

SCRUTINY COMMENTS ON THE REVIEW & UPDATION OF APPROVED MINING PLAN OF DHARMAPUR IRON ORE MINE OF SHRI V.N.K. MENON, OVER AN AREA OF 10.31 HA AS PER THE LEASE DEED & 10.00 HA AS PER THE CEC SKETCH, M.L. NO. 2543, IN VILLAGE R.M. BLOCK SANDUR TALUK, RAMGAD RANGE RESERVE FOREST, IN BELLARY DISTRICT, KARNATAKA STATE. SUBMITTED UNDER RULE 17(1) OF MCR, 2016 FOR APPROVAL. CATEGORY OF THE MINE IS A (FM-FULLY MECHANISED MINE, PROPOSED PERIOD FROM 2017-18 TO 2021-22).

COVER PAGE

1. The present document should be corrected as, submitted under rule 17(1) for approval of MCR, 2016. In the light of the above remarks, the text para, annexures and the plates, wherever applicable may be corrected.
2. The RQP certificate number indicated may be deleted and replaced with qualified person in the all the place of the text and the plates, wherever applicable.
3. The Forest land should be written as Ramgad Reserve forest, instead of just forest land.
4. The online registration number obtained under rule 45 from IBM may be indicated.

GENERAL

5. In the introductory chapter, what are the modifications sought in the present document needs to be specified, instead giving partial information. From the text it could be understood that for increasing production and for the lease period as per MMDR Amended Act, 2015. Online registration number is given as 372/30KAR03166 is not correct. It should be given separately as IBM/372/2011, whereas mine code is 30KAR03166. Text may be attended, wherever applicable in the light of the above remarks.
6. The list of annexures furnished in the table, may be added with number pages in each annexure for reference.
7. Annexure-1B must be replaced with the legible copy.
8. RQP's certificates may be replaced with the M.sc-Geology qualification certificate & the minimum of five years' professional experience certificate obtained after the M.sc(Geology)/ BE(mining) qualification may be enclosed. Annexure-8 may be deleted/ attended appropriately replacing with above certificates.
9. Chemical analysis report obtained during the year 2012 may be replaced with the latest.
10. In page-14, the details of R & R work undertaken given in table, without indicating what were the proposals & the actual done in the field. Besides, anything, which is due to carry out, may be indicated.
11. Para 2(a), latitude & longitude of BP. A is given, but for all the corner pillars need to be given with enclosing photographs.
12. Para 3.3: (i) Details of exploration carried out after approval of last modified SOM document dated 15/10/2014, should be supported by form-J. (ii) The % deviation figures i. r. o. production and development should be checked and corrected with deviation towards negative or positive side properly.
13. Para 3.4, under violation it is not reflected correctly, violation were observed during the last inspections, which should be added.
14. Para 3.5, wherein it is given mine was suspended, which may be written as discontinued and re-opened on 15/1/2014. Besides, in para 3.6, the rule may be changed to 17(1) and 2016, instead of 1960.

15. All the photographs may be added with name of the mine & lessee for easy reference.

PART-A

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

17. Para 1(i): Proper justification should be given for non-requirement of exploration at present with area cover under G-1 level of exploration as per MEMC rules 2015 w.r.t. total mineralized area.

18. Para 1(j): (i) The reserves and resources estimated (111—2,101,005 tonnes +211---798,525tonnes and 333---565,477 tonnes) in last approved modified SOM document dated 15/10/2014 may also be mentioned. (ii) Blocked reserves (111) in 7.5 m safety barrier zone may be classified under 211 instead of 333, based on exploration out-put and MEMC rules 2015. (iii) Final reserves and resource table incorporated at page no 27 should be mentioned at end of this chapter (i.e. para 1(l)) as per universal format. (iv) F-axis (page No-35):---The cost of production should also include payment to NMET & DMF w.r.t. IBM average sale value /market price of iron ore mentioned.

19. Para 1(k): (i) The grade of BHQ may also be mentioned. (ii) Blocked reserves (111) in 7.5 m safety barrier zone may be classified under 211 instead of 333, based on exploration out-put and MEMC rules 2015. According, the reserves and resource should be reconciled.

20. Para 1(l): (i) Page no 42:--Resources figure mentioned at table of level of exploration should modified as all mineral resources falls under G-1 level of exploration. (ii) 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. (iii) The cut-off grade for estimation of reserves and resources should as per threshold value i.e. +45% Fe. (iv) Final reserves and resource table as per universal format may be incorporated at end of this para.

21. In para 2A(a), it is given over all slope angle of 28 to 30degree, whereas in proposed mining method, over all pit slope will 45 degree shall be maintained, hence the contrary proposals at different should be avoided. Further, in the same para in page-45, the year wise tentative development/ production given for 2017-18 to 2021-22 in tonnes, without table number. Besides, the same table should be also be given in cubic meters as per the latest universal guide lines format. Further, the slope of faces, direction of advancement, approach to the faces & specification of roads, etc to be marked. Also, the existing dumps parameters spread, height, slope protective works etc., to be marked.

22. Para 2 (f): (i) Possibility of enhancement of life of mine based on common boundary agreement with adjacent mine in future has not been discussed. (ii) Proper justification should be given for non-requirement of exploration at present with area cover under G-1 level of exploration as per MEMC rules 2015 w.r.t. total mineralized area.

23. In the same para in page-46, it is given BHQ & pure waste will be dumped/ stacked separately, proper protective measures should be provided by erecting temporary partition to avoid mixed each other.

24. Para 3 (a) : Depth of water table in mRL w.r.t. general ground level may also be mentioned.

25. Para 3 (b) : Proposed maximum and minimum depth of working in mRL may also be mentioned.

26. Para 4(a): The grade of BHQ may be mentioned.

27. In page-56, under waste dumping, it is given pure waste & the BHQ will be dumped separately, but no place is ear marked for BHQ in the related plate. The proposed dumping area is not fit for dumping, provided corrective measures taken push forward the existing dumps from behind by lowering the existing dumping mRL, including the haulage road to be lowered from behind, later it can be raised.
28. In page-57, the table is not numbered which must be attended and corrected if possible, so that the dumping could be undertaken to some extent and create another place for dumping within the lease.
29. Table in page-58 need to be indicated with financial year for easy reference.
30. Page -61, wherein year wise waste dumping within the lease is given, finds to be repeated, because same table is repeated at page-57, care should be taken to avoid repeated information and the tables.
31. Whole text and the paras should be followed strictly as per the new universal format for furnishing the desired information without fail.
32. Para 8.1(i) : Presence of perennial surface body if any within ML may also be mentioned under Water regime. Further, non-presence of public buildings and place of worship and monuments within ML and nearby should be clearly indicated at page no-86.
33. Para 8.3.5: The maintenance of existing retaining wall, garland drain, check-dam etc within ML and proposals of season-wise environmental monitoring may be reflected under "Others" of year-wise proposal tables.

PART-B

34. Certificate and undertaking from Lessee: An additional undertaking from lessee stating the time-bound implementation of CEC approved R & R Plan and monitoring / maintenance of protective measures already implemented, may also be incorporated under para 9.
35. 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.

Annexures:

36. The chemical analysis reports of few latest representative samples of iron ore, BHQ and waste (shale) by NABL accredited Lab or Govt. Lab has not been appended.
37. Copy of Mahazar report of joint inspection survey has not been enclosed.
38. The enclosed boreholes logs should be signed by Geologist / QP.

PLATES

39. Key Plan (Plate No.2): The approach road to the ML area need to be indicated with approximate distance from a known place. Key plan should be prepared as per rule 28(1)(a)(b) of MCDR, 88.
40. Plate No 5 (Surface Plan): (i) GPS co-ordinates of all corner Boundary pillars as per Mahazar report of joint inspection survey may also be mentioned. (ii) Position of adjacent Mines may also be reflected.
41. Plate No 6 (Geological Plan): Area covered under G-3 level of exploration may be removed as per scrutiny comments at para No 1(k).

42. Plate No 7 & 7A (Geological cross sections): Blocked reserves (111) in 7.5 m safety barrier zone may be classified under 211 instead of 333, based on exploration out-put and MEMC rules 2015.
43. Proposed Production & development Plan (2017-18, Plate No.8): The working benches shown for the year 2017-18 must be at the end of 31st March 2018. In the light of the above remarks, all the years' development & production workings must be brought out at the end of 31st March of that year respectively. Similarly, year wise build of dumps status should match to the end of each year as 31st March and in the 5th year it should be up to 31st March 2022. In the light of the above remarks, protective works should be attended. Approach road to the each bench should be marked. CCOM circular No.4/91 & 5/91 may be taken full care while preparing these plates. Modified/ updated surface geological plan to be used as base plate for preparing these plates.
44. Waste Dump Management Plan (Plate No.9): The protective measures already provided around the dump area is brought out in the plan, but not shown in the sectional views, including the settling tank. The remarks given in the text part must be taken care while attending the plates.
45. Plate No-10A (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.
46. Conceptual Plan (Plate No. 11): The plan & sections were prepared and submitted reveals that the worked out benches are done with afforestation only at the end of the conceptual period and no area has been put to use for neither partly/ nor fully back filled with waste. Appropriate planning need to be made for systematic and scientific workings at the end of the conceptual stage.
47. Conceptual Plan & sections (Plate No. 11): from the sections it is understood that the present review and up-dation of plan period is written as scheme period workings, which must be corrected appropriately.
48. Plate No-10 (Environmental plan): (i) Adjacent Mines may also be reflected properly. (ii) All surface features around 500 m radius from ML boundary should be reflected properly as per rule 28(5)(b) of MCDR 1988.