

**SCRUTINY COMMENTS ON DRAFT REVIEW AND UPDATION OF MINING PLAN OF KARIGANUR IRON ORE MINE (ML. NO. 1799) IN HOSPET TALUK OF BELLARY-DIST OVER RETAINED AREA OF 115.67 HA (AS PER DGPS SURVEY) OUT OF 199.4 HA (AS PER CEC SKETCH) OF M/S KARIGANUR MINERALS MINING INDUSTRIES.**

1. **Cover page:** (i) The expiry date of ML as per amended MMDR act has not been mentioned. (ii) The details of ML area as per CEC sketch, retained area of ML and area as per DGPS survey etc may clearly mentioned. (iii) Rule under which PMCP submitted should be checked and corrected. (iv) The document Submitted for modification should be under rule 17(3) of MCR, 2016. (v) The forest land should be in specific, whether it is RF or other type. In the light of the above remarks, the text and the plates may be attended, wherever applicable.

2. **Introduction:** (i) The copy of letter from DMG/CEC regarding production limit of mine has not been appended. (ii) Deemed extension letter from the DMG if received may be enclosed in the annexure for reference. (iii) The purpose of present submission & the changes made in the present document if any may be dealt accordingly.

3. **Para 1(b):---** The Managing Partner of Firm should be as per the enclosed partnership firm with clarifications.

4. **Para 1(f):---** The experience certificate of QP as under Rule 15 of MCR 2016 have not been enclosed.

5. **Para 2(a):--** Latitude & longitude of one BP pillar may be mentioned as per universal format.

6. **Para 2(c):--** The details of ML area as per CEC sketch, retained area of ML and area as per DGPS survey etc may be clearly mentioned.

7. **Para 3.3:-----** (i) The afforestation and other environmental protective measures carried out during period 2012-13 to 2016-17 with respect to approved proposal have not been discussed. (ii) The indicative cost summary table of approved R & R Plan and actual expenditure incurred should also be mentioned. Besides, it is given mining operations were not carried out due to lease renewal process & statutory obligations during the year 2012-13 to 2016-17. Whether, in the present situation it is obtained or not may be indicated.

8. **Para 3.5:---** Latest Hon'ble Supreme court orders/directions on "Jambhunathahalli Temple issue" if any may updated with the copy of the same.

9. **Para 3.6:-** Reasons for modifications of document should be indicated.

**Part-A**

**Geology & Exploration:--**

9. **Para 1(a):---** Irrelevant mentioning of "Rain water Collected" under Drainage pattern may be checked and removed.

10. **Para 1(c):--** Lumps to Fines ratio of Iron ore should also be mentioned.

11. **Para 1(e):--** Numbers of DTH boreholes considered for assessment of reserves/resource may also be clearly mentioned.

12. **Para 1(f)** :-- The rule under surface plan submitted may be checked and corrected as “32 (1) (a ) of MCDR 2017”

13. **Para 1(i)**: The lateral extent of area cover under G-1, G-2 and G-3 level of exploration has not been mentioned w.r.t. total mineralized area. As per rule 12 (4) of MCDR 2017, the G-1 level exploration should be proposed over the entire potentially mineralized area. Proposed depths of BHs have been reflected twice in table No-9 may be reconciled. Further, the proposed expenditure on exploration should be mentioned.

14. **Para 1(j)**:-- (i) The reserves and resources estimated in last approved MP document dated 4/12/2012 may also be mentioned. (ii) Bulk density and recovery factor should be determined based on field tests conducted & confirmed. (iii) Justification table of UNFC may be reflected under 3 tables’ viz. geological axis, feasibility axis and Economic axis to avoid repetition.

15. **Para 1(k)**:-- The enclosed calculation table has not been discussed/ referred.

16. **Para 1(l)**: (i) The grade of BHQ should be checked and mentioned w.r.t. enclosed chemical analysis report. (ii) The total of G-3 resources of iron ore and grand total figures at table of page no-27 are not matching. The same may be checked and corrected w.r.t. table No-10. (iii) The UPL mentioned to be checked & corrected w.r.t. enclosed sections. (iv) The cut-off grade of estimation of iron and BHQ should be mentioned at Table No-10. Further BHQ quantity should not be included under reserves by considering grade and non-utilization during plan period by beneficiation or blending. It may be classified under respective resources category only.

### **Mining**

17. **Para 2A(a)**:-- The existing method of excavation is not briefed appropriately. Therefore, it is expected to brief on the slope of faces, direction of advancement, approach road to the faces & specification of roads, etc., to be marked. (ii). Also, the existing dumps spread parameters, height, slope protective works etc., to be marked. (iii). The bench wise, mRL wise, opening reserves, exploitation and the closing balance should be furnished for the proposed periods. (iv) The difference between top and bottom RL is coming 59 meters whereas maximum depth of pit is indicated as 95 meters. This needs clarification. In the light of the above remarks, the para in the text may be attended wherever applicable.

18. **Para 2(b)**:--( i)Year-wise tentative excavation table with foot note should be as per universal format (ii) Latest Hon’ble Supreme court orders/directions on “Jambhunathahalli Temple issue” have not been discussed. (iii) Mine production should be envisaged from the area where reserves are estimated & categorized under proved (111) and probable (121 &122) mineral reserves category. (iv) The calculation table of production and development has not been enclosed.

19. Para 2©, under individual year wise development plan & sections, the development and production shown reveals that the excavation towards southern end, where already high wall is present, and restricting towards the northern side, it is better to work towards northern end by advancing the additional benches, instead of restricting the workings as per the lithology depicted. In the light of the above remarks, the development and the production for the other two years may be attended in such a manner to move the faces towards northern side, which will help in exposing the ore body both lateral and also at depths. Similarly the workings can be proposed towards south eastern side to expose/ to prove the quality of the deposits present below the BHQ exposures at the top of the workings. In the light of the above remarks, the text and the plates also may be attended appropriately, wherever applicable.

20. **Para 2 (f)**:-- (i) The conceptual Mine planning should to revised to end of ML period i.e. upto **31/03/2020** as per universal format. (ii) Life of mine should be checked and corrected w.r.t. production target of CEC. (iii) Proposal of submission of final mine closure plan under rule 24 of MCDR 2017 has not been discussed. Further implementations of approved R & R Plan and stabilization of active dumps by progressive plantations, other environmental protective measures etc have not been discussed year-wise considering expiry of ML. (iv) The incorporated standard table of existing land use pattern table and land use pattern at conceptual period (i.e. end of lease period) should be revised accordingly. Further, total of ML area should be matching with area as per CEC's sketch.

19. **Para 3 (d)**:-- The quantity of rain water assessment should be checked and corrected.

20. **Para 4**:-- (i) Year-wise generation of wastes / mineral reject should be presented in standard table as per "Universal format". (ii) **Page no-53**: The grade of BHQ mentioned should be checked and corrected. The efforts to be taken for separate stacking /disposal of BHQ has not been discussed. (iii) The conceptual dumping should not be discussed considering the expiry of ML. (iii) **Table No-31**:-- The quantity of generation of waste figures are not matching w.r.t. mining chapter.

21. **Para 6 (g)**:-- The grand total of table no-34 is not matching. The same may be checked and corrected.

22. **Para 8**:-- The rule under which PMCP submitted should be checked and corrected as "Rule 23 of MCDR 2017".

23. **Para 8.1**:-- Total ML area should be matching with area as per CEC's sketch at table no-36 and 37. Further, the conceptual land use pattern need not be incorporated considering expiry date of ML.

24. **Para 8.2 (ii), (iii), (iv) (v)** :-- (i) No float ore mining in the mine. Accordingly, the text part should be revised/ modified. (ii) The mentioning of scheme period may be replaced as Review of MP period.

25. **Para 8.2 (x)** :-- (i) Latest Hon'ble Supreme court orders/directions on "Jambhunathahalli Temple issue" has not been discussed (ii) Irrelevant mentioning of seeking of renewal of ML at last para should be checked and removed.

26. **Para 8.3.1**:-- The proposals of conceptual period should be removed at table no-38.

27. **Para 8.5**:-- Proposal of submission of final mine closure plan under rule 24 of MCDR 2017 has not been discussed.

28. **Para 8.6**:-- (i) The financial assurance calculation should be made as per rule **27(1) of MCDR 2017** and accordingly Bank Guarantee should be submitted. (ii) The details of ML area as per CEC sketch, retained area of ML and area as per DGPS survey etc may clearly mentioned.

## **Part-B**

29 **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) The rule under which the document submitted should be checked and corrected "17(3) of MCR 2016" (iii) All the necessary documents should be submitted for in support of compliance of CCOM circular No- 2/2010 along with letter regarding DGPS agency recognized by state Govt. (iv) The certificate and undertaking should be signed by the Managing Partner/**Nominated Owner**.

30. **Certificate from QP**:-- The provision of rule may be checked and corrected as "MCDR 2017"

## Annexures:

31. Few photographs of pits and dumps sites have not been appended.

32. Affidavit from the lessee regarding that no matter is pending against the lease area on the following issues. (1) Issues relating to illegal mining with the State Government. (2) Royalty and Revision matters with the State Government. (3) Safety and Environment issues of General Public Concern. (4) Public Interest Litigation (PIL) and other Court cases etc, has not been enclosed.

33. **Feasibility study report** :--(i) The reserves/resources, production schedule and mining method should be modified as per scrutiny comments as mentioned above. (ii) Economic Evaluation chapter :-- Grand total of (a) Environmental Protection (under capital Investment) (b) Socio economic development (under recurring expenditure) (c) Occupational Health & safety (under recurring expenditure) and (d) Environment Management (under recurring expenditure) have not been matching. The same may be checked and reconciled. (iii) 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.

## Plates:

34. The details of ML area as per CEC sketch, retained area of ML and area as per DGPS survey etc may clearly mention in title of all plates.

35. **Plate No 3**(Surface Plan):--- (i) The boundary pillar's co-ordinates as per Mahazar report of CEC joint survey should also be incorporated (ii) The plan may be as per rule 32 (1) (a) of MCDR 2017.

36. **Plate No 4**(Geological Plan): (i) Near AA' section G-3 level of exploration may be given w.r.t. enclosed sections. (ii) The plan may be as per rule 32 (1) (b) of MCDR 2017.

37. **Plate No 5**(Geological Cross sections):--- (i) Proposed BHs should be properly projected with dotted lines (ii) Proposed and drilled BH's Nos. should be properly marked at section EE' . (iii) The UNFC code 122 given for BHQ may be replaced as "222" per scrutiny comments at para 1(l).

38. Year-wise Production and developments sections (Plate No -7):-- (i) Mine production should be envisaged from the area where reserves are estimated & categorized under proved (111) and probable (121 &122) mineral reserves category. (ii) Year-wise buildup of Dump section has not been enclosed. (iv). The plate may be attended in line with the remarks, given in para 2A(a) & 2(c) respectively, while attending the three years plates.

39. **Plate No-8** (Environmental plan):-- (i) Water monitoring station at water discharge point of ML area should also be proposed. (ii) Contour lines should be at five meter intervals. (iv) The plan may be as per rule 32 (5) (b) of MCDR 2017.

40 **Plate Nos 9 and 9A (Conceptual plan and sections)**:-- The plan and sections should be modified as per scrutiny comments at para 2A(a), 2(c) & 2(f). Besides, the position of workings brought out for the ensuing plan period is not appropriate. Also, what would be position of workings at the conceptual stage may be brought out.

41. **Plate No-10** (F.A Plan) :--(i)The F.A table should be incorporated as per scrutiny comments at para 8.6 (ii) Name of this plate may be corrected as "**Financial Assurance Plan**".

42. **Plate No-11** (Reclamation Plan) :-- (i) Name of this plate may be corrected as "**Reclamation Plan**". (ii) Proposed environmental monitoring station at core-zone should be properly reflected. Water monitoring station at water discharge point of ML area should also be proposed. (iii) The existing and proposed Year-wise afforestation and other environmental protection measures should properly highlighted in plan.