Scrutiny comments on examination of Modification of Mining plan (MMP) of Quelchem Tour Tambdi Mati Iron Ore Mine, Lessee: Sociedade Timblo Irmaos Limitada Represented by Sociedade de Foemento Industrial Pvt Ltd. over an area of 75.3004 Ha ha in North Goa district of Goa State. (T. C. No. 14 of 1953)

Text:

GENERAL

- 1. Self-attested copy of qualification & experience certificates as required for qualified person to prepare mining plan/Review of Mining Plan/Scheme of mining/its modification under MCR'2016 to be enclosed.
- **2.** Introduction & Chapter-2. Para 2.b): It is to be clarified that whether ML area falls under ESZ/CRZ etc. or not.
- **3.** Para 2. b): In details of ownership of land within lease area, name of different individuals/ firm are given in addition to lessee. Area acquired by lessee to be clarified along with documentary proof as enclosure. Survey Nos. of ML as per DGPS only to be mentioned.
- **4.** Chapter-3: Para 3.3: Waste Generation and ROM Ore production etc. to be mentioned up to 31.08.2017. Exploration carried out in 2016-17 reported as nil against the proposal. Hence, suitable proposal for exploration to be incorporated & given in Geology chapter to make up the exploration shortfall in rest period of 2017-18.
- **5.** Chapter-3: Para 3.5: Details of any suspension/ closure/ prohibitory order, which have already been given in last MMP, is not required to be repeated again & again.

Geology and Exploration:- i) The reason given in the Details of approved mining plan/ scheme of mining for not carried out exploration and to cut the number of boreholes to be drilled in the present plan period are not justified. The proposed boreholes should be completed in the year 2017-18 only. ii) Under exploration already carried out details of area explored under G-1, G-2, G-3 level, non-mineralized area based on the exploration carried out and mineralized area to be explored needs to be discussed. iii) Under details of sample analysis number of core samples, face samples, trench sample, chip samples etc. analyzed so far need to be discussed. iv) Reserves which are blocking in 50m safety barrier from Road and Nallahs should be estimated under remaining resources.

Geological plan and cross sections:- i) The area explored under different level of exploration should be marked as per discussion during field visit. ii) Color codes given for different lithounits should be same on Plan & sections. iii) UNFC codes are not clear on the sections.

MINING

- **6.** Para a): Brief Sequence of different mining operations to be described here i.r.o. existing & proposed mine workings. Existing Waste Dumps and Protective Measures details to be given in waste disposal Chapter. Any waste dumps existing within ML area, not belonging to the lessee as mentioned to be given with documentary proof.
- **7.** Para b, c & d) ref. with Development plan & Sections:- Year-wise excavation/development proposal to be given for prospective period of 06 months only from Oct.2017 to March 2018 (Fy-2017-18). Production & development achieved/carried out in last 06 months (Fy-2017-18) also to be mentioned.
- **8.** Para d) & e): Layout of mine workings should be given in detail along with optimum selection of mining Machinery and pit road layout. Description of different mining machineries proposed to be deployed to be given with its rated capacity along with detailed calculation in respect of its adequacy and optimal utilization based on total annual handling of ROM & Waste.

- **9.** The mine working within 50m from existing nallah is proposed; permission from state DMG in this regard (as per lease deed condition/MCR, 2016) should be discussed & submitted in further submission. Otherwise, safety zone of 50m from seasonal nallah to left untouched.
- 10. As per Surface Plan & Environment Plan, Excavation/waste dumping were carried out in 7.5 m statutory barrier along the ML boundary (common boundary) at many places. Permission from competent authority regarding the same to be enclosed and also it is to be clarified that when the same was carried out.

MINE DRAINAGE

- 11. Para 3.a): minimum & maximum depth of ground water table to be given clearly.
- **12.** Para 3.c):- pumping arrangement, and places where the mine water is finally proposed to discharge & related environmental concern to be discussed.
- **13.** Para 3.d):- Existing arrangement and proposal for protective measures to control wash-off from mine discharged water should be given in quantified terms.

STACKING OF MINERALS REJECT/ SUB-GRADE AND DISPOSAL OF WASTE

- **14.** Para b): proposal of exploration at proposed surface dumping ground to be given to prove presence or absence of ore.
- **15.** Para C): In the interest of mineral conservation, entire proposal for temporary Backfilling/Dumping of waste in Pit-4 to be relocated as surface dump. Mineral in Pit-4 to be exhausted fully first.
- **16.** In view of above, Configuration and sequence of surface dumping & its build up to be described in detail with manner of disposal of waste in stages/terraces.

PMCP

- **17.** Para 8.3: In summary of PMCP table for Item No. 8.3, Cumulative actual achievement as on date should be given and year-wise proposal of 2017-18 only to be given.
- **18.** Para 8.6 : Financial assurance: Most of the ML area is utilized by mining and dumping. However, 19.7 ha. area mentioned as un-utilized. Hence, the Area considered for financial assurance should be verified /rechecked, and financial assurance to be paid accordingly.
- **19.** Financial assurance: The Area considered for financial assurance should be rechecked in view of aforesaid scrutiny comments and accordingly financial assurance to be paid.

Enclosure:-

- **20.** Annexure given are not paged and page no. is also not mentioned with Annexure nos. in the Index. All the annexure to be properly indexed, numbered & paged and signed by the TQPs.
- **21.** Permission from state DMG for mine working within 50m from nallah is proposed; (as per lease deed condition/MCR, 2016) should be discussed & submitted

PLATES:

- 22. Rule 31, 32 & 34 of MCDR, 2017 to be followed for preparation of all plans & sections.
- 23. All plans to be prepared based on recent and accurate survey and to be correct as per existing surface features & mine profile. Such plans should be prepared by the qualified Surveyor and certified by the mining engineer of the mine for its correctness.
- **24.** 7.5 m statutory barrier along the ML boundary should be marked clearly over all the plans.
- **25.** Drainage pattern should be clearly marked on Environment & reclamation plan.
- **26.** Plantation and Protective Measures existing and proposed to be shown prominently over Reclamation plan in different colours.
