

SCRUTINY COMMENTS ON THE DRAFT MODIFICATION TO THE APPROVED SCHEME OF MINING OF NARAHARI IRON ORE MINE OF M/S MINERAL ENTERPRISES LTD., OVER AN AREA OF 56.96 HA AS PER CEC & 57.00 HA AS PER LEASE DEED, IN BEDARA BOMMANAHALLI VILLAGE, IN CHITRADURGA TALUKS & DISTRICT, KARNATAKA STATE. UNDER RULE 10(1) OF MCDR, 1988. M. L. NO. 2388. CATEGORY OF THE MINE IS A (FM-FULLY MECHANISED MINE, LEASE AREA UNDER NON- FOREST. PROPOSED PERIOD IS FROM 2016-17 TO 2019-2020.

### COVER PAGE

1. The document should be furnished under rule 17(3) of MCR, 2016 as modified mining plan and not as what is submitted now and also the ML validity period as per MMDR Act, 2015 new amendment may be given.
2. The extent of forest / non forest land should be furnished for reference.
3. The five years period may be given along with the modification period sought for.

### GENERAL

4. In the introductory part, the reason mentioned for modification is clear, but it is required to include the other facts, that the present document is submitted without change in the reserve part, since the mining operations were not commenced after the approval of the previous document vide letter No.279/440/94/BNG/1390 dated 8/6/2015. In the light of the above remarks, the related para in the text may be attended.
5. In para 3, under details of approved mining plan/ scheme of mining, the last approved scheme of mining date is given without indicating the five years period of validity for more clarity.
6. Few mine photographs may be enclosed, showing mine workings, waste dumps, stacks, infrastructures and plantation area etc, bore hole locations for reference.
7. In table-2.7, the development & production review given for the period 2005-06 to 2010-11 only, instead of giving for the period 2011-12 to 2015-16.
8. In page-24, under reclamation & rehabilitation, the work carried out as per the R & R approved document is given, which may be furnished in tabular form with the target & actual, pending if any may be given with date of completion for reference.

### PART -A

9. In para 1(e), under table 1.5 & 1.6, the details of exploration carried out in the lease area, out of which, some of the bore holes may be brought out through photographs for reference.
10. In para 1(i), in table-1.8, the details of proposed bore holes/ pits, given for next four years, wherein the proposal for making pits may be deleted. In the light of the above remarks, the para 2.3, may be attended.
11. In page-43, the photographs attached in the text page, should be given with details of the pits, instead of without any reference.
12. In para 2.1, it is proposed to operate the mine through A(FM), keeping 6m height & width more than 6m, it is better to mention the width as either 8m or 10m instead of proposing >6m is not appropriate.
13. In table-2.2, what is the percentage of OB/SB/IB/ ROM taken for calculation may be specified. Besides, the approximate bulk density & recovery factor considered should be indicated. Further, in para 1(k)(a), the recovery factor of ore is given 90%, if it is so, how the waste ratio is worked out to 1: 0.48 & 1: 0.27 as an average may be explained. In the light of the above remarks, the related paras may be checked.
14. In para 2(e), it is given that, upon completion of the exploration, the area in the north eastern side i.e. 6.37 ha of non mineralized area is identified for OB/ waste dumping and

the area is marked in the conceptual plan as dumping area D-5, is not appropriate, without completing the exploration in the particular area, how it can be declared for non-mineralized may be clarified/ explained.

15. In para 2(f)(3), under mine development, it is given that the mine is already developed and is a working, is not correct. It should be written as at present it is non operational, due to various reasons. The para need to be attended, appropriately.

16. In para 2(f)(4), the proposals made in the R & R plan need to be reviewed and the balance work, which need to be completed, should be furnished in the table with the date of completion for clarity.

17. In table-2.5, under land use pattern, the area for afforestation is 6.66 ha & also for green belt is 2.47 ha has been considered, which is not supported with evidence, how the 6.66 ha area is going to be utilized.

18. In page-62, under wheel loaders are required for the following purposes, wherein, it is stated that, 166691 tonnes of waste is going to be handled, but in page-49, in table-2.2(a), the waste quantity is indicated as 196,445t, this must be checked and corrected.

19. In para 4, under stacking of mineral rejects/ sub grade, it is given in table-4.3, that the waste with iron content below 45% is dumped in the earmarked waste dump, is not appropriate, better complete waste may be placed in the waste dump, but the waste with less than 45%Fe may be placed separately for future use. In the light of the above remarks, the text paras may be attended, wherever applicable.

20. The PMCP chapter should be furnished completely, instead of submitting only land use pattern, including the financial assurance calculation along with table for reference.

## PART-B

21. Surface Plan (Plate No.2): The GCP-3, location considered from LBS-6 is not found to be appropriate, when it can be connected from nearby LBS-1, which may be changed. The notations given in the index is not complete, some of the notations are not given, which are pertaining to the surface plan. (I.e. retaining wall & garland drain, etc.).

22. Production & Development Plan & section (Plate No. 6A & 7): The proposal to work in the year 2016-17 beginning and the face advancement must be given with arrow for the clarity of the workings. The development & production sections should be given year wise, instead of giving without specifying the years, which sections belongs to which year is not clear for understanding. Besides, composite sections should be avoided. The section along 7-7', the waste dump is dumped above the ore body/ mineralized area, which is not appropriate, which should be dumped away from the UPL. The proposals should be made to remove from the location in phased manner, to work below the mineralized area. In the light of the above remarks, the remaining proposed period should be attended.

23. EMP (Plate No.9): The waste dump shown in conceptual plan is not shown in this plan & the methods adopted to protect the waste dumps is not shown.

24. Conceptual Plan & section (Plate No.8 & 9): The conceptual plan and section is not prepared in a way, it should be. The mining pit area, reveals, as if, there are no measures of back filling & rehabilitation work expected to undertake in that area. From the conceptual sections along 7-7', it reveals the ore body below the waste dump, which was not given due care to mine it out.