

Scrutiny Comments on draft 'Review and Updation of Mining Plan' in respect of Shiva Vilas Trust Iron Ore Mine of M/s Shiva Vilas Trust, ML No. 2646, covering 19.22 Ha of area in Ramghad Village, Sandur Taluk of Ballari District, Karnataka State.

All the headings, subheadings and para nos. should be replicated as per the standard guidelines as given in "IBM Manual on Appraisal of Mining Plan 2014" and information's to be given in order.

Unwanted information's may be deleted.

COVER PAGE:

1. Under Category, it may be given as A-FM/Opencast/Trustee/Non captive/Private.

INTRODUCTION:

2. In this chapter, it is to be mentioned that, no letter on the production capping of 0.1285 Million Tons have been issued by the CEC, however based on the inter -generational equity that the ore reserves has to last for 20 years , RMP has been submitted for 0.1285 Million Tons. If the CEC makes any change in the production capacity, Modified RMP will be submitted for approval.
3. Reasons for non working may be clearly given.
4. State wise leases already held by the lessee indicating the type of mineral, areas, location etc. may be furnished.

GENERAL:

5. Para 1.0(a): In this para, the details like phone no., Fax, Mobile No and E-mail ID of the nominated owner may be given.
6. Para 1.0(d): All the minerals which are included in the lease deed may be given.

LOCATION AND ACCESSIBILITY:

7. Para 2.0(a): (i) Lat/Long. of Pillar no.3 is given, whereas there is no such pillar no. furnished in Table No.1 or 1a. Necessary correction maybe done accordingly.
8. Para 2.0(b): All the details of the lease area may be furnished as per the format given in the IBM manual on appraisal of mining plan 2014.

DETAILS OF APPROVED MINING PLAN:

9. Para 3.1: Details of earlier approved mining plan and scheme of mining may be tabulated giving the details such as MP/RMP, plan period ,approval letter no., approval date & remarks since the inception.
10. Para 3.3: Review of earlier approved proposals of exploration, production-development & reclamation may be tabulated year wise. Reasons for deviation may be given in the remarks column.

PART-A

11. Para 1.0 (e): (i) Exploration carried out in the past may be furnished in a table, indicating year wise number of boreholes drilled, type (Core/RC/DTH), diameter, grid interval, inclination, Collar level, depth etc. (ii) Under details of sample analysis, total no of samples given, name of the NABL accredited laboratory along with their findings may be enumerated in brief.
12. Para 1.0 (i): (i) Future exploration proposed may be tabulated indicating the year, type, no of boreholes, grid interval, depth, location & total meterage. (ii) Future exploration proposals given in the document may be aligned as per Rule 12(3) of MCDR, 2017 which requires detailed exploration (G1 level) to be carried out over the entire potentially mineralised area under the mining lease, within a period of five years from the date of opening of the mine.
13. Para 1.0 (j): (i) The area under G-1, G-2, G-3 and G-4 may be given in a tabular form based on the exploration carried out in the past. The same may be shown in the geological plan and sections as well. (ii) Bulk density & recovery factor (Core recovery & mining recovery) of each of the material handled in the mine given in this para may be supported by field test report from NABL accredited /Govt. authorised Laboratory.
14. Para 1.0 (k): Section wise detailed calculation of reserves/resources may be furnished in this para aligned with table no.6, 7 & 8. Blocked reserves may also be given.
15. Para 1.0 (l): (i) Lumps & fine ratio may be discussed in this para.

MINING - OPEN CAST MINING:

16. Para 2.0 (b): (i) Bulk density & recovery factor of each of the material proposed to be handled in the mine may be tabulated.(ii) In this para it may be mentioned that the proposed tentative excavation is subjected to final approval from CEC.
17. Para 2.0 (c): Year wise, bench wise, section wise calculation of production & development quantities may be given.
18. Para 2.0 (e): (i) Brief description on preparatory work to be carried out, production & development, OB dumping, mineral stacking & plantation may be given on yearly basis citing references of the section line. (ii) Under requirement of machineries, calculation may be furnished to calculate the no. of drills, excavators & tippers based on the maximum material handling in the proposed plan period.
19. Para 2.0 (f): Re-grassification of the entire mined out area at the conceptual stage of mining may be proposed & few sections of the same may be given.
20. Para 4.0(a): Under this para, the details may be furnished in the following appended table.

Year	Top Soil (Tons)		OB (Tons)		Blending	Benefication
	Re use/Spreading	Storage	Backfilling	Storage		

21. Para 4.0(b): In this para, it has been mentioned that the dumping ground is proved for absence of mineral & is outside the UPL. The same may be supported by bore hole datas & discussed briefly.

22. Para 4.0(c): (i) Details of OB dumping may be given in the appended table

Year	Extent (Ha)	Quantity (Tons)	Top RL	Bottom RL	No of stages	Slope angle	Location

(ii) Proposed engineering structures for environment protective measures may be given year wise and be shown on the plates.

23. Para 8.1: Under human settlement, demographic details may be furnished.

24. Para 8.2: (i) Mitigation measures to control air pollution in the working pit may be reviewed and corrected accordingly.(ii) Mitigate measures for blasting may also be given

25. Para 8.3.1: Land use pattern at the end of plan period & conceptual stage may be tabulated and discussed in this para.

26. Para 8.3.5: The information given in table no.27 may be furnished in tabular column as per the format given in the IBM manual on appraisal of mining plan 2014.

27. Para 8.6: Since retaining wall & garland drains are proposed to be constructed in the plan period, the area may be considered for FA calculation under the heading “others”. Accordingly FA table may be crosschecked & corrected.

PLATES:

Colour coding may be kept uniform in all the plates

- a) Key Map (Plate No.SV02-RMP): (i) Lease area may be prominently marked. (ii) Access to the mining lease area may be shown. (iii) Topo sheet no may be given.(iv) Wind rose diagram may be shown giving the prominent wind direction.
- b) Geological Plan (Plate No. SV05-RMP): (i) Area under G-1, G-2, G-3 & G-4 may be shown prominently with thick lines & indexed accordingly. (ii) UNFC codes may be depicted in bold letters. (iii) This plan should be duly signed by the mine surveyor with certificate no.
- c) Geological cross sections (Plate No. SV06-RMP): (i) All the features falling on the respective section line may be depicted. (ii) UNFC codes for the area considered for different categories may be shown clearly on each of the sections line & be prepared as per the guidelines given in Minerals (Evidence of Mineral Contents) Rules, 2015. Necessary corrections may be done at all places in the document. (iii) In many of the section line, interpolation of the deposit is extended beyond the lease boundary. The same may be corrected. (iv)This plan should be duly signed by the mine surveyor with certificate no.
- d) Environment Plan (Plate No. SV07-RMP): Progress of the proposed engineering structures (Retaining wall, Garland drain, RWH pits etc) may be shown year wise in different colours & indexed accordingly.

- e) Conceptual Plan (Plate No. SV08-RMP): (i) In this plate only the details pertaining to conceptual land use pattern may be shown with outlines & solid fill colours. (ii) Re-grassification of the entire mined out area at the conceptual stage of mining may also be proposed & shown.
- f) Conceptual sections (Plate No. SV09-RMP): The sections may be re-drawn based on the comments placed at point (e) of Plates section.
- g) Land use Plan (Plate No. SV10-RMP): The given plate is not necessary, however the given land use pattern is not clear, whether the land use pattern is of the conceptual stage of mining or at the end of plan period. The same needs to be indexed & tabulated accordingly.
- h) Financial area assurance plan (plate no. SV11-RMP): (i) Different activities of the mining & allied activities may be shown in different contrast colours. (ii) The waste dump & area for future mining is the same. (iii) No safety barrier around the existing building is shown. Necessary corrections may be done in the text part as well.
- i) Tentative excavation Plan (Plate No. MP01-RMP to MP05-RMP): (i) The bore holes may be removed from this plates. (ii) LT line is shown in this plate, whereas no such LT line is shown on the surface plan. (iii) It is observed that the LT line is shifted on year to year basis & no such mention in the text. (iv) Minimum distance between the mineral storage & top soil storage may be maintained to avoid mixing. (v) The building lying in the NW of the lease is shown at the end of plan period in financial area assurance plan, whereas from the third year onwards production & development is shown in that area. Clarification & necessary corrections may be done accordingly. (vi) Year wise extent of mineral storage is not shown.
- j) Tentative excavation cross-sections (Plate No. MP06-RMP): (i) The year wise movement of benches may be shown clearly. (ii) The colour coding of the mining & allied activities may be kept same as given in the tentative excavation Plan. (iii) A Longitudinal section may also be given.

Annexure: Following items are required to be annexed with the document:

- a) The format of the Consent letter/Undertaking /Certificate may not be changed and all the points to be covered.
- b) Valid CFE obtained from KSPCB may be enclosed and necessary correction may be done in the introduction given in the text.