Scrutiny Comments on Review of Mining Plan & PMCP of Mahugain Graphite Mine (223.4479 ha.) of M/s JSMDC situated in Village- Mahigain, Tulbula, Tatipathal & Tamdaga, district-Palamau, Jharkhand state.

- 1. In the Preface mention the discontinuous date of mine working.
- 2. General Pg. 1 Give the details of Mining Leases of Major Minerals already held by M/s JSMDC, and update the current position.
- 3. Location & Accessibility Pg. 2 iv,
  - a. As mentioned the area falls under Costal Regulation Zone (CRZ), which is not correct, necessary correction is to be made accordingly.
  - b. Mention the corner boundary pillars accordingly.
- 4. In details of Approved MP / Scheme of Mining
  - a. The details of the Actual Work done of the Lapse Period should be incorporated clearly Block wise of 5 Years as the Scheme of mining is due for approval form 2003-04 onwards.
  - b. Pg. 3 v Point 3.5 Mines in not in operation, give details of suspension / closure / prohibitory order issued by any Govt. agencies, attach the necessary annexure related to the matter.
- 5. Geology & Exploration
  - a. The Local Geology of the area shows presence of Sillimanite in the area as such % of presence of Sillmanite in the graphite schist may be mentioned.
  - b. Pg. 1 iv Vein no. in Quarry No. 1, 2 & 3 are identical as such mention the name of the village also in the Name of the blocks, necessary changes is to be made in table 1.1 and wherever necessary.
  - c. Mineral Resources: (Mineral resources may be estimated purely based on level of exploration, with reference to the threshold value of minerals declared by IBM) in the following format:-

Level of Exploration	Resources in million tons	Grade
G1 - Detailed exploration		
G2 - General Exploration		
G3 – Prospecting		
G4- Reconnassance		

- d. All resources shall be assessed up to the threshold value and the resources between the threshold value and the cut-off grade shall be reported separately. There will however be no restrictions in estimating resources below the threshold value if there is a ready market of such mineral/ore either directly or after beneficiation.
- e. The non-saleable/un-usable minerals/ ores above the limit prescribed in the threshold value and below the cut-off grade shall be stacked separately in an area earmarked for the purpose.
- f. The ground selected for dumping of overburden, waste material, the sub-grade or non-saleable ores or minerals shall be proved for absence or presence of underlying mineral deposits for areas of existing dumps. The fresh areas proposed for dumping should be probed before initiation of dumping.
- g. The overburden and waste material obtained during mining operation shall not be allowed to be mixed with the materials above the threshold values of minerals stacked.
- h. Determination of Bulk Density and Recovery factor should be based on field test.
- i. Table 1.15 mention the date (As on date).

## 6. Mining -

- a. As on date of inspection the already mined out existing pits were filled up by water as in such a case the dewatering proposal should also be incorporated and accordingly the production scheduled should be prepared.
- b. Table 2.1 Name of the Blocks mention the name of village in which it falls, necessary changes is to be made accordingly wherever necessary.
- c. Table 2.2 The production updated status from 2013-14 till 2018-19 should also be incorporated.
- d. In table 2.1 and table 2.3 nomenclature of the Quarry does not matches, necessary changes is to be made accordingly wherever necessary.
- e. In situ Tentative excavation is not incorporated under the chapter MINING, which should be incorporated year-wise as per format prescribed in IBM Manual for Appraisal of Mining Plan 2014.
- f. Mention whether, if the existing dumps will be re-handled for the production of Graphite or if the presence of Graphite is negligible whether it will be used for reclamation.
- g. As in previous paras waste are being generated from the mine as such in table 4.1 its use should be incorporated accordingly.

## 7. Plans & Sections:

- a. In all the plates plan year should be mentioned accordingly.
- b. As per CCOM Circular 2/2010 In case of forest areas, the boundary pillars shall be fixed on ground with reference to at least three permanent ground features in and around mining leases, which is not shown in respective plates.
- c. In Geological Plan structural details like strike, dip, fold, fault, plunge of ore body should also be mentioned.
- d. In all the plans forest areas should be clearly demarcated.

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