

SCRUTINY COMMENTS ON THE MINING PLAN OF MALAGOLLA IRON ORE MINE OF M/S HOTHUR TRADERS., OVER AN AREA OF 21.61 HA, IN M. L. NO. 2313, AS PER AUCTIONED BLOCK, IN MALAGOLLA VILLAGE, IN SANDUR TALUK, BELLARY DISTRICT, KARNATAKA STATE. SUBMITTED UNDER RULE 16 OF MCR, 2016. CATEGORY OF THE MINE IS A (FM-FULLY MECHANISED), LEASE AREA UNDER RESERVE FOREST. PROPOSED FOR FIVE YEARS. CAPTIVE MINES.

COVER PAGE

1. Category of the mine is A (FM-Fully Mechanised), instead of A (Mechanised). Type of Forest, whether RF/ PF may be indicated.
2. The mine comes under whether Captive/ non-captive may be given. The online registration number and the mine code to be entered.
3. All certificates and undertakings from the Nominated Owner and from the Qualified Person should be furnished in Part-B of the document, followed by Part- A. Signature of the Nominated Owner should be in original.

INTRODUCTORY

4. It is mentioned that the present lease (i.e. Malagolla iron ore mine of M/s Hothur Traders, ML. No. 2313) is common boundary with ML area of Kumaraswamy of M/s NMDC in three sides of ML area, but here it is given in two sides of the ML area, which should be corrected.

GENERAL

5. Para 1.2(a), under name of the lessee, the name of the nominated owner need to be indicated.
6. Para 1(f), the RQP certificate of Mr. B. P. Pandey, attached need to be deleted, and replaced with qualification and experience certificate of the QP as per rule 15(1) of MCR,2016. Another geologist may be included in the QP list who involved in the preparation of the document with his qualification & minimum five years' experience certificate to be endorsed along with this document.

LOCATION AND ACCESSIBILITY

7. This chapter is not found to be prepared as per the standard guidelines, may be duly re-furnished.
8. Copy of the Khasara Plan, showing co-ordinates of applied ML area, issued by the State Govt. to the applicant may be enclosed with the document.
9. Paras after 2.3 are not furnished with the relevant information, which ought to have been as per the universal format guidelines.

PART-A

10. Para 1.0, Geology and Exploration: The chapter 'Geology and Exploration' is not found to be furnished as per the standard guidelines, may be duly re-furnished. Followings items should be corrected or incorporated in this chapter:
11. Local Geology of the leasehold block should be discussed briefly in this chapter with descriptions of existing lithology in the ML block, in accordance with geological plan. Length, width, strike/dip and mode of occurrence of ore body are also to be mentioned.
12. Expenditure incurred in various prospecting operations should be furnished.
13. Temporary dumping by backfilling is proposed at pit bottom along section no. S2 (eastern side), during site inspection exposure of ore body was seen at pit bottom. Hence, before commencement of backfilling at designated area, exposed ore body should be completely handled and such particular area is required to be explored to prove as mineral barren at first year itself.
14. As evident from site inspection and from geological plan, entire mineralised area is not explored by M/s MECL by G1 stage of exploration. Therefore, to ascertain the extent and depth of mineralization, complete ML block should be explored by detailed exploration (G1 stage); accordingly future exploration programme may be re-framed.
15. In economic evaluation of feasibility report, provisions of paying royalty against District Mineral Foundation (DMF) and National Mineral Exploration Trust (NEMT) are not considered.

UNFC code 112 does not exist logically; the same may be corrected as UNFC code. 122.

16. Reserve estimation as per UNFC along section no. S6 is not found correct, actual sectional influence in this case is 136 m (i.e. under G2 stage of exploration). Hence, estimated proved reserve (UNFC Cat. 111) under this particular section should be placed under probable reserve category (UNFC Cat. 122).

17. In economic evaluation of feasibility report, provisions of paying royalty against District Mineral Foundation (DMF) and National Mineral Exploration Trust (NEMT) are not considered.

Justification of UNFC category 111 and 122 should be deliberated, no resource estimation is given for UNFC Cat. 333.

18. Para 1.4.3 under grade classification, in table-1.3 & 1.4, the details of iron ore intersected at 45%Fe & 55%Fe reveals even where there is no intersections in the Bore holes like 4 & 7, still it is considered as positive. Especially in bore hole no.7, very thin band, but taken for 30m is not appropriate, this needs to be checked.

19. Para 1.7, stripping ratio, the production & the waste reported are proposed one, but the waste is reported as generated, to be corrected.

20. Para 2A (a), under mining chapter, it is expected to brief the existing old mining pit workings and the proposed method of working through A (FM-fully mechanised method). (ii). Besides, 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. (iii). Also, the existing dumps spread parameters, height, slope protective works etc., to be marked. (iv). The bench wise, mRL wise, opening reserves, exploitation and the closing balance should be furnished for the proposed periods. (v). Further, the development & production plate no. 6A to 6E, remarks given may be reconciled for the correction and the modifications suitably. (vi). The chapter 'Mining' is not found to be furnished as per the standard guidelines, may be duly re-furnished. (vii). In 'In situ tentative excavation' proposals table, proposed ROM quantity is found to be exceeded than CEC approved quantity. It is to be noted that, as per definition 'mineral reject' and 'sub-grade' are integral part of ROM. (viii). The 1st year dump proposals, 2nd year dump proposals etc., are not appropriate in the beginning of the working, since that area need to be worked out to exploit the mineral beneath and confirmed the area for further feasibility to work through exploration. Later, that area can be considered for back filling, instead of dumping.

21. Para 2.2.1, under insitu tentative excavation, wherein the information furnished in table without giving table number for five years. Also the universal guidelines format paras to be strictly followed while preparing the document, instead of formulating the own paragraphs. As per the 1st year workings, it is given 182800 m³ of excavation, comprises of 135996 m³ of ore, 46804 m³ of mineral rejects, which is not correct, the mineral rejects quantity should be brought out under the heading of intercalated waste, under column-5 of the table format. Similarly, the below table furnished in tonnes must be attended and corrected. In the light of the above remarks, the text and the plates may be attended, wherever applicable for all the five years workings.

22. Para 2.2.2, under dump re-handling, the proposals may be rechecked and reconciled, the % of recovery reported is found to be less as per the field visits.

23. Para 2.2.3, under enclosed plans & sections, the annexures XA to XE to be brought out in the main text part itself, instead of on the annexure side. Plates need to be attended as per the remarks, given in the plates.

24. Para 2.3, method of working proposed is Mechanized, it is actually A (FM), accordingly the text paras in the text to be attended suitably, wherever applicable. Further, it is given that the ROM will be hauled to the pre designated processing / dumping yard & ROM will be processed in the primary screening & crushing plant mechanically. ROM cannot be directly taken to pre-designated processing/ dumping yard, unless until it is stacked in the ML area and moved only after the e-auction process. This should be taken care and attended accordingly in the text and followed in the future.

25. Para 2.3.3, under production & development plan, the para need to be attended in line with the scrutiny remarks, given in the development plates and the para 2A(a) strictly to follow the systematic workings.

26. Para 2.3.4, mine layout, it is given that the five years workings as given plate No. 6A to 6E & 7 will be worked along the strike length of the ore body, but during the site inspections, it was discussed that, referring to 1st year development & production can be undertaken, whereas the 2nd year development & production should be extended towards the ML boundary on the southern end boundary, where the RL 1015 is marked and also bore holes no. MHMR -8, that to be excavated along with the small patch of waste dump projected towards the west, due to the existing topography through slicing from top downwards for few benches, later it can be modified, depends on the change ore body exposures and the geometry. (Pl refer para 2.4.4).
27. Para 2.4, under conceptual mining plan, this chapter should be attended appropriately whatever applicable as per scrutiny remarks given in the above paragraphs.
28. Para 2.4.4, should be attended in line with the remarks, furnished above. Besides, during the site inspection, as discussed also should be considered to move the workings not only N-S, but also on the virgin land towards western end to exploit the ore to the maximum. Further, the old dumps may be analysed to know the grade and quality for future dump workings and the location may be put to excavation if possible. Accordingly the whole para may be attended.
29. Para 2.6.2, under blasting, the powder factor indicated as 7 is not correct way of indication; it should be given as 7t/kg of explosives used.
30. Para 4.3, under mineral rejects/ waste generation: The dumping proposals drawn at the bottom of the old worked area reveals the presence of the ore deposits, hence whatever the ore left in the side benches and in the bottom faces should be exploited to the optimum and exploration may be undertaken in the bottom to confirm the presence/ absence of the mineralization and can be decided later for permanent back filling(reclamation) and followed by rehabilitations after completing filling followed with afforestation. Para 4.5 need to be checked and attended.
31. Para 5.0, Use of Mineral: This chapter is not found to be prepared as per the standard guidelines, may be duly re-furnished. Provision of direct feeding/ transportation of ROM to captive steel plant, as deliberated by the applicant during site inspection, are not found to be mentioned in this chapter.
32. Para 6.0, Processing of ROM and Mineral Rejects: This chapter is not found to be prepared as per the standard guidelines, may be duly re-furnished.
33. Para 8.1: In page 61, name, distance and population of the villages present in the buffer zone may be furnished in a tabular format.
34. Para 8.3.1: Proposed year-wise afforestation proposal is not furnished.
35. Para 8.6: Omission of 'additional area requirement during plan period' from the 'area remain touched at start of the plan' is not tallying with leftover untouched area after five years plan period, please clarify. Copy Bank Guarantee is not found to be enclosed with the document, a valid Bank Guarantee against Financial Assurance should be submitted by the applicant before execution of ML deed.

PART-B

36. The certificate from the lessee should be given instead of applicant. The document submitted should be mentioned as rule 16 of MCR, 2016, instead of 22(4) of MCR, 2016. In the light of the above remarks, the whole certificate to be attended. Besides, the certificate given by the QP, must be attended and the scheme of mining indicated should be replaced with mining plan.
36. Key Plan (Plate No.1): the name of the mine may be invariably written on all the plates. The approach road to the ML area with approximate distance from a known place may be indicated for reference. In the light of the above remarks, all the plates may be attended.
37. Surface Plan (Plate No. 03): The mine is indicated as Malagolla Iron Ore Mine, whereas as in the text & plates are not attended at related places. Existing bore holes should be indicated with red color as per the standard notations. The name of the surveyor signed in the plan need to be indicated. The three GCP's selected for need to be mentioned with name of the points for reference.
38. Geological Plan (Plate No.4): UPL, area covered under different stages of exploration and proposed Bore Holes are not marked.
39. Geological Cross section (Plate No.5): Geological Sections (Plate no. 5): Geological sections are not matching w.r.t. the Geological Plan. Open pit exposures and apparent dip of the ore body

are not found to be connected with drilled borehole data. Exposed clay areas are not found demarcated in any section. UNFC codes and proposed boreholes should be marked.

40. Production & Development Plan (Plate No.6A to 6E...1st to 5th year): The development and production proposed for 1st year to 5th year should be attended in line with the remarks given in text paras after para 2A strictly. Also as discussed in the field during the site inspections. The respective year workings should be brought out at the end of 31.03.2018, 31.03.2019 and so on up to 31.03.2022.

41. Land Use Plan at the end of Ensuing Mining Plan (Plate No.9): Need to be attended in line with the comments given in plate no.10.

42. Conceptual Plan (Plate No.10): The name of the mine needs to be indicated on the index part for reference. The way in which the mine workings are proposed/ executed in the conceptual period must be brought out and possibly whatever the extent of the workings will be used for back filling and rehabilitations and afforestation etc., along with water storage in the higher elevation in a steel slope is impractical. Hence the plan needs to be attended to the reality.

43. Conceptual section (Plate No.10B): the sections should be attended in line with the conceptual plan remarks.

44. Environment Plan (plate No.12): The scale indicated is 1:4000, wherein it should be prepared in 1: 5000 and the plate should be prepared as per the rule 28(5) (b) of MCDR, 1988. The other ML areas present within the 500m buffer zone must be brought out for clarity & reference.

45. Financial Area Assurance Plan (Plate no. 12): Enclosed FA table is not found correct.

ANNEXURES:

(i). Boundary pillars present in the mine may be present through photographs, including three Ground Control Points and Bore holes drilled by the MECL.

(ii). Mine pits, waste dumps, stacks & infrastructure etc., present in the ML area may be furnished through photographs.

(iii). Environmental datas for the four seasons may be attached.

(iv). All the annexure must be given with number of pages in each annexure for easy reference.

(v). The RQP certificate to be deleted and enclosed with BE (Mining), or M.Sc. (Geology), qualification and experience certificate with minimum five years professional experience certificate.

(vi). Annexure-1 should be given with date, annexure-2 should be given with 0.41 MTPA and from CEC. Annexure-5 & 6 should be with dates and from MOEF, annexure-7, should be checked for correctness of M.L. No. and the company name. Annexure-9 should be given from NABL.

(vii). Annexures-10 to 14 (XA to XE), should be placed in the text part in the mining chapter, instead of annexures side. Besides, the calculation furnished in the 1st year, section-S4-S4', column-8/9 given with ROM as 80% recovery & 20% as intercalated waste, if it is so, how again the waste is showing in the column-8 to 9 may be checked & reconciled.

(viii). Annexure-11, should be mentioned with the place of the plant. Annexures-13 should be given with the M.L. No. in each photographs and the lessee name.

(ix). Annexure-15, submitted with incomplete information.

(x). The valid bank guarantee to be submitted along with the final document, while submitting for the approval.

(xi). Corrected Feasibility Study Report.

(xii). Copy of the photo ID of the applicant/ lessee.

(xiii). The information furnished in table 1.3, 1.4 & annexure-IX for 45%Fe & 55%Fe should be tested from the authorised NABL laboratory.