

## BRIEF SUMMARY OF PROJECT

### **Bailadila Iron Ore Project, Deposit-11 Mining Lease, Kirandul, South Bastar Dantewada District, Chhattisgarh**

Bailadila Iron Ore Deposit-11 Mining Lease extends over 874.924 Ha forest land and comprises of Bailadila Deposit-11A, 11B and 11C mines. Initially, the iron ore production operations commenced in the year 1987 from Deposit-11C and the ROM iron ore is hauled to crushing plant located in adjacent mining lease of NMDC i.e Deposit-14 NMZ. Subsequently, the iron ore mining operations commenced in the year 2002 at Deposit-11A. The deposit-11A is sharing common infrastructure facilities with adjacent Bailadila Deposit-10 of NMDC located at Bacheli complex. After creating necessary infrastructure facilities such as crushing plant and down hill conveyor exclusively for Deposit-11B in Deposit-11 M.L. area, the iron ore mining operations commenced from the year 2015 onwards at Deposit-11B.

NMDC has already created integrated infrastructure facilities outside lease area such as Loading plant and MV siding for transportation of iron ore through Railway wagons. Indian Railways have also constructed electrified broad-gauge railway line of 469 Km from Kirandul to Visakhapatnam in the year 1966-69 for transportation of iron ore. The iron ore for Visakhapatnam Steel Plant is sourced entirely from Bailadila mines of NMDC. RINL, KIOCL, Essar Steel meet their iron ore requirements from Bailadila Deposits. Numerous steel plants in C.G. State depend upon Bailadila iron ore mine for their iron ore requirement.

The Deposit 11 ML is located between Latitude 18°37'34.6066" to 18° 41'26.1792" N and Longitude 81° 13'13.2276" to 81°15'18.0396" E and falls in SOI Toposheet E44J2/J6. The topography of the area is hilly terrain. The entire mine lease area is in the forest compartment no.s 1842, 1844, 1845, 1846, 1849 and 1852 to 1854 of Bailadila Reserve Forest. Forest clearance for diversion of 874.924 Ha forest land is also obtained from MoEFCC vide letter no: 9-98/97-FC dated 22/12/1999. The M.L. lease deed has been executed and is valid up to 31/3/2020. Further, Government of C.G, Mineral Resource Deptt, Raipur vide letter dated 3/5/18 renewed lease upto 10.09.2037. The approval of Mining Plan for the period (1-4-15 to 31-3-20) is also obtained from IBM, Raipur vide letter no: 2565 dated 9/12/2016

The balance available iron ore reserves in the Deposit-11 M.L. are 334.07 million tons as on 1/4/2017. With present available reserves and proposed production capacity at 11.30 MTPA, the life of mines in Deposit-11 mines will be about 30 years.

The iron ore mining operations in Bailadila Deposit-11 M.L are fully mechanized opencast mines. The mines adopt using shovel dumper combination and various

process involved are drilling, blasting, excavation, quality control, ore processing (crushing & screening), loading of products, sub grade stockpile and waste disposal.

Drilling is done with blast hole drills. Blasting is done with SME explosives. The blasted material of size less than 150mm is excavated using Shovel (4.6 / 8 m<sup>3</sup> capacity) and unloaded into dumpers of 50/85/100 Ton capacity. The dumpers carry the material on designated haul roads to dumper platform where dumpers unload the material into gyratory crusher. The mined ore from Dep-11A mine, 11B mine and 11C mines transported to respective crushing plants located at Bailadila Deposit-10 M.L, Deposit-11 M.L and Deposit-14 NMZ Mining lease areas. At the crushing plant, the ore is reduced in size to -150 mm. The haul roads have maximum gradient of 1 in 16. Berms of 10-12 meters are left out at worked out benches maintaining over all bank slopes of 45 or less. In laterite and blue dust areas the width of the berm is increased to 20 meters for safety and bench height is kept at 10 meters.

The crushed Iron ore material is transported through closed downhill conveyor system to screening plants-I / II located at Kirandul for Deposit-11B & 11C and to screening plant-II located at Bacheli. The sizing of ore is done in the plant to separate the ore into Lump ore (minus 150mm & plus 10mm), CLO (30/40 to 10mm), Fine ore (below 10mm). The above products are transported through closed downhill conveyor system to loading plants at Kirandul (for Dep-11B & 11C) and at Bacheli (for Dep-11A) where stacking and reclamation is done through mechanized way. Lump & fine ore is reclaimed mechanically and loaded into the Railway wagon at the Loading Plant. The iron ore material from hill top to loading plant is transported through closed down hill conveyor system.

The opening up of iron ore mines in remote areas of Bailadila range has brought the local tribal people to the mainstream civilization by the spectacular efforts of NMDC. NMDC mining projects at Kirandul Complex employs 1626 people directly and about 1000 people are employed through different contractors. Local people are given the preference for employment under semi-skilled and unskilled categories.

NMDC has obtained Environmental clearances for Bailadila Deposit-11A, 11B and 11C from MOEF&CC during various time periods under EIA 1994 / 2006 notification depending upon the development of mines. The E.C. for Bailadila Deposit-11B obtained vide letter no: J-11015/416 / 2005-IA.II (M) dated 11/9/2006 under EIA Notification 1994 for 7.0 MTPA ROM iron ore capacity. The E.C for Deposit-11A obtained vide letter no: J-11015/83/2011.IA.II(M) dated 31/10/2011 under EIA Notification 2006 for 2.8 MTPA ROM Iron ore capacity. The E.C for Deposit-11C (1.5 MTPA) was obtained as part of Integrated E.C of Bailadila Deposit-14/11C Project vide letter no: J-11015/433/2007-IA.II(M) dated 11/9/2007 under EIA notification 2006. Thus, the total E.C. capacity available for Bailadila Deposit-11 ML for Deposit-11A, 11B and 11C mines is 11.30 MTPA ROM Iron ore.

MOEFCC has issued Notification no: 1530(E) dated 6/4/2018, where projects which have obtained Environmental Clearance under EIA Notification 1994, shall submit an application in Form-1 as given in Appendix-II of the EIA Notification 2006 within six months for grant of E.C under the provisions of the EIA 2006.

In view of the above notification dated 6/4/2018, Bailadila Deposit-11B which got E.C under EIA 1994 Notification required to obtain ENVIRONMENTAL CLEARANCE under EIA 2006 Notification.

Since Deposit-11B is part of Deposit-11 ML and it comprises of other deposits such as Deposit-11A and 11C, it is proposed to submit Form-1 for obtaining Environmental clearance for existing ROM Iron ore production capacity of 11.30 MTPA for a lease area of 874.924 Ha by amalgamation of environmental clearances of Deposit-11A (EIA 2006) and 11B (EIA 1994) and Bailadila Deposit-11C (integrated E.C of Bailadila Deposit-14/11C project under EIA 2006).



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