

3.1 Justification for locating the project in Forest area.

The entire mining lease area covered under the forest land and the valuable mineral like Iron and Manganese ore have been estimated in the approved Mining Scheme. Considering the demand of the above mineral by the growing Industries the exploitation of such mineral from the area is very essential to cater the requirement of such mineral based industries. Since the occurrence of the above mineral is site specific, which happens to fall in forest land, the area is required for diversion to win these mineral. Hence to carry out the mining and ancillary activities in forest land required for diversion. However, the mining and ancillary activities have been proposed in a conservative way to meet the minimum requirement only which to be located in forest land as no alternative is there and **at the end of the mining, the entire utilized area will be reclaimed & rehabilitated with plantation as per Mine Closure Plan & Reclamation Plan.**



The reason of item wise requirements of forest land is mentioned below:

- a) **Mining:** To cater the requirement of the mineral based industries, mining is the only way for extraction of ore from the mineral deposit. As deposit of mineral is site specific, based on the geological studies of mineral reserve in the area to excavate the ore from the deposit and to carry out a safety and scientific operation, the mining including mines road have been proposed for diversion over **71.795** ha. of fresh/ additional area to make the total diversion area for mining in forest area will be **82.684** ha. including already diverted earlier for mining over 8.407 Ha. excluding broken safety zone area for mining over 0.291 Ha and 2.482 Ha. of earlier diverted for dumping will be proposed for mining.
- b) **Ore Beneficiation:** Looking into the present scenario of market demand of Iron and Manganese ore with the growing industries of the country and for mineral conservation point of view, the Indian Bureau of Mines, Govt. of India have decided to take up the cut off grade of Iron ore mineral is up to 45% Fe which was earlier 58% Fe. Considering the above facts, it has become very essential and mandatory to utilize and market the sub grade ore by upgrading them, adopting the advance technology like crushing, screening and beneficiation of ore by processing plant etc. The main intention of the mineral processing plant is to improve the chemical and physical properties of the ore to improve low grade materials to high grade, so that the minerals can be recovered more and marketed comfortably. That's why the proposed plant is inevitable to continue mining operation smoothly which will also give more benefit to State Govt. as well as the Central Government. An area of **3.391** Ha. is identified in the fresh virgin forest for this purpose.
- c) **Sub-grade ore Stacking:** Considering the mineral conservation point of view, the Indian Bureau of Mines, Govt. of India is emphasizing on assessment of the Iron ore and Manganese reserve/ threshold value up to 45% Fe and 10% Mn and stacking of the sub grade ore properly for future use. Presently, the good quality ore is only marketable and the sub-grade ore raised are normally not sold until unless demand come, which are required to be stacked separately for mineral conservation point of view and also for the future use. So, the sub grade ore stacking is proposed only over **2.348** ha. in fresh virgin forest area.
- d) **Dumping of Waste:** Dumping of waste is a very essential requirement of mining operation, which cannot be taken up in mineral zone from mineral conservation point of view as per the Indian Bureau of Mines. Once mining pits exhausts, waste will be used for back filling. But as

dumping of waste is a simultaneous operation with mining excavation, some area become very essential for dumping of waste material for accumulation before exhaustion of ore from any mining pit. In earlier granted area for dumping was in 8 different places for different Blocks. Though the dump area was very close to all pits and the pits will be extended in different direction for scientific and systematic mining, therefore most of the earlier dump area will be converted to mining, so there is a proposal over **5.540 Ha.** is proposed for waste dump out of which 2.855 Ha. is earlier diverted for dumping and 2.685 Ha. in fresh virgin forest area.

Out of earlier granted area over 5.62 Ha. 0.283 Ha. will be maintained for ML boundary line safety zone and an area over 2.855 Ha excluding broken safety zone area for dumping in Block – VIII will be remain unchanged and 2.482 Ha. will be proposed to convert for Mining.

- e) **Road:** For minerals transporting point of view haul road is most essential for mining. Already there is 1.539 Ha. of area outside the broken up area was approved for road to connect one block to another and move outside the lease area through crossing the safety zone area along the ML boundary line. The internal road is variable according to the development of pits except the safety zone area already used for road.

All other details are furnished in item wise breakup of Proposed Land use **Table No 2.**

