

Scrutiny comments on examination of Review of Modified Mining Plan with PMCP in respect of Oiteiro Borga Do Bairro Queri Mine (T.C.No. 34 of 1950) of Sociedade Timblo Irmaos Limitada rep. by Panduronga Timblo Industrias over an area of 88.3756 Ha. situated in Rivona Village, Sanguem Taluka, South Goa District of Goa State submitted under Rule 17(2) of MCR'2016.

**Cover page-** The approval period should be financial year as corrected as 2017-18 to 2021-22.

**Page-4,** The provision & name of qualified person should be given under rule 15(1) of MCR, 2016. It needs correction. The name & contact details of recognized agency, who had been conducted the DGPS, is not given in text.

**Details of approved MP/SOM-Para-3.3-** The production & development quantity, sub-grade; mineral rejects & dumps recovery if any achieved up to Dec., 2016 or till date in financial year 2016-17 should be given based upon monthly return submitted to IBM only & it should be discussed in brief regarding remaining cap production quantity is to be achieved up to March, 2017 in the financial year 2016-17.

The proposed & achievement should be mentioned as per approved scheme proposal i.e. Latitude & Longitude /RL etc. & actual workings done should be discussed in tabular form with proper justification.

The para-3.4, the copy of latest violation pointed out & their compliance should be discussed for the change of place of working, exploration etc with justified reason. It should be discussed in brief.

The quality & quantity of lifting of excavated ore by way of auctioning by state Govt. should be discussed in brief with supporting document. The remaining grade wise stock of auctioned ore available in mining lease area as on 01.4.16 or till date should be discussed with supporting document.

**Mining-** The production & development proposal in the year 2016-17 i.e. (Jan.17 to march, 17) should be discussed & justified. It was observed during inspection that mine workings proposed on hill top & old collapsed benches, height & width of benches are not in order, therefore it should be time bound commitment for rectification of benches in order & mine workings should be proposed & started from top to bottom. All safety & precautionary measure should be proposed to divert/embankment for wash off the material in slope of dumping area.

The status of approval & period of common boundary working permission with adjoining TC No.29/52 should be discussed in mining chapter. The proposed mine workings/ dump recovery should be 100m from existing pit/dump edge as per DGMS guideline if any.

It should be discussed in brief regarding existing dumps with quantity & grade, number of benches in ore & waste, nearest distance from WLS/NP etc. should be given. Width of benches proposed needs to be indicated.

The annual ROM production quantity with tentative grade of excavation should be given as per manual of appraisal of mining plan 2014, based on IBM threshold value of hematite ore is +45%Fe & +35%Fe for siliceous ore. Here in table, cut of grade is proposed & taken as +55%Fe only whereas mineral rejects (-55%Fe to +45%Fe) column left blank, which is incorrect. The quantity of mineral rejects which is above threshold value & below cutoff grade should be given in mineral rejects column.

The dumping on mineralized ground should be temporary in nature only. The method of dumping with terrace height should be given. The recovery of ore calculation should be discussed and justified in plan & conceptual period. The 100% recovery is not possible.

The proposed location of protective & safety measures in plan & conceptual period should be discussed in details since mine workings is on hill top & surrounding area is paddy fields and human settlement are there. Safe Operating Procedure as per DGMS guidelines should be discussed.

Page-58,61, Stacking/Use of mineral & mineral rejects- It should be discussed in brief regarding utilization of mineral reject ore, (+45%Fe to -55%Fe for Hematite ore & +35%Fe for siliceous ore) because as per buyers requirement +55%Fe is salable. The year-wise tentative quantity of generation of mineral reject should be given in tabular form.

Page-72, financial assurance- The original valid BG of extended period should be submitted in the form of annexure.

All plan and section, text & tables should be modified based upon above scrutiny points and should be duly signed by RQP or authorised persons on every page.

### **Plan & sections:**

**Surface Plan:** The adjoining lease of TC No.29/52 & mineral stacks outside the lease area/surface features outside lease should not be shown on plan. The mineral reject/subgrade & waste dump and iron ore pit & Mn pits should be shown by different colour code to distinguish properly. The FC area, forest & non-forest area should be shown effectively. The similar colour code of collapsed bench & dump should be shown different to distinguish properly. The surface plan should be certified by mine manager also with name & date.

**Production & Development Plan & Section/Reclamation Plan/Financial Assurance Area Plan-** The yearly advancement of approach road should be shown on proposed workings & dump area. The 50m of statutory barrier from HT line /nalan/roads etc.& proposed dump site should be shown 100m away from pit edge as per DGMS guidelines. The environmental protective measures as mentioned in text should be match with reclamation plan & shown effectively.

- 1) **General:-** i) On cover page it is mentioned that Review of mining plan is submitted under Rule 17(2) of MCR, but review of mining plan should be submitted under Rule 17(1) of MCR-2016. ii) Review period should be mentioned as 2017-18 to 2021-22.

## **2) Geology & Exploration.**

- i) In the last approved document mineralized zone for iron was mentioned as 21.30 Ha and area explored under G-1, G-2 and G-3 were mentioned as 7.30Ha, 6.00ha and 8.00 ha respectively. However in present submission Mineralized area for Iron ore is mentioned as 24.00ha, area explored under G-1, G-2 and G-3 are mentioned as 7.30ha, 6.00ha and 10.70 ha respectively. How area of mineralization and area explored under different level of exploration varies from last approval without doing any exploration is to be justified.
- ii) Under future programme of exploration it is mentioned that 34 boreholes will be drilled in the year 2015-16 and 2016-17. However 2015-16 is already over and days remaining in the year 2016-17 is less and may not be possible to complete exploration as per the proposals, so exploration proposals should be revised. Proper justification should be given for non completion of boreholes during 2015-16 and 2016-17. Further the entire mineralized area should be explored under G-1 level of exploration in the regular grid pattern as per Minerals (Evidence of Mineral Contents) Rules, 2015.
- iii) Since no boreholes were drilled on section 1-1' pertaining to T.C No-34/50, the reserves estimated Under UNFC code 111 should be removed.
- iv) Based on the tests carried out recovery of fines and lumps from the ROM may be discussed in local geology of the area.
- v) Reserves/resources should be estimated as on date.

### **Plates:-**

**Geological plan & cross sections:-**i) Dip and strike of the formation is not marked on the Geological plan. ii) Lithology shown on Geological plan and sections are not matching, refer sections D-D', E-E', G-G' etc. iii) UPL marked on surface geological plan and cross sections are not matching. iv) boreholes which are above the bench profile should be shown in dotted line.