

Note on “Transportation of Minerals”
Tiringpahar Iron & Manganese Mine, M/s Tata Steel Limited

For an annual production of 85000 MT of manganese ore in 300 working days, about 150 piece-rated workers will be deployed for production of 300 t/day. Subsequent to manual processing of ROM, the different quality of ores are then loaded manually to the dumpers and transported to stacking ground for stacking the ore in regular geometrical shapes and samples are collected and analysed at our laboratory.

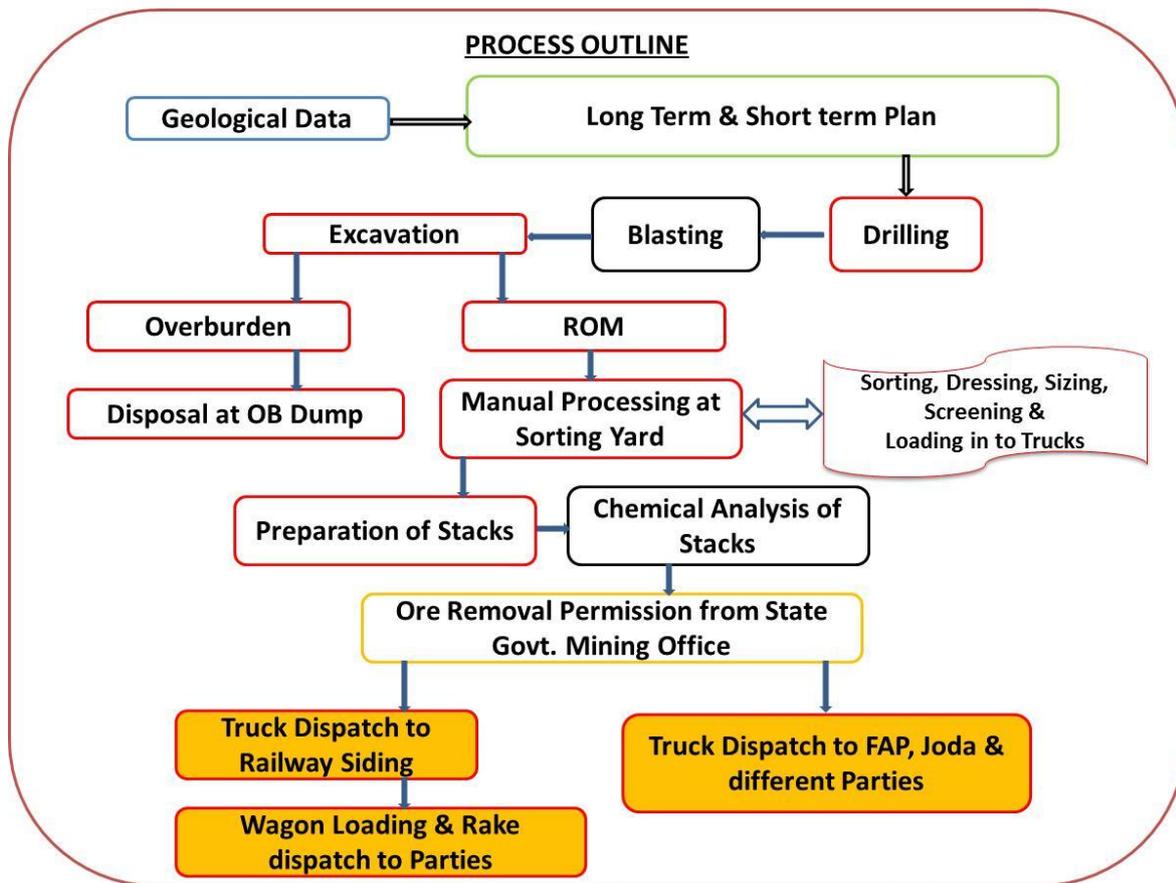
The customer wise monthly despatch requirement is informed and on the basis of availability of stacks at mines the future production is planned. Accordingly, the schedules are prepared and samples of the particular stacks are collected from our internal Natural Resource Division and then submitted to the Government Lab. The Government Certified analysis report in Form-K is then collected from Government Lab. The online application is then made in the i3ms system in Form-J with Form-K to Deputy Director of Mines, Joda. After the field inspection of the Inspector of Mines, the recommendation is made to Deputy Director of Mines, Joda for issue of permission to despatch. Then removal permission is obtained from Mining & Geology Department of State Government after stack verification. Thereafter, the stacks are dispatched to our FAP Plant Joda and railway siding by road. The ore from railway siding is transported through rail to different parties.

Then the royalty payment is made and final approval for despatch is granted in Form-L. The customers are then communicated to apply in Form-H.

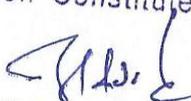
In the transportation process, the approved list of vehicles is submitted to Deputy Director Mines, Joda Office one day before the transportation. All listed vehicles are checked at security gates and a loading slip is issued. The vehicles are then allowed to load the ore from respective stacks in the Stack yard as mentioned in the loading slip. The permitted quantity is loaded and is ensured with the help of Weigh Bridge. After that, a transit pass is generated from the i3ms system, online. The haul road used is maintained to minimize undulation so as to avoid spillage; also, the vehicles are covered with tarpaulins to alleviate the air borne dust from ores enroute. The haul road is water sprinkled at regular intervals so as to minimise the dust generation caused by the hauling of the ore loaded vehicles.

Further, the fines generated during manual processing of ROM are kept separately for screening to recover residual lump. After recovery of the lumps, the fines are stacked separately and sold whenever a market for such ore is available. Miscellaneous operations in the mine includes levelling of dumping yard, preparation and maintenance of haul roads, dozing of boulders from mine face, loading of trucks at stack yard etc.

The outline process flow of the production and transportation of mineral is being shown in Figure -1.



(Figure - 1 : Process outline of production and transportation ore from Joda West Iron & Manganese Mine)

For TATA STEEL LTD.
 By their Constituted Attorney

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