

## JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST AREA

The total mining lease area allotted by Govt of Odisha to M/s Essar steel India Limited is 139.165 Ha. Out of which 90,629 Ha. is mineralized zone for Mining and allied activities and balance are of 48,536 Ha, is non-mineralized area for ancillaries activities.

About 91% of the lease area is under forest land and the valuable mineral deposit of iron ore falls under the forest land.

Since the above block has been allocated to Essar Steel India Limited under captive category for use in it's Integrated Steel Plant at Hazira, Gujarat , the exploitation of such mineral from the area is very essential to cater own industry. 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.

Indian Bureau of Mines, Nagpur has declared that the thresh hold value of Iron ore as 45% Fe and it will be possible to increase the percentage of Iron ore by using mineral processing plant. The entire ore bearing zone coming under forest area contains the Iron ore of Fe 55% to 65%.

Therefore, in order to carry out the mining and ancillary activities in forest land , proposal is being given for diversion. However, the mining and ancillary activities have been proposed in a conservative way to meet the minimum requirement and **at the end of the mining, the entire utilized area will be reclaimed & rehabilitated with plantation as per Mine Closure Plan & Reclamation Plan.** This would definitely enhance the financial resources of the State in the form of royalty and other taxes. Moreover, the project is site specific as mineral deposits do occur in the appropriate site.



The reasons for item wise requirements of forest land is as mentioned below :

**Mining:** To cater the requirement of the mineral based industries, mining is the only way for extraction of ore from the mineral deposit. Since the Mineral Deposits are site specific, on the basis of geological studies, the plan for the mining operations have been done considering safe and scientific method .

**Dumping:** Dumping of waste is a very essential requirement of mining operation, which cannot be dumped in mineral zone from mineral conservation point of view as per the Indian Bureau of Mines. The generation of wastes during the life of the mining in the block will be very less.

**Storing of mineral:** Considering the grade wise and size wise requirement of the captive steel plant of the company , the product from the mines are to be segregated and stacked separately and systematically in the stock yard and hence land is required for the purpose of stock yard inside the mining pit, crushing and screening plant area from where ore will be dispatched.

Considering the mineral conservation point of view, subgrade ore needs to be stacked separately for future use .

Further, the threshold value of the Iron ore has been made as 45 % Fe by Indian Bureau of Mines and also the proper stacking of subgrade ore for future use is mandatory.

**Ore Beneficiation/Processing:** Considering the threshold value as 45 % Fe as fixed by Indian Bureau of Mines, the up-gradation of ore is highly essential. The main purpose of the mineral processing plant is to improve the chemical and physical properties of the ore, so that it can be used economically .

Therefore, 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. The up gradation process comprises of crushing, screening, grinding, gravity separation and subsequent magnetic separation in multiple stages so that the desired



quality can be achieved. The Stationary Crushing and Screening unit will be having two units, one unit with 3 MTPA capacity will be having screening facility only wherein predominantly powdery ore, blue dust and ore flaky in nature will be processed to produce Iron ore fines ( -10 mm) of about 2.70 MTPA (i.e. 90% of the total feed to this unit).

The ore which will require beneficiation will be subjected to the beneficiation process as mentioned above.

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