



BRIEF SUMMARY OF THE PROJECT

This proposal is for Periyathirukonam Limestone Deposit over an Extent of 74.81.0 Ha of M/s. The India Cements Limited, Ariyalur Taluk and District, Tamil Nadu. The peak production capacity of 2.34 MTPA of ROM for obtaining TOR from MoEF&CC towards getting environmental clearance.

M/s. The India Cements Ltd (ICL) was established in 1946 and the first plant was setup at Sankarnagar in Tamilnadu in 1948. Since then it has grown in stature to many plants spread over Tamilnadu, Andhra Pradesh, Telangana, Maharashtra & Rajasthan. The company has existing cement plants / grinding units at Dalavoi-Ariyalur District, Sankarnagar-Tirunelveli District, Sankari-Salem District & Grinding unit at Ponneri, Tiruvallur District in Tamil Nadu.

The company has proposed to expand its existing cement plant in Ariyalur district from 2.16 MTPA to 4.71 MTPA of cement capacity and has already obtained Environmental Clearance from MoEF&CC vide F.No.J-11011/79/2012/IA-II(I) dated: 27.09.2013 for Expansion. Besides operating the existing limestone mining leases, to meet the limestone requirement of their existing cement plants and to meet additional Limestone requirements of the proposed expansion, company has purchased limestone bearing lands and obtained a fresh mining lease in Periyathirukonam area.

M/s. The India Cements Limited, were granted a Mining Lease namely Periyathirukonam Limestone Deposit over an Extent of 74.81.0 Ha of Patta-dry lands in Periyathirukonam, Reddipalayam and Edaiyattankudi Villages of Ariyalur Taluk and District, Tamil Nadu, by the Commissioner of Geology and Mining, Chennai, vide letter Rc.No. 13035/MM1/1999 dated 10.01.2017.

MOEF&CC notification stipulates that, any new project requires environmental clearance. Under the above circumstances ICL has initiated action towards obtaining environmental clearance for this project.

Prior to obtaining environmental clearance, as per MOEF&CC notification of September 2006, Form I and Feasibility report have to be submitted along with proposed Terms of reference (TOR) for the project for stipulating the TOR for the project by MOEF&CC, Govt. of India.

This project falls under **category A** as per MoEF&CC notification in this respect, because of mining lease being more than 50 Ha. Hence, Form – 1, proposed TOR and feasibility report have to be submitted to MoEF&CC, New Delhi for their approval and prescribing TOR and according EC after submission of EIA/EMP report to them.





Mining plan for this proposed lease over an extent of 74.81.0 Ha is already prepared and is submitted for approval.

Entire limestone production from this Mining Lease will be used captively in the various ICL's cement plants located in the State of Tamil Nadu.

Periyathirukonam mining lease area is located in the part of revenue villages of Periyathirukonam, Reddipalayam and Edaiyattankudi, Ariyalur Taluk and District, Tamil Nadu State. Periyathirukonam limestone deposit is located about 19 Km South East of Ariyalur, the District Head Quarters. The nearest rail head is at Ariyalur on Madurai-Chennai section of the Southern Railways. The nearest Airport is at Trichy, about 75 kms SSW of the deposit area. Cuddalore is a nearest port located on the coast of Bay of Bengal, about 130 Kms NNE of the deposit.

This area is accessible from V.Kaikatti, which is located at a distance of 11 Km. from Ariyalur on Ariyalur – Jayankondam State Highway. The area is accessible through the metal /tar road branching off from V.Kaikatti situated about 8 km from the site.

The applied mining lease area falls in Survey of India Toposheet No. 58 M/4 located between Latitude - 11° 03'39.45"N - 11° 04'18.54"N and Longitude - 79° 09'01.03"E - 79° 09'56.38"E.

The mining lease area and the 10 km buffer zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc. No forest land is involved in the lease area. The area does not come under CRZ category.

In the 10 km buffer zone, water bodies namely Uppu Odai – in between the lease area, Marudaiyar River – more than 130m – S, Kallar River – 3.7km- SW, Vilangudi Odai – 7.4km – NE, Ottan Odai – 3.4km- SW, Sukra Eri – 6.6km – SE, Chempan Odai – 9.2km- W, Pullambadi Canal – 9.2km – S are located from lease boundary. Marudaiyar River passing South of the lease area is almost dry throughout the year except during the North–East monsoon. Uppu odai passing in between the lease area is dry throughout the year except during the rainy season. Water flows from north to south and join in Marudaiyar River ultimately. Reserved forests like Vilangudi R.F. - 3.8 KM – NE, Ulliyakkudi R.F. – 5.4 KM – NE, Ambapur R.F. – 6.4 KM – NE, Alvay R.F.- 9.0 KM – E, Suttamalli R.F. – 9.4 KM – E, Sundaresvarapuram R.F. – 6.5 KM – NE, Manageri R.F. – 7.7 KM – NE, Kallankadu R.F. – 9.9 KM – NE are located from lease boundary.

The topography is almost gentle sloping from West to East in western side and East to West in Eastern side. Maximum elevation is 40 m and minimum elevation is 35 m above Mean Sea Level.





Proposed Mining method is mechanized opencast mine by using heavy earth moving equipment's in combination with deep hole drilling, blasting and adaptation of non-conventional mining method of Ripper dozer/Rock breaker/Xcentric breaker.

No blasting is required as the top soil and overburden is soft and friable. The Top soil and overburden will be removed by excavator and load onto the Tippers.

The Bench height will be maintained as 5 m and Bench width is 5 m with Bench slope is 70°.

As per the prospecting report by the Department of Geology and Mining, State Government of Tamil Nadu estimated reserves/resource as per UNFC. The Proved mineral reserves (111) is 13.36 million tons. At the proposed peak production capacity of 2.34 MTPA of ROM, the Life of mine will be 10-12 Years. However the life of mine may change based on achieving the targeted production.

In this deposit, there are two types of overburden i.e. Topsoil and Sandy clay. Totally about 9.04 million tons of waste comprising 2.59 million tonnes of top soil, 4.97 million tons of OB/IB & 1.48 million tons of mineral rejects is expected to be generated from this lease area.

The first year, mining operation will be commenced from northwestern side of mining lease area. Second year onwards mining operation will be progressed towards eastern, south side and further western side. During the first five year mining plan period about 38.04.0 hectares of area will be opened up and about 16.23.0 hectares will be backfilled. The mine haul road inside the mine will be laid with a gradient of 1:16.

At the end of mine life about 54.52.0 hectares of area will be opened up and an area of 26.15.5 hectares will be backfilled with mine waste and remaining area of 28.36.5 hectares will be left and converted as water body. The ultimate pit limit has been drawn to mine the shell limestone for a maximum depth of 44 m.

Top soil will be removed separately and utilized for tree plantation. Initially top soil will be spread out over the protective/Peripheral bund. Subsequently top soil generation will be concurrently used to spread over on the top of back filling area.

During initial period overburden, waste and reject will be used for formation of protective and peripheral bunds. Subsequently, the waste will be dumped in the already excavated area as a part of backfilling concurrently on the south western side. The height of refilling area will be maintained to original ground profile. As such there will not be any external waste dump.

Total Water requirement for the mining operations will be 45.0 KLD for domestic, dust suppression, green belt & workshop. For drinking & industrial purpose, bore well water will be





initially used. Later, on creation of mine floor sump, harvested rain water, seepages if any in the sump can be used for industrial purpose.

Infrastructure facilities like work shop, office, first aid room, rest room and canteen cum rest shed and site service will be provided at mining site.

All the main mining equipment's will be diesel operated. The electricity requirement of 1200 units per day for lighting purpose and pumping water from Mine Pit, will be sourced from TNEB. DG Set of 50 KVA will also be provided as an alternate source to meet the power requirement.

The direct manpower strength will be around 18 and indirectly more than 100 persons will benefit due to employment prospects in allied services like logistical operations, trading activities, casual labour needs, green belt creation etc.

The limestone produced from this Mining Lease will be used for manufacture of cement in company's factories in Tamil Nadu initially and can also cater to the need of the Dalavoi Cement plant expansion under consideration.

To enhance the life style, income generation opportunities and educational levels of the local community in a big way, M/S. The India Cements Ltd has decided to spend Rs. 10 Lakhs per annum from this lease area for various CSR activities. The main focus will be in developing health, education, skill development, environment development etc.

Financially, the local community will have benefits like increased income levels, better life styles etc. Besides, the local panchayats, State and Central Governments will also benefit due to receipt of taxes, cess, royalty, DMF and NMET etc., from the project proponent.

In the context of accrual of tangible benefits on all fronts arising from project operations, the project is worthy of approval for improving the infrastructural, social and financial status of the region, the State and the country, as a whole.

