be furnished.
- 11. Year-wise tentative Excavation in Cubic Meters to be indicated from (b) In-situ/float excavation as per guideline. Then, a NOTE to be added below the proposed year wise excavation summary Table regarding tentative tonnage as arrived considering Recovery % and Bulk-Density (Tonnage factor) based on time series data and samples test. Documentary proof for bulk density/ T.F. and Recovery % considered to be submitted. It should be from NABL accredited lab. or Govt. lab. Further, table to be re-furnished as discussed in the while field inspection.
- 12. Working proposal to be given after leaving statutory barrier from the lease boundary, seasonal nalla/check dams. Adequacy of machinery deployment and allied to be furnished based on the proposal.
- 13. Year wise working proposal as given in the text should be within the area estimated under reserve category only and to be supported with the respective plan & sections.
- 14. Sufficient proposal for protective measures to be given to substantiate the environmental requirement.

- 15. R & R to be discussed properly with existing as well as proposal.
- 16. The entire ore deposits reported as Float Ore. Therefore, the year wise mining and consequent backfilling of waste/reject/soil in the mined out area to be given properly with substantial proposal of reclamation and rehabilitation.
- 17. Para 3.d):- Rainwater management plan i.e. drainage plan (Flow chart) along with arrangement for arresting solid wash off should be given. Existing arrangement and proposal for protective measures to control wash-off from flow of rain water should be given in quantified terms.

### STACKING OF MINERALS REJECT/ SUB-GRADE AND DISPOSAL OF WASTE

- 18. Generation and utilization of waste/reject/soil to be given systematically and to support the R&R requirement.
- 19. It has been mentioned in the text that there is no generation of waste whereas the 0.747 tonnes waste handling proposed. The contradictory para may be corrected.
- 20. Treatment of float ore area to be proposed systematically.
- 21. Year-wise distribution of reclamation & rehabilitation to be described.

### **OTHER**

- 22. a) Site services:- Basic welfare requirement, Sufficient infrastructure and their maintenance to be committed. This includes the details of welfare infrastructure in the site office and their maintenance and ODF.
- 23. b) Sufficient statutory and technical manpower to be proposed to be employed to support the safe and scientific mining.

#### **PMCP**

- 24. PMCP to be discussed in accordance with the rule 23 of MCDR,2017. Further, Mitigation measures of impacts associated with mining based on EIA i.e. mainly related to air, water, noise, vibration, land, aesthetics etc. to be elaborated.
- 25. Para 8.4: Disaster management to be elaborated with specific responsibility of mines management & employees with code of practices. The details of contact numbers of responsible persons including role of external agency should be discussed.
- 26. Financial Assurance to be submitted as per the rule 27(1) of MCDR, 2017.

#### **Enclosure:-**

- 27. All the annexure to be properly indexed, numbered, paged and signed by the TQP.
- 28. The copies of earlier approved Mining plans should be attached with proper and appropriate reference in the text.
- 29. Annexures to be furnished as per the Guideline/Format of "IBM manual on appraisal of Mining Plan-2014". All the annexure to be properly indexed with numbered and paged.

#### PLATES:-

- 30. Rule 31, 32 & 34 of MCDR, 2017 and convention of MMR-1961 to be followed for preparation of plans & sections.
- 31. All plans to be prepared based on recent and accurate survey features & profile. Such plans should be prepared by the qualified Surveyor and certified by the mining engineer of the mine for its correctness.
- 32. All relevant plans to be re-prepared/modified in view of above comments.
- 33. P &D plan to be re-casted based on the discussion in the field. Legends should be clearly shown as proposed.
- 34. Reclamation plan: A reclamation plan showing all back-filling, R&R measures, Environmental protective measures etc. to be enclosed as per Guideline/Format of "IBM manual on appraisal of Mining Plan-2014".
- 1) Geology and Exploration:- i) Thickness of the different lithounits should mentioned based on the exploration data. ii) At page number 16 it is mentioned that exploration is carried out by lessee himself. It should be clarified that whether exploration is carried out under the supervision of the statutory person and whether any intimation is given to concerned authorities to carry out exploration in the lease area needs to be discussed. iii) The area explored under different level of exploration, area to be explored and area proved as non-mineralized to be given separately for Dhangarwadi and Udgiri block. iv) Chemical analysis of trial pits analyzed from NABL lab is needs to be enclosed. v The rule under which plans and sections were prepared needs to be mentioned as per MCDR-2017. vi) The entire mineralized area to be explored under G-1 level of exploration in the grid pattern as per MEMC rule 2015. Proposals should be given separately for Dhangarwadi and Udgiri block. vii) Dimension of the trial pits varies from page to page this need to be rechecked and corrected. viii) At page no-25 year 2017-18 is mentioned as 1017-18, this should be corrected. ix) In Dhangarwadi block it was observed that many check dams were constructed in the lease area as a part of water conservation and seasonal nallahs are also flowing within the lease area. So 50mtr safety barrier should be excluded from each checkdam/nallah for estimation of reserves. Otherwise letter from the concerned department should be submitted for any relaxation for estimation of reserves. x) The bulk density and recovery factor taken for reserve estimation should be taken based on the test conducted. xi) Compare to total explored area ore estimated under reserve category is appears more. This need to be rechecked and corrected. xii) The lateral extension to be considered for resource assessment shall depend on geological considerations supplemented by continuity by mapping or by the other means and in any case shall not be more than 50% of the grid spacing of the probe points. Accordingly reserves/resources need to be re-estimated.

# 2) Plates:-

**Geological plan and cross sections:-** Area explored under different level of exploration and reserves/resoures estimated under different codes of UNFC classifications are not properly marked on geological plan and cross sections.