

BRIEF SUMMARY

PROPOSED BUNDER DIAMOND BLOCK

**Buxwaha Protected Forest, Sagoria Village,
Buxwaha Tehsil, Chhatarpur district, Madhya Pradesh**

Area of the Mine: 364 Ha For

**5.00 MTPA Of Kimberlite Ore Production (Diamond Bearing Ore)
With Total Excavation OF 25.04 MTPA (5.00 MTPA Of Kimberlite Ore
+ 3.70 MTPA Of Soil + 16.34 MTPA of Overburden Waste) & 5.00
MTPA Ore Processing Plant (Beneficiation Process)**

Essel Mining & Industries Limited (EMIL), an Aditya Birla Group Company has won **BUNDER DIAMOND BLOCK** through the process of e-auction notified for grant of mining lease over precise notified area of 364 Ha. of Bunder Diamond Project located in Buxwaha Protected Forest, Sagoria Village, Buxwaha Tehsil, Chhatarpur district, Madhya Pradesh.

Letter of Intent (LOI) has been issued by the Govt. of Madhya Pradesh to EMIL vide letter no. F-2-26/2019/12/1 dated 19.12.2019.

BACKGROUND OF THE PROJECT:

The area was initially explored by Rio Tinto Exploration India Private Limited (RTEIPL). Subsequent to submission of PL reports, RTEIPL applied for mining lease over the area of 954 Ha. However RTEIPL decided not to go ahead with the project and surrendered the same to the Government of Madhya Pradesh.

Subsequently the Directorate of Geology and Mining (DGM), Government of Madhya Pradesh, in pursuant to the Mines and Minerals (Development and Regulation) Act, 1957 and the Mineral (Auction) Rules 2015 issued notice inviting tender in July, 2019 to commence the auction process for grant of Mining Lease for Bunder Diamond Project located in Chhatarpur District of Madhya Pradesh.

The e-auction process was conducted for the said mineral block and EMIL was declared as the "Preferred Bidder" and later after fulfillment of Terms and conditions, Letter of Intent (LOI) for grant of mining lease over 364 Ha area of Bunder project was issued to EMIL on 19th December 2019 vide letter no. F-2-26/2019/12/1.

The area for which the LOI has been issued is 364 Ha. only, and is part of the area proposed by RTEIPL (954 Ha). It is much smaller in extent and constitute about 40% of total area of RTEIPL.

Essel Mining & Industries Limited now proposes to obtain Prior Environmental Clearance for mining and processing of Kimberlite Ore (Diamond bearing ore) from Bunder Diamond Block spreading in 364 hectares (Ha.) area and located in Buxwaha Protected Forest, Buxwaha Tehsil, Chhatarpur district, Madhya Pradesh.

The Kimberlite (also known as Lamproite) ore Mining is proposed at 5.00 Million Tonnes Per Annum (MTPA) with Kimberlite Ore processing plant capacity of 5.00 Million TPA (MTPA). The total excavation for 5.00 MTPA of Kimberlite Ore Production (Diamond Bearing Ore) is With Total Excavation of 25.04 MTPA (5.00 MTPA of Kimberlite Ore + 3.70 MTPA of Soil and colluvium + 16.34 MTPA of Overburden Waste).

The proposed activity is considered as Category - A project as per Environmental Impact Assessment (EIA) Notification SO 1533, of 14-09-2006 and subsequent amendments and Prior Environmental Clearance from Ministry of Environment, Forests and Climate Change (MoEFCC) is required.

The estimated recovered Diamonds from 53.70 million tonnes ore material will be approximately 34.20 million carats. It is proposed to produce about 10 mt. Kimberlite ore during the first five years and the remaining 43.7 mt of reserves will be worked for the additional period. With this, life of the mine is estimated at 14 years.

It is proposed to undertake mining by using mechanized opencast mining using drilling and blasting and shovel dumper combination up to a depth of 345m or 100mRL.

ROM mined shall be fed to the Ore processing plant proposed within the lease area. The waste/overburden and soil/colluvium shall be stored and stacked separately at designated areas within the lease.

Ore processing will involve:

- Primary Crushing
- Secondary Crushing and Dry Screening
- Tertiary Crushing
- Wet Screening and Degriting
- Dense Media Separation Plant
- Final Recovery

The quantity of diamond removed per tonne of Kimberlite is 0.63 carat per ton of ore. Thus after processing ore, there will not be any significant weight loss due to removal of diamonds. Thus whole quantity of ore processed, minus losses in process will form tailings.

The tailings generated will be treated in thickener where they are dewatered and thickened by a mechanical process (filter press) to a solids content of about 85% to 90% solids (or better). The solid cake will be disposed to tailing dumps within mining lease area

The water requirement for the mine and ore processing plant is about 16050 m³/day (5.9 Million Cubic Meters/year).

A seasonal nala located on mineralized area will be diverted by constructing dam. With the intent to keep the mine pit from surface water inundation and in turn, to keep workmen safe, construction of the embankment on the diverted stream is proposed. Required water is sourced from the reservoir formed on the upstream of the dam

The storage of water in the reservoir is estimated to be about 17.00 MCM. For tapping 16050 m³/day from this water reservoir, permission will be obtained from the Ministry of Water Resource, Government of Madhya Pradesh.

The mining will intersect ground water and necessary permission will be obtained from CGWA for working below ground water table.

All the required statutory facilities such as vocational training centre, canteen, rest shelters, first aid room, ambulances, crèche, etc will be provided.

The manpower proposed to be employed will be around 400 Persons (Direct and Indirect) for all levels including crushing and screening plant, Diamond Processing Plant and other services

The peak demand of electric power is estimated at 22 - 25 MW. EMIL will Approach Madhya Pradesh State Electricity Board for tapping the required electric power from suitable source after ascertaining the feasibility.

There are no wildlife sanctuaries, national parks, Tiger Reserves, Elephant Corridors, eco-sensitive areas within the 10 km radius of the mining lease area. The nearest National Park/Sanctuary is Panna Tiger Reserve (PTR) with its buffer zone at 19.03 km.

The capital Investment Cost is estimated as Rs. 2500 crores.