

SCRUTINY COMMENTS ON DRAFT MINING PLAN OF JANIKUNTA IRON ORE MINE (AUCTIONED BLOCK, M. L. NO. 2185A) OF M/S HOTHUR ISPAT PRIVATE LIMITED.,(PREFERRED BIDDER), (FORMERLY THE LESSEE/ COMPANY IS M/S MINERAL MINER & TRADERS), OVER AN AREA OF 44. 42 HA., IN VILLAGE JANIKUNTA, BALLARI TALUK OF BALLARI-DISTRICT, IN STATE KARNATAKA. SUBMITTED FOR APPROVAL, UNDER RULE 16(1) OF MCR, 2016. RESERVED FOREST, CATEGORY OF THE MINE IS A(FM-FULLY MECHANIZED. CAPTIVE, NON-FOREST (REVENUE LAND).

COVER PAGE

1. The online registration numbered given by the applicant is not correct. The name of the previous lessee/ company is any may be reflected. The lease expiry date is given as 50 years, which may be given appropriately. In the light of the above remarks, the para 1(a) need to be attended and corrected and other places of the text wherever applicable.
2. The list of contents of the chapters given, which must be added with number of pages in each chapter may be added with another column for clarity.
3. Introduction: The tables of cost summary and time schedule implementation of approved R & R plan have not been incorporated.
4. The annexure referred VI, is of incorporation consequent on change of name and not the registration number obtained from IBM. The para 1(f), recognized person should be replaced with qualified person.
5. Para 2(a), the LOI issued by the DMG and its validity period need to be indicated. The lease period & expiry should be specific about the date of expiry from which date. (ii). Para 2(b): DGPS co-ordinates of corner boundary pillars of the mine/area supplied by state DMG may also be incorporated. (iii). The three GCP points as indicated in surface plan are indicated separately, which needs to be in the single surface plan, instead of showing separately. These points should be erected near by the Boundary than long distance.

Part-A

6. **Para 1(c):** under local geology, it is given the ore body no.1 is exposed up to a length of 500m with an average width of 35m, is not appropriate, at places the exposure is not visible. This must be attended accordingly, the calculation of reserves/ resources may be considered suitably as applicable. Similarly the ore body no. 2 and no. 3 is of 350m & 200m respectively, need to be attended as per the actual exposures. The ore body referred as No.1, 2 & 3 in the text are not specified on the plan and sections, for to be with clarity.
7. Para 2(e)(i), the mining pit having 17 benches of 7.5m average height are found to be disturbed due to the long period of non-operational status, which must be mentioned suitably, wherever applicable. (ii). Under the details of bore holes, it is mentioned that, out of 15 bore holes drilled by the MECL, no bore holes has touched the bottom of the ore body, and thus the iron ore formation continues beyond the explored depth. Otherwise, the para may be written as all the bore holes are within the ore body and not in the non-mineralized.
8. In para 2(iii), the expenditure incurred in various prospecting operation is of Rs. 4,66,73,150/- by the Govt. of Karnataka, but what is the amount actually spent for the this project, if available may be brought out.

9. Para 2(I), it is proposed to drill 15 bore holes of Core/ RC bore holes in the mineralized area for a total meterage of 1500m, whether it is going to be all are core boreholes or all are RC drill holes may be specified or both equal ratio.

10. Para 2(J), reserves/ resources as per UNFC, it is given iron ore reef is exposed to a strike length of 450m, but in para 2(C), three reefs indicated with 500m, 350m & 200m, if it is so, which is the one indicated for 450m, whether anything new or same may be explained. If it is same, why the length is different may be explained/ if it is new why the same is not discussed in para 2© chapter.

11. Table no.8, under exploration, in geological axis G2, limestone & Bauxite has been taken describing norms of exploration, why not iron ore is considered, when the document is submitted for iron ore may be explained. In the light of the above remarks, the other para on above issues may be checked.

12. In table no.10, the reserves under G2 scale of exploration, furnished without giving the UNFC code whereas table nos. 11, 12 & 13 respectively has been given with 122/222/333. (ii). The ultimate pit depth has been considered up to drilled end of bore holes i.e. up to 623m RL, at this stage it is not appropriate to decide on the same. The lease area needs to be reassessed with future exploration programme within the 50 years lease period. (iii). In table no.16, the category wise reserves & resources updated as on 1/7/2019 reveals 111/122 UNFC codes, which are not indicated appropriately in the respective tables.

13. In table no.15 & other tables the bulk density calculated based @ 3.10t/m³, the method adopted to arrive 3.10t/m³ may be briefed clarity.

14. Para 2A(a), (i) The existing and the proposed method of workings should be described in brief considering the existing pits/ dumps and stacks available in the leased/ auctioned area. (ii). Similarly, the proposed method, 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). The type of machineries proposed for future workings, may be discussed. (vi). During the site inspection, it was discussed in depth to work from the top RL to bottom RL in a phased manner for systematic and scientific approach to exploit optimum deposits. (vii). The existing and the proposed dimension of the pit may be given for reference.

15. Table No.18, on excavations, reveals 85% ore recovery which is not appropriate and correct. The text para need to be attended and corrected, suitably.

16. In table no.20, the bulk density considered for 3.10t/cum, whereas in other table no.21, of the text it is given with 3.31t/cum, which must be attended appropriately, with proper justification. (ii). Besides, in the proposals on three years production, it is noted less than the approved quantity of CEC, what is the reasons for not giving full quantity.

17. Para 2(d), it is given that the ROM will be processed within the lease area, what type of process adopted in the ML area may be dealt in brief.

18. Para 2(e), under layout of mine workings, the old pits that are existing in the lease area needs to be numbered or given some notations for reference, and accordingly, the proposals may be modified, wherever applicable to achieve the desired production. From the table no.20, the proposed production for the 1st three years is 2 lakhs against the approved target of 3 lakhs. Why the main ore body No. 1 is not taken considered for more production than the no.3 ore body.

19. **Para 2(f):** (i) The quantity of generation of waste during conceptual period and their location disposal has not been discussed. (ii). Incorporated Table of Implementation Schedule of mitigation /engineering measures should be as per approved R & R plan. (iii) The standard table of existing land

use pattern table and land use pattern at conceptual period (i.e. end of lease period) has not been incorporated at end of this para.

20. Table no. 28, the land use pattern details furnished for the present and for the future/ conceptual period, wherein there is no mention of back filling area, which are under consideration in the text proposals. Table no.39 and other related tables need to be attended suitably.

21. The table no. 32& 33 the unit of waste quantity is not given, in the light of the above remarks, the other tables within the text may be attended appropriately, wherever applicable.

22. Para 8.3.1, under mined out land, it is given that there is no proposals for back filling as the ore is available at further depth in the mining pit, if it is so, but in the text para there are proposals for back filling in the ensuing plan period, which may be attended appropriately.

Part-B

Annexures:

23. The list of annexures given need to be furnished with another for indicating the number of pages in each annexures for easy reference. (ii). All the annexures should be given with dates for reference. (Annexure-VII, should be indicated as CMD, not just MD. (iii). Annexures IX, should be checked and given the name of the qualified person correctly, instead of differently at different places. (iv). Annexure-XI, better add with name of the previous lessee/ name of the mine and present preferred bidders for to avoid confusion without names. (v).

24. A copy of MECL report (text part) should also be appended in support.

25. **Feasibility study report** :--(i) The feasibility report submitted reveals different ore to OB ratio, compared to the one submitted text para in table Nos. 18 & 19.

26. Annexure-XVII, about the mine workings photographs, which must be also with name of the mine & lessee/ previous & the present preferred bidders.

Plates:

27. Plate No.01(Key Plan): The certificate written on the plate need to be modified to the plan and sections prepared based on the lease map authenticated by the state Govt. The approach road with distance from the known place need to be marked.

28. Plate No 3 (Surface Plan): (i) The bore holes drilled by MECL as core drill and the RC drills should be given with standard notations. (ii) The plan may be prepared as per rule 32 (1) (a) of MCDR 2017. The old pits, waste dump etc., present in the ML area need to be depicted in the plan. (iii). The old existing pits and the waste dumps and the stacks present if any need to be given with numbers or names separately. (iv). The three GCP points given separately, which should have been given in the main surface plan. Selecting long distance school for GCP-3, near by the lease boundary, a permanent structures/ post should have been erected. (v). The certificate written on the plate need to be modified to the plan and sections prepared based on the lease map authenticated by the state Govt. In the light of the above remarks, the other plates may be attended suitably.

29. Plate No 4 (Geological Plan): (i) Proposed BHs given in the index as core bore holes, where in the text para it is proposed as core bores holes/ RC drill holes, better to attend correctly, without any difference and confusions. (ii) The plan may be as per rule 32 (1) (b) of MCDR 2017. (iii). The proposed bore holes may be added in the G3 scale of exploration area for to draw more information.

30. Plate No 5 (Geological Cross sections): (i) Depth of proposed BHs should be upto atleast little below the depth of mineralized zone / UPL. (ii) The remarks given in the geological plan may be considered for geological sections.

31. Plate No -6A (Year-wise Production and developments Plan): (i). The proposal should be to work from top RL towards downward to the bottom RL. (ii). The remarks given in the text part at Para 2A need to be attended strictly for systematic & scientific operation. The approved production proposals of 0.31 million Metric tons from CEC need to be maintained.

32. Plate No.07 (Production section): This sections should be attended in line with the remarks furnished in para 2A and above production plan.

33. Plate No-8 (Environmental plan):-- (i) Existing surface features should be highlighted. Proposals need not be shown. (ii) The plan may be as per rule 32 (5) (b) of MCDR 2017.

34. Plate Nos. 09 (Conceptual plan & sections): The plate should be supported with conceptual sections, which ought to have been. Besides, the back filling under taken in the worked out area need to be shown through sectional views. From which RL the back filling is undertaken and the method of back filling undertaken and sources utilized for the same may be revealed in the sections for the clarity. Besides, the plan and sections should be such that, what would be position of workings at the time of conceptual stage must be visualized and brought out accordingly.

35. Plate No-11 (Reclamation Plan):-- (i) This plan should be in 1:2000 scale. (ii) Proposed environmental monitoring station at core-zone should be properly reflected. (ii). Water monitoring station at water discharge point of ML area should also be proposed. (iii) The proposed year-wise afforestation and other environmental protective measures at toe of dumps should properly highlighted in plan. (iv). The back filling proposals from 2nd year in the main ore body no.1 is not appropriate and correct. The back filling depicted on the plan also not clear for understanding. (v). Proposing back filling from 2nd year need to be sure for exhaustion of ore body from the location selected/ proposed, without which no back filling should be commenced.