

Scrutiny comments in respect of Pale iron ore mining lease, (Pale Mine) T.C. No.31/53, over an area of 83.8771Ha non-forest land, A-category fully mechanized mine, situated in Pale & Velgem -villages, Bicholim-Taluka, North Goa-District of Goa-State for approval in Modification in Mining Plan under rule 17(3) of MCR, 2016 for block period 2013-14 to 2017-18 & approval period of 2016-17(March,17) to 2017-18 of M/s Chowgule and company private limited.

**Details of approved MP/SOM-** (i) The review chapter should be discussed in brief till Feb., 17. (ii) The production & development quantity, sub-grade; mineral rejects & dumps recovery if any achieved up to Jan.17 in financial year 2016-17 should be given based upon monthly return submitted to IBM only. (iii) it should also be discussed in brief regarding ROM production achieved till January,2017 & remaining cap quantity to be achieved in 2016-17.

The present mine workings/excavation of ROM is being carried out in pit no.1 & 2 & further location of proposal of ROM quantity should be in G1/G2 level of exploration only as per provision of MEMC rule 2015. It needs correction as advised during inspection.

It was observed during inspection that proposed level of benches in financial year 2016-17 & 2017-18 are not of same level as in adjacent mining lease which is having common boundary (Pit bottom of TC no.41/56,28mRL & 31/53, 34 mRL.) It needs correction & modification. The plan & section should be given in UTM co-ordinates instead of local grid. The colour code in plan & section is mismatching with different plan.( plate no.4&4B) .It needs correction.

It was observed during inspection that mineral rejects of siliceous ore is stacked, which was not proposed in earlier approved mining plan. The generation of mineral rejects of siliceous ore should be proposed with tentative grade & quantity and location of stacks.

The copy of latest violation pointed out & their compliance should be discussed for the change of place of working, exploration etc with justified reason. Appointment of mining engineer & geologist should be discussed under provision of MCDR, 1988.

The status of quality & quantity of lifting of excavated ore by way of auctioning by state Govt. should be discussed in brief with supporting document.

#### **1. Geology and Exploration.**

- i) Under the heading exploration already carried out the area explored under G-1, G-2, and G-3 level of exploration and area to be explored needs to be discussed.
- ii) Under the geology of the lease area the ratio of lumps and fines in the ROM for the different types of ore needs to be discussed based on the tests conducted.
- iii) Reserves/resources estimated under G-1, G-2 and G-3 level of exploration should be as per the Minerals (Evidence of Mineral Contents) Rules 2015. Reserves/resources need to be re-estimated accordingly. Depth below the drilled borehole and lateral extension from the extreme borehole cannot be considered for estimation of reserves.
- iv) Reserves/resources should be estimated as on date.

**Mining-** As discussed during inspection- (i) The targeted quantity of production for the year 2016-17 & remaining quantity to be achieved in 2016-17 and accordingly optimization of man & machinery & proposed no of working faces ,shifts, advancement of faces & effective working hours/shift etc. should be discussed.

The proposed mine workings/ dumping/stacking should be 100m away from existing pit edge as per DGMS guideline. The UPL should be modified by leaving statutory barrier of nallah, road, HT power line etc.

All relevant table & text should be discussed & modified as above scrutiny. The remaining proposal will be same as earlier approved modification in mining plan approved by this office recently.

**Plates:-**

- i) Geological plan and cross sections needs to be updated based on latest survey.
- ii) Color codes given for the different litho units vary from plan to sections.
- iii) Section lines should be marked at 50 mtr interval.

**Plan & sections:** *All relevant plan & sections, Surface plan, Production& development plan, Conceptual plan should be updated & modified. The relevant table & text should be updated & modified based upon the modified/enhancement of production & development proposals.*

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