SCRUTINY COMMENTS ON 'REVIEW AND UPDATION OF MINING PLAN' IN RESPECT OF KARADIKOLLA (SURESH) IRON ORE MINE, M. L. NO. 2502, COVERING 42.10 HA. AS PER THE CEC SKETCH, LOCATED AT NEB RANGE, NEAR KARADIKOLLA VILLAGE, SANDUR TALUK OF BELLARY DISTRICT, KARNATAKA STATE. THE PERIOD OF PROPOSAL IS FROM 2018-19 TO 2022-23. RESERVE FOREST AREA. SUBMITTED FOR APPROVAL UNDER RULE 17(1) OF MCR, 2016. NON—CAPTIVE, PRIVATE.

### **GENERAL**

- 1. Document should be prepared as per the standard guidelines as given in "IBM Manual on Appraisal of Mining Plan 2014"
- 2. Period of proposals may be mentioned as from F.Y. 2018-19 to F.Y. 2022-13 throughout the document.

### **COVER PAGE**

- 3. Name of the document may be corrected as 'Review and updation of Mining Plan'
- 4. Rule of submission may be corrected as under Rule 17(1) of Mineral Concession Rules, 2016.
- 5. Address of the lessee and the QP may be removed from the cover page.
- 6. Though the reserve forest is indicated, without giving the name of the reserve forest.

# **INTRODUCTION:**

7. In the introduction chapter, it is expected to specify clearly, that the document is submitted for the next five years plan period, without any change in the production and the method of working and proposals if any in specific.

### DETAILS OF APPROVED SCHEME OF MINING

8. Review in respect of exploration, excavation, reclamations etc. should be furnished up to 31.10.2017. Reason for deviation in respect of exploration may be given. Implementation status of approved R & R Plan should be discussed at the end of this chapter.

#### **PART-A**

### 9. **Geology and Exploration:**

- a) Occurrences and thickness of the float iron ore present southern side of the ML area is required to be discussed in 'Local Geology'.
- b) Variation of total resources should be justified in this chapter (Ref. page 25) since no exploration has been carried out in this mine after approval of 'Modification to the approved Scheme of Mining', approved dated 27.08.2015.
- c) Total extent of mineralized area should be discussed. Entire potential mineralised area should be explored by detailed exploration (G1 stage) in accordance with Rule 12(3) of MCDR, 2017.
- d) While estimation of reserve and resource of this mine, recovery of 'insitu' iron ore is considered as 100%, the same is required to be justified.
- e) Total resources should be estimated as on 31.10.2017, concurrent mine production since last estimation of Reserve may be mentioned.

f) In economic evaluation of feasibility study report, provisions of paying royalty against DMF and NEMT are not considered, may be corrected accordingly.

## 10. **Mining:**

- a) The existing and the proposed workings should be described in brief for understanding. Besides, with the existing topography of the ML area and the deposits/ workings, it is appropriate to carry out mining, through top slicing, from top to bottom level by level, to avoid lot of curved/ zig zag workings.
- b) In float iron ore areas, no exploration or separate resource estimation has been carried out by the lessee but float ore mining is proposed during F.Y.2018-19. Without basic exploration data and scientifically estimated reserve, such areas cannot be proposed for mining.
- c) During site inspection temporary ore stacks were seen at pit 1 top and scattered ore stacks were also seen lying in pit 2. These ore stacks required to be handled and accordingly systematic bench development should be proposed. Locations of proposed ore stacks should be identified and accordingly shown in the Production and Development Plans.
- d) Bench rectification work and straightening of benches is required to be undertaken at pit 2 top, south western sides during F.Y. 2018-19.
- e) Detailed section wise and year wise production and development calculations are not given, calculation of waste and stripping ratio is not found correct (Ref. page 34).
- f) Nos. of active and inactive dumps present in the ML area to be furnished in a tabular format mentioning dump ID, total extent and height (ref. page 40).
- g) Where back filling is proposed with partial back filling due to shortage of waste from the waste dump, can be continued to undertake in part also. Further, bench plantations may be undertaken. Not necessary to undertake full back filling. Water reservoir may be created in the absence of waste at places, and used for irrigation and domestic purposes.
- 11. **Para 4.0, Stacking of mineral reject/ sub grade material and disposal of waste:** Environment protective measures like construction of retention wall, gully plugs and check damps should be undertaken along the toe of the proposed active dump to prevent escape of material[Ref. Rule 37(2) of MCDR, 2017]. Said proposals may be furnished here in a tabular format.
- 12. Para 7.0: In Employment potential, employment of mining engineer and geologist is not proposed as per the provision of MCDR, 2017.
- 13. Para 8.3, Progressive Reclamation Plan: In Progressive Reclamation Plan, backfilling is proposed from F.Y. 2018-19 to 2022-13, but backfilling areas and proposals are not discussed in year wise production and development Plans, Please clarify.
- 14. Para 8.4, Disaster Management and Risk Assessment: Name, designation & contact no. of the person to be communicated in case of any emergency situation should be furnished in this para.
- 15. Para 8.6, Financial Assurance: In Financial Assurance table, no additional area under mining has been proposed during the plan period which is found to be incorrect since additional float ore mining area is already shown in southern side of the ML area. In SL. No. 12 (Others), 8.85 Ha. area is shown as 'fully reclaimed and rehabilitated' which is required to be elaborated. Financial assurance valid up to 31.03.2023 should be submitted by the lessee as per rule 27(1) of MCDR, 2017.

#### **PART-B**

## 16. **Para 10, PLATES:**

- a) Key Plan (Plate no. 3): Nearby ML areas are required to be demarcated in this plan.
- b) Surface Plan (Plate no. 4): Extent of existing dumps (one active & two inactive) and stacks should be clearly demarcated in the plan with ID nos.
- c) Geological Plan (Plate no. 5): UPL and drilled boreholes are not shown in the plan. Extent of existing float ore areas and mined out float areas should be demarcated. Exploration by trial pits are required to be proposed in the float ore areas.
- d) Geological Sections (Plate no. 6): Proposed boreholes and trial pits should be demarcated in the sections.
- e) Production and Development Plans (Plate nos. 7A to 7E): As per the scrutiny comments offered above, the development and the production must be undertaken through top slicing for better systematic and scientific mining. Year wise dump layout plans should be included within P&D plans. Connecting haul road from mine pit to proposed dumping areas and year wise proposed stacking areas should be demarcated. Existing bench rectification works and straightening of benches should be incorporated in the P&D plans.
- f) Year wise Production and Development sections are not provided.
- g) Conceptual Plan and Sections (Plate no. 9): Tentative outlines of proposed mine working, dumping, reclamation rehabilitation and other allied activities at the end of present ML period (i.e. up to 04.09.2023) should be shown; this plate may be corrected accordingly. Besides, what would be the position of workings at the end of the conceptual period may be given appropriately. What is seen in the present case will not be seen at the conceptual/closure of the mine.
- h) Financial Assurance Plan (Plate no. 11): Common index is used for 'area under excavation' and for 'OB dump' areas, may be corrected accordingly.

# 17. **Para 11, Annexure:** Following items are required to be annexed with the document:

- a) Copy of photo identity cards of managing partner and QP are not legible, may be replaced accordingly.
- b) Corrected feasibility study report.
- c) Section wise, Year wise production and development calculation.
- d) Copy of valid Bank Guarantee, in accordance with Rule 27(1) of MCDR, 2017, valid till 31.03.2023.
- e) Few photographs of stacks of different grades of ROM and the despatches of e-auctioning system.
- f) All the annexures must be given with reference number along with dates. Besides, the annexures list given / enclosed must be added with another column for number of pages in each annexures.