

## **1.0 EXECUTIVE SUMMARY**

### **1.1 Introduction**

The Rentachintala Quarry Owner's Association has formed a cluster of 44 quarry sites in order to apply for Environmental Clearance. This is in compliance to the Office Memorandum dated 24th December 2013 by MoEF, New Delhi regarding the cluster formation. The projects proposed are within 500m for the periphery of each other. The total area of the cluster comes to around 57.31 Ha. Also the interstate boundary between Andhra Pradesh and Telangana fall within 5km from the cluster zone.

The list of quarry owners, extent of lease along with their survey numbers is attached as Annexure 1. The cluster falls in Goli Village, Rentachintala Mandal, Guntur District, Andhra Pradesh. There are 41 existing leases and 3 new leases in the cluster.

## **2.0 INTRODUCTION OF THE PROJECT/ BACKGROUND INFORMATION**

### **2.1 Identification of Project and Project Proponent**

The Rentachintala Quarry Owner's Association has been formed by the quarry owners who have their quarries in Goli Village of Rentachintala Mandal.

### **2.2 Brief Information about the Project**

The cluster area of 57.31 Ha is located in Government land. Open cast semi mechanized mining is followed to extract building stone material. The nearest habitation from the proposed project is in East direction ie., Goli village.

### **2.3 Need for the Project and Its Importance to the Country or Region**

The demand for building stone has increased due to rapid industrialization and growth in infrastructure. So the number of building stone producing quarries is increasing in India. Building Stone and M-Sand have to produced as they form the aggregate in the concrete mixture used in the construction industry. The Indian Railways also requires the material for the maintaining the existing network and also for the never ending expansion.

As per EIA notification 2006 project proponent is submitting the proposal to get Clearance of from MoEF, GOI.

**2.4 Demands-Supply Gap**

There is huge demand since the material is used extensively in Construction, Railways, Roadways and many other sectors. This project will help in reducing the Demand-Supply gap in the area.

**2.5 Domestic/ Export Markets**

The material is used in the domestic market and in there is no scope for exporting the material.

**2.6 Employment Generation**

Proposed mining is semi mechanized method and this project operation will provide livelihood to the 500 workers. It will provide employment to the people residing in vicinity.

**3.0 PROJECT DESCRIPTION****3.1 Type of Project Including Interlinked and Interdependent Projects, If Any.**

No interlinked projects are associated with this project.

**3.2 Location of the project**

The mining cluster lease area is located in Goli Village, Rentachintala Mandal, Guntur District, Andhra Pradesh. The mine lease area falls in Survey of India Toposheet No. 56 P/10 (New: E44T10).

Figure 1  
Location Map



### 3.3 Details of Alternate Sites

No alternate site was considered as the project is mineral specific and site specific.

### 3.4 Size or magnitude of operation

The proposed cluster has lease over an area of 57.31 Ha.

### 3.5 Method of Mining

The quarrying in the sanctioned area is of open cast method by semi-mechanized way. Considering the technical parameters like surface topography, quality variations, geo-technical aspects are required for production and extraction of building material in the area. It is proposed to work from the deposit by adopting benches formations with ultimate pit slope of 45°. Only Jack Hammer, drilling is required for controlled blasting to break the insitive sheet rock. The benches height and the width will be maintained as specified by D.G.M.S. The width of the working benches shall not be less than the height. The year wise production and development plan indicates the site for disposal of waste, site for afforestation as shown in map. The plan showing position of the working pit proposed for extension etc. Due care has to be taken in designing the benches and advancing the benches for production. The ground water table is much below the proposed working level.

The machinery used to carry out the mining operations are given **Table 3.5**

**Table 3.5**

#### **Mining Machinery**

1	Excavator with breakers (Tata 210 LC)
2	Air Compressor (Atlas Cop)
3	Tractor Moulded Compressor
4	JCBs for loading
5	Jack hammer
6	Tippers
7	Tractor for water supply

### 3.6 Raw Material Required Along With Estimated Quantity, Likely Source, Marketing Area of Final Product/S, Mode of Transport of Raw Material and Finished Product

No raw material will be required in the proposed project. The operation involves the extraction of material and dumping in stock yard. Loading of the building stone

material will be done mechanically by tippers of 10 Tons capacity and transported from the quarry to the required site. The rejected material will be dumped separately.

### **3.6.1 Use of Mineral**

The extracted material will be used in Construction, Railways, Road ways and many other sectors

### **3.7 Processing**

No processing at site is involved.

### **3.8 Resource Optimization/ Recycling and Reuse**

Not envisaged.

### **3.9 Availability of Water Its Source, Energy/ Power Requirement and Source**

#### **3.9.1 Water Requirement**

Water is required only for drinking purposes and dust suppression. The number of working people is around 500 so the domestic water requirement will be around 23 KLD. Water will be required for dust suppression and greenbelt also. This water will be supplied from bore wells of nearby area.

#### **3.10 Quantity of Wastes to be Generated (Liquid and Solid) And Scheme for their Management/ Disposal**

##### **3.10.1 Solid Waste Generation& its Disposal**

In this type of extraction the recovery factor is as high as 95 % so only 5% comes out as waste. This waste shall be stacked in the dump yard to reuse for reclamation purpose. The waste will be dumped along the southwest border of QL area.

##### **3.10.2 Liquid Effluent**

No liquid effluent will be generated at the mine site. The domestic wastewater generated will be sent to septic tanks followed by soak pits.

### **4.0 SITE ANALYSIS**

#### **4.1 Connectivity**

#### **4.1.1 Nearest Railway Station**

Rentachintala railway station is about 6 km distance towards SW direction from the mine area.

#### **4.2 LANDFORM, LANDUSE AND LAND OWNERSHIP**

The notified area is Government land. Most of the area is broken up for the extraction of building stone. Only 3 new leases are proposed out of the 44 leases in the cluster.

#### **4.3 Climatic data from secondary sources**

Rentachintala has a Tropical wet and dry climate. The highest temperatures are experienced in the month of May, when the summer season is at its peak. The maximum temperature averages more than 40 degrees, occasionally reaching as high as 45 degrees. The highest temperature ever recorded is 52 degrees Celsius in 2012. Winters are pleasant, with occasional spells of rain from the northwest monsoon.

### **5.0 PLANNING BRIEF**

#### **5.1 Planning Concept**

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## **5.2 Population projection**

The project will employ mostly workers from nearby villages. There will not be any increase in population due to the project.

## **5.3 Land use planning**

The project site is Government land. There will be change in land use as the material is excavated.

## **5.4 Assessment of Infrastructure Demand (Physical & Social)**

On the basis of the preliminary site visit, the infrastructure demand in the villages was assessed on the basis of need and priority. The existing infrastructure is satisfactory but the approach road has to be maintained regularly.

## **5.5 Amenities/Facilities**

Site Services like Work shed, First Aid, Drinking water as required will be provided within the leased area.

## **6.0 PROPOSED INFRASTRUCTURE**

### **6.1 Industrial Area (Processing Area)**

No infrastructure is proposed.

### **6.2 Residential Area (Non Processing Area)**

As the local persons will be given employment, no residential area/ housing is proposed within the mining lease area.

### **6.3 Green Belt**

Green belt will be developed along the boundaries of mine lease area.

### **6.4 Water Management**

The water required will be supplied from the nearby villages through tankers.

**6.5 Sewerage System**

The domestic wastewater generated will be sent to septic tanks followed by soak pits.

**6.6 Industrial Waste Management**

Not applicable.

**6.7 Solid Waste management**

The waste generated which is about 5% will be stacked in the dump yard proposed in the mine area.

**7.0 REHABILITATION AND RESETTLEMENT (R&R) PLAN**

Not Applicable.

**8.0 PROJECT SCHEDULE & COST ESTIMATES**

The average cost of production in each lease would be approximately Rs.10.00 Lakhs

**9.0 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATIONS)****9.1 Financial and Social Benefits with Special Emphasis on the Benefit to the Local People Including Tribal Population, If Any, In the Area.**

The extraction of the material will be done in semi mechanized manner so local labour will be used. Supporting ancillary facilities will help the local people once the project commences.

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