

SCRUTINY COMMENTS ON THE MODIFICATION OF APPROVED REVIEW & UPDATION OF MINING PLAN OF SUBRAYANAHALLI IRON ORE MINE OF M/S MML(PRESENTLY – KARNATAKA STATE MINERAL CORPORATION LIMITED, (KSMCL)., M.L. NO. 2629, OVER AN AREA OF 80.93 HA AS PER ML DEED & 80.06 HA AS PER CEC, IN SUBRAYANAHALLI VILLAGE, SANDUR TALUK, BELLARY DISTRICT, KARNATAKA STATE. SUBMITTED FOR APPROVAL UNDER RULE 17(3) OF MCR, 2016. MODIFICATION PERIOD FROM 2018-19 TO 2019-2020. CATEGORY OF THE MINE IS A(FM- FULLY MECHANIZED), OPEN CAST MINE. FOREST LAND. DATE OF EXPIRY OF THE MINING LEASE IS 12.04.2049.

TEXT:

1. On cover page, the mine code and the registration number received under rule 45 indicated is not correct. It should be written as for mine code 30KAR03069, and registration number is IBM/4369/2011. The name of the mine and the name of the company should be written. The forest land indicated should be specifically given the type of forest land. The date of grant of ML and the expiry should be given. The present modification period should be given specified.

2. The list of annexures enclosed in the text need to be indicated with number of pages in each annexures by adding another column in the table. Besides, the annexures should be indicated with dates of each letter and the lease number etc., for clarity. The relevant annexures letters details should be enclosed documentary evidence in all respect.

3. Introduction: It is expected that the chapter should be described in chronological order, without any overlapping. Irrelevant and unwanted information if any may be deleted. In table 01, four criteria is given, but mentioned as three criteria. Besides, it is indicated routine exploration work, for updation of reserves, but no information received in this respect from your office in any form for reference, without which, how it is indicating exploration undertaken may be explained.(ii). What area additional infrastructure created in the mine may be given. (iii). No exploration undertaken to incorporate the latest exploration details to update the mineral reserves/ resources. (iv). The modification period should be written as 2018-19 to 2019-20 respectively.

4. Para 1(a), the table no. 02, the registration number & the mine code are two different and cannot indicate together. The name of the lessee is given as MML, but in other place it is given as KSMCL, if it is so, the authentic document or the approval from the state DMG may be attached.

5. Para 2(a), the ML area indicated as forest area, but it should be specified, whether ordinary forest or RF may be given.

6. Para 3.2, table no.09, it is mentioned that in the year 2015-16, 28 nos., of bore holes were proposed against which 23 nos., of bore holes, were achieved, but this office is not received any corresponding letters and no evidence of bore holes enclosed in this document.

7. Para 3.2, table no. 10, the deviation given in the last column found to be incomplete, which need to be furnished correctly. (ii). Table no.11, the R & R work in progress & that which are completed given with percentage, but the incomplete work needs to be given with tentative date of completion.

8. Para 3.6, needs to be attended with that appropriately, whether modification undertaken or not.

PART-A

9. Para 1(e), it is mentioned that the exploration already completed in the ML area for 80.06 ha, hence the exploration is not proposed for this modification period i.e. 2015-16 to 2019-20, is not correct, it should be 2018-19 to 2019-20.

10. Para 1(f), the exploration already carried out given in table no.15 for 23 numbers, whereas no bore holes could be showed/ found at the site inspection, reveals not appropriate.

This needs to be proved through authentic photographs and there is no correspondence on the above subject. It is also indicated form-K already submitted, no such information available in this office.

11. Para 1(k), the mineral reserves/ resources given table no. 16, reveals the latest one, but it is expected to give the as per the previous approved document and the additional increase of reserves/ resources based on the present exposure of the ore body through the pits/ or through the exploration undertaken after following the procedure of the exploration. (ii). Column 1, shows the level of exploration, column 2, shows the resources in million tonnes, but as per the column1, it is taken geological reserves & where reserves/ resources are different & both are not the same. (iii). The percentage of recovery & bulk density is considered based on the past mining data, is not correct, it should be considered with the latest data also to be appropriate. (iv). The average % of ore recovery is given as +60%, how this has been established may be explained. (v). The bulk density given as 3.5t for iron ore & 2t for waste need to be with supporting documents/ lab test. (vi). Table no.19 & 20, should be calculated and presented based on the remarks given above. Separately increased reserves/ resources should be brought and the final re-estimated reserves/ resources may be shown as on 1/4/2018.

12. Para 2A (a), it is expected to give brief information on the existing and the proposed method of operation/ excavation in para wise for more clarity. (ii). Existing mining practice viz. dimensions of working pits, bench parameters, overall and individual pit slopes, dump configuration and existing slope etc. should be discussed in this para. (iii). Further, the slope of faces, direction of advancement, approach to the faces & specification of roads, etc to be indicated. Also, the existing dumps spread parameters, height, slope protective works etc., to be indicated. The bench wise, mRL wise, opening reserves, exploitation and the closing balance should be furnished for the proposed periods. (2018-19 to 2019-20.). (iv). The text paras information all should be followed as per the standard guidelines issued in this respect may be strictly followed. (v). Table no. 22, wherein the 3rd column total tentative excavation is given without indicating the unit.

13. Para 2(d), the shifts indicated as two, but what the timing for each shift is not indicated. In the below pages it is given 6am to 10pm, and each shift of 8 hrs. Better, give the timing without overlapping with clarity. (ii). It is given, ore / waste is handled by direct excavation is not appropriate, it should be given without drilling & blasting, with the use of ripper dozer or with the use of excavators. (iii). The ore to waste ratio and the lump & fines ratio of the mine may be indicated along with. (iv). The disposal of over burden/ waste will be transported to the pre-determined dumping site, instead, it should be specified the site/ location in the surface plan or some other plan. (v). In the above para in page no.33, it is indicated that the total waste generation during the year 2018-19 & 2019-20 is around 94432 million tonnes is not correct, this should be reconciled.

14. Para 2(f), under the conceptual mine plan, the excavation proposals for the year 2018-19 & 2019-20 given found to be not appropriate and correct. In addition to the above proposals, from C-C' to E-E' should have been considered for systematic and scientific mining, without any selective mining. Besides, the BHQ & the intermediate mineralized area should be removed from top to bottom in line with the other working benches.

15. In table no. 33, under composite dumping, the bulk density considered for waste as '2' is less than the actual in iron ore field at least it should be 2.5, in the light of the above remarks, the text para should be checked for correction if any, along with Table No. 36, should be attended

16. Para 4(a), it is given, ore to ore burden ratio, which may be corrected as ore to over burden ratio to be appropriate.

17. Para 8(a), under the existing land use pattern, the extent of the land for the dumping is very much less than the extent of the land for mining.

This need to be reconciled and adequate area is required/ allotted to manage the waste dump/ reject/ BHQ/ BHJ for better mining, instead of unsystematic work. In line with the above comments, the text paras need to be attended, wherever applicable.

18. Para 8.3.1, it is given back filling in a phased manner, but here it is not clarified, what type of back filling or the reclamation & rehabilitation programme will be undertaken, which ought to have been.

19. Para 8.6, in table no. 48 & 49, the additional area required during the plan period is given as 12.56 ha, in table no.49 it is 16.82 ha, why the difference may be corrected.

20. The consent letter from the lessee should be the appropriate one and not the applicant, it should be attended. The lessee company is given as MML and in some place it is as KSMCL, hence it is required to indicate correctly, which one is the latest and to be indicated in the document, must be specified. (ii). The certificate from the QP must be indicating the MCDR, 2017 and not 1988.

21. Key Plan (Plate No.1): The modification of approved mining scheme is given; at places it is given approved mining plan/ review & updation of mining plan.. Hence, it is expected to give correct at all places. The RQP certificate number given must be deleted. The company name should be one MML or the KSMCL, care should be taken to correct accordingly in the text and the plates. (ii). Approach road to the ML area with approximate distance may be given.

22. Surface Plan (Plate No.3): The indexing given on the surface plan should match with the plan drawn with clarity. But, some of the index is not tallying in the plan. (ii). the proposed dumping location should be marked on the plan for easy reference. (iii). **On the plate, it is required to certify by the QP that, the plan prepared as per the plan authenticated by the state Government is found to be correct, but the same wording is not found in the plan, which must be attended in all the plates.** (iv). During the site inspection, it was observed that the mine is filled with calibrated fines/ ore stack at many places without number and at random without systematically stacked. Lot of fines ores are getting washed out of mine due to natural slopes and without adequate retention walls. (v). Some of the stacks present in the mine are not brought out in the plan, also found merged with the working faces.

23. Geological Plan (Plate No.4): The plate to be attended as per the remarks given in the above plates as applicable. The level of exploration undertaken in the ML area is not indicated on the plan, like G1, G2 & G3, similarly in the sections. The UNFC codes also can be given accordingly with 111, 121, 222, 331 & 333, etc.

24. Development & Production plan (2018-19 -Plate No.5): The proposals drawn for the year is acceptable, provided the in between sections, i.e. from C-C' to H-H' also in the programme to develop the workings from top downwards maintaining the orientations of faces, by dislodging the ore cum BHQ along with the intercalated faces together to maintain the systematic and scientific mining operations in the ML area. Though the mine produced more than 2.5million tonnes(MT) of ore in the past and just 0.41 MT, it is appropriate to take up developments more than the production before increased production undertake in the mine. (ii). It is therefore, to re-plan for the proposals for the remaining two years period, by including the separate stacks/ dump for the BHQ.(iii). In the light of the above remarks, the plan concerning the year 2019-20 needs to be attended in all respect.

25. Conceptual Dump Management Plan (Plate No.8): Conceptual plan and section should be prepared and submitted along with this document, instead the lessee submitted dump management plan. What would be the position of pits, dumps, stacks, back filling and other related activities at the end of the mining during the conceptual periods may be brought out.