SCRUTINY COMMENTS ON REVIEW & UPDATION OF MINING PLAN OF JAMBUNATHANAHALLLI IRON ORE MINE OF SRI ALLUM BASAVARAJ. M.L. NO. 1893, OVER AN AREA OF 31.67 HA, (4.25 HA IN R.F. & 27.42 HA IN REVENUE), IN JAMBUNATHANAHALLLI VILLAGE, IN HOSAPETE TALUK OF BELLARY-DISTT, STATE KARNATAKA, CATEGORY OF THE MINE IS A(MECHANISED), FOR THE YEAR 2017-18 TO 2021-22(UP TO 7.3.2022).

COVER PAGE

- 1. The extent of the area as per CEC survey has not marked along with the ML deed copy to be appropriate.
- 2. Introduction: Proper justifications with necessary document should be given for non-submission of FMCP in respect of 23. 25 Ha areas reduced, due to 1 km radius area of Sri Jambunath Temple. Besides, renewed letter & the date, month should be given. Affidavit stating the staus of the whole case may be given. The details of present status of the case in Hon'ble supreme court may be furnished.
- 3. Para 3.3: Review of production and development, other environmental protective measures etc. up to financial year 2016-17 should be given in this para, instead of 2011-12 only.
- 4. Table-10 on R & R works given, the items which are under progress; the expected date of completion may be given.
- 5. Para 3.6, rule should be changed to 17(3) of MCR, 2016 and the previous one should be deleted.

Part-A

Geology & Exploration:

- 6. Para 1(a): Drainage pattern, vegetation, climate and rainfall data of the area should also be discussed in brief as per Universal format.
- 7. Para 1(c): Lumps to Fines ratio of Iron ore should also be mentioned. Local geology as per guidelines should be given.
- 8. Para (e), when Hon'ble Supreme Court banned all mining operation, then how exploration carried out, may be clarified. Whether report submitted to IBM after undertaking the exploration in due format may be given. In complete exploration cost reported in the para.
- 9. Para 1(i): The area cover under G-1 level of exploration w.r.t. total mineralized area has not been mentioned.
- 10. Para 1(j): The recovery factor considered for non-forest area should be reviewed & reduced based on field observations during site inspection. Bulk density and recovery factor should be determined based on field tests conducted & confirmed. Any addition of exploration done and the reserve updated may be indicated.
- 11. Para 1(k): (i) The proved reserves (111) in respect of non-forest area should be reconciled based on revised recovery factor. (ii) Reserves blocked at safety zone of 7.5 m, have not been assessed. The same may be classified under 211.
- 12. Para 1(l): (i) Date of estimation of reserves/resourced to be checked and corrected. (ii) Sub-paras (a) to (c) have not been discussed as per Universal format.(iii) A separate feasibility study report as per existing procedure has not been enclosed. Economic Evaluation chapter should be discussed in detail with NPV & IRR. Proposed operation cost should also include royalty and payment to NMET (2 % of Royalty) & DMF (30 % of royalty). Accordingly, economic viability may be made w.r.t. present sale value of ore. (iv) Foot note as per universal format may be incorporated below Table no-16 and updated with latest as on 1.10.2016 along with test report.
- 13. Para 2(a): concurrent back filling is proposed in the mined out areas, wherever shale exposes. It is better to drill at least one or two DTH holes in the ML area to reassess the mineralization at depth. Besides, the Ore to waste ratio should be arrived based on the volume of excavation data. Workings may be described in brief with approachability etc.
- 14. para 2(b), tentative excavation given in table-17, must be indicated with metric tonne/ cubic meters. Besides, the in table-18, the estimated available materials in the ML area need to be specified, instead of leaving blank. Year wise, bench wise, opening reserve, exploitation, closing balance may be tabulated.

- 15. Para 2©, the geometry of the workings may be described briefly, indicating the advancement of the workings faces, its length & width, approach road etc.
- 16. Para 2(d), the tippers requirements given reveals 10t capacity for transportation, table-19, but in the para it is given for 16t capacity tippers. Further, for screening ROM manually programmed, in contrary to the method of workings.
- 17. Para 2(e), mining/ workings are proposed in forest area only, what is the reason for not prosing in non-forest area may be explained.
- 18. Para 2 (f): (i) Life of mine should be revised based on modified reserves and resources. (ii) Foot note should be given below Table no-24, regarding conceptual period and end of this plan period are same by considering expiry date of ML. Recovery of ROM may be reconciled. The basis of recovery calculated may be given.
- 19. Para 3 (b): The minimum and maximum depth of working should be checked and corrected w.r.t. enclosed plans. What is reported 540 & 510mRL is not appropriate.
- 20. Para 4 (a): Year-wise generation of wastes / mineral reject should be presented in standard table as per "Universal format".
- 21. Para 4(C), instead of mining plan period, scheme of mining is proposed, which must be corrected and also in the other part of the text and the plates, if applicable.
- 22. Para 7(b): The grand total of table nos. 28 & 29 should be checked and corrected. The OMS indicated per person is found to be not appropriate, needs to be checked.
- 23. Para 8.1 (page no-25): Reduction of ML area as per Hon'ble Supreme court order in Sir Jambunatha Temple issue has not been discussed.
- 24. Para 8.2: Mitigate measures to be taken for control of air, water and noise pollution may be indicated in separate para.
- 25. Para 8.3.1: Proposed area to be back-filled should be checked and corrected w.r.t. proposals. Para 4(b) may be reconciled.
- 26. Para 8.3.5: The year-wise proposals of back-filling and afforestation on back-filled area should be properly mentioned at table no-32.
- 27. Para 8.6: The additional requirement of area under mining should be checked and corrected as total area was not matching.

Part-B

- 28. Certificate and undertaking from Lessee: (i) An additional undertaking from lessee stating the time-bound implementation of CEC approved Reclamation & Rehabilitation Plan and monitoring / maintenance of protective measures already implemented, may also be incorporated under para 9. (ii) Neither the compliance/condition of CCOM circular No-2/2010 incorporated nor supporting documents submitted.
- 29. Certificate from QP: The provision of rule may be checked and corrected.

Annexures:

- 30. Experience certificate of Shri Sripad Pujar, QP, has not been enclosed.
- 31. Environmental monitoring data have not been enclosed.
- 32. Copy of ML deed has not been enclosed.
- 33. Copy of the valid bank guarantee for the proposed period must be enclosed.
- 34. The copy of the scheme of mining and the mining plan approval may be enclosed one after other, instead of submitting with a gap.
- 35. The qualification and the experience certificates of qualified persons may be enclosed.
- 36. Environment clearance copy may need to be updated.
- 37. Certificate from QP should be corrected as MCDR, 1988. (Mineral Conservation & Development Rule, instead of MCR-2016).

Plates:

38. Key Plan (I/b): Wind-rose diagram, location Sri Jambunath Temple and adjacent Mines in buffer zone etc., have not been properly shown on plan. The approach road to the ML area with approximate distance may be indicated. Key plan should be prepared as per rule 28(1)(a)(b) of MCDR, 88.

- 39. Surface Plan (Plate No. II/a): The forest boundary shown with single line reveals in part, which must be completed with the ML boundary. Besides, in the table on the plate, it is mentioned 31.67 ha area is for mining scheme, instead of for mining plan period, which must be corrected. In the light of the above remarks, the other plates may be attended. Surface plan should be prepared as per rule 28(1)(a) of MCDR, 88.
- 40. Plate II/b: (Surface Geological Plan): Area covered under G-1 level of exploration should be properly shown on plan. Geological plan should be prepared as per rule 28(1) (b) of MCDR, 88.
- 41. Geological Cross sections have not been enclosed.
- 42. Production and Development Plan (Plate No. 2017-18): the notation used to show the working benches in the index side, must be indicated with the end of the workings for the year 2017-18, instead of just showing in the index. Besides, on the plate also, same at the end of the respective workings should be brought out for reference. In the light of the remarks, the other plates up to 2021-22 may be attended. The five periods must be corrected appropriately. Workings must be shown as it is, distinguishing the difference between others. Original contour will not be existing after the workings, which must be attended, in all the plates.
- 43. Year-wise production and development sections have not been enclosed.
- 44. Plate No-IV (Reclamation Plan): (i) proposed environmental monitoring stations have not been shown in core zone. (ii) Water monitoring station at water discharge point of ML area should also be proposed. (iii) Proposed concurrent back-filling and afforestation on back-filled area have not been shown.
- 45. Plate No-V (Environmental plan): (i) Water monitoring station at water discharge point of ML area should also be proposed. (ii) Proposed conceptual land use/this plan period need not be shown. (iii) Contour lines should be at five meter intervals. (iv) The adjacent mines have not been shown on the plan. Environment Plan as per rule 28(5) (b) of MCDR, 88.
- 46. Conceptual Plan (Plate No.VI): The concurrent back filling undertaken in the envisaged production area must be carried with afforestation, to be covered under progressive mine closure plan, otherwise incomplete.
- 47. Another qualified person having Msc(Geology)/ Mining Engineer with minimum five years' experience in the related field may be added with his signature.