

EXECUTIVE SUMMARY

1.0 INTRODUCTION

Sri Ramanagouda proposed Grey Granite Quarry over an extent of 4-00 Acres at Sy No. 407/4, Mudugal Village, Lingasugur Taluk, Raichur District, Karnataka. The type of land proposed is Patta land belongs to Sri Govindgouda Devappagouda Nadagoudar. Sri Ramanagouda entered an agreement with Sri Govindgouda Devappagouda Nadagoudar and proposed the project.

Sri Ramanagouda applied for quarry lease under KMMCR 1994 to Dept. of Mines and Geology Raichur. The senior Geologist Dept. of Mines and Geology Raichur given the instructions to submit approved quarry plan and Environmental Clearance as per the provisions of KMMCR 1994.

By seeking environmental clearance for Grey Granite quarrying Sri Ramanagouda submitted application to SEIAA Karnataka as per the provisions of EIA notification 2006.

The lessee has submitted ToR application (Form-1, Pre-Feasibility Report and Approved Quarry Plan) in order to prepare EIA report for grant of Environmental Clearance for Extraction of Grey granite vide proposal no. SIA/KA/MIN/45332/2019 to SEIAA Karnataka. The proposal was considered by SEAC Karnataka during its 235th SEAC meeting dated on 3rd December 2019. SEAC Karnataka decided to recommend the proposal for grant of Terms of Reference (TOR) for preparing EIA/EMP report and conducting public consultation vide its letter No. SEIAA 742 MIN 2019 dated 29/2/2020.

The proposed project is covered under activity 1 (a) "Mining of minerals" as per the EIA notification vide gazette no. S.O. 1533 dated 14th September 2006. As per MoEF Notification dated 1st July 2016, combined sketch prepared by DMG Raichur, there are 21 leases including this lease within 500-meter radius from this lease combined area of these being 80 acres 30 Guntas and these being more than the threshold limit of 5 Ha the committee decided to categorize this project under B1 Category.

1.1 Location of the Project

The Grey Granite Quarry is located at Survey No. 407/4, Mudugal Village, Lingasugur Taluk, Raichur District, Karnataka.

TABLE 1.0: SALIENT FEATURES OF THE PROJECT SITE

Sl. No	Particulars	Details																		
1.	Project Location	Sy No: 407/4 Mudugal – Village Lingasugur - Taluk Raichur – District Karnataka.																		
2.	Latitude/Longitude	<table border="1"> <thead> <tr> <th>Sl No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>15°59'11.5"</td> <td>76°27'49.3"</td> </tr> <tr> <td>2</td> <td>15°59'10.7"</td> <td>76°27'50.6"</td> </tr> <tr> <td>3</td> <td>15°59'01.5"</td> <td>76°27'46.8"</td> </tr> <tr> <td>4</td> <td>15°59'59.6"</td> <td>76°27'44.8"</td> </tr> <tr> <td>5</td> <td>15°59'00.0"</td> <td>76°27'44.4"</td> </tr> </tbody> </table>	Sl No.	Latitude	Longitude	1	15°59'11.5"	76°27'49.3"	2	15°59'10.7"	76°27'50.6"	3	15°59'01.5"	76°27'46.8"	4	15°59'59.6"	76°27'44.8"	5	15°59'00.0"	76°27'44.4"
Sl No.	Latitude	Longitude																		
1	15°59'11.5"	76°27'49.3"																		
2	15°59'10.7"	76°27'50.6"																		
3	15°59'01.5"	76°27'46.8"																		
4	15°59'59.6"	76°27'44.8"																		
5	15°59'00.0"	76°27'44.4"																		
3.	Location covered in Topo sheet No	56D/8																		
4.	Climatic Conditions	<ul style="list-style-type: none"> • Avg. Ambient air temp 17.7⁰ C to 45⁰ C • Avg. Annual rainfall 621 mm <i>Source: CGWB Raichur</i>																		
5.	Site elevation above Mean Sea Level	<ul style="list-style-type: none"> • Highest Elevation: 539 m MSL • Lowest elevation: 535 m MSL 																		
6.	Type of Land	Patta Land converted for quarrying																		
7.	Site topography	Flat Terrain and having gentle slope towards North-Eastern side																		
8.	Nearest roadway	SH 29 – 1.1 Km NW (Gangavathi -Lingasugur Road)																		
9.	Nearest Railway Station	Raichur railway Station – 96.4 Km (NE)																		
10.	Nearest Airport	Rajiv Gandhi International Airport – 251.4 Km (NE)																		
11.	Nearest village/major town	Vyasa Nandihal Village 2.0 km, (S) Lingasugur Town - 19.6 Km (S)																		
12.	Ecologically sensitive zone	None within 10 km radius area																		
13.	Nearest Reserved/Protected forests	None within 10 km radius area																		
14.	Historical/tourist places	None within 5 km radius of mine lease area																		
15.	Nearest water bodies	Tungabhadra Right bank Canal – 2.0 Km (S)																		
16.	Seismic zone	The area is not known for natural hazards. Seismically, this area is categorized under Zone-II as per IS-1893 (Part-1)-2002. Hence, seismically the site is a stable zone.																		

2.0 PROJECT DESCRIPTION

2.1 Method of Quarrying

Quarrying of Grey Granite on a small scale by semi-mechanized method of opencast workings will be carried out. All the operations are carried out by semi-mechanized method using excavation, drilling and wire saw cutting will be engaged.

2.2 Anticipated life of the quarry

The life of the mine will be till the reserve gets ended i.e. for 5 Years at the current proposed rate and per the current reserve estimation.

2.3 Conceptual Quarry Plan

After complete extraction of estimated reserves, the reclamation of area of land affected by mining activities will be taken up in order to restore to its original use to the possible extent. The reclamation measures proposed will be backfilling in a phased programme wherever it is necessary. The deep pits after completion of mining which could be serve as a water pond, will not be consider for back filling and will be left as it is after taking necessary land scoping and providing protective measures in the aspects of safety.

2.4 Waste Generation & Disposal

During the course of quarrying apart from the granite blocks other waste materials like top soil, overburden and dressed waste material are generated

The generation of waste during the course of quarrying for 5 years' period will be about be 27,864 Cum (83,592 tons) transported to the dump yard. The area selected for dump yard is around 0-20 acres is sufficient to accommodate the waste generated during the course of 5 years. The height of the dumps will be maintained average 10 mtrs. from the ground surface taking necessary measures to maintain the dump slope at the angle of 37° natural slope from the horizontal for proper stability, keeping a road width of 5 mtrs. with 1 in 16 gradients.

2.5 Water Requirement & Source

Total water requirement for the project will be 6.6 KLD, Requirement is met by procurement of water from the bore wells from nearby villages and nearby Tankers.

2.6 Manpower Requirement

The proposed quarry provides direct employment of 30 people Most of the directly employed manpower falls under skilled category and the respective distribution / numbers is follows. Preference will be given to the local people as per their eligibility.

2.7 Site Infrastructure

The quarry has its own office in project site canteen, first-aid center etc. quarry office is well connected with wireless and telephone, internet & e-mail facilities for communication. The quarry is provided with a workshop to undertake repairs and regular maintenance of mining machinery deployed.

3.0 EXISTING ENVIRONMENTAL SCENARIO

Baseline Environmental Studies Meteorology & Ambient Air Quality

Summary of Meteorological data generated at site (November 2019 to January 2020

Temperature (°C)	13.5 to 34.1°C
Relative Humidity (%)	41% to 67%
Wind Direction	SW
Calm wind %	11.02%

3.1 Ambient Air Quality Status

From the results, it is observed that the ambient air quality with respect to PM10, PM2.5, SO2, and NOx at all the monitoring locations is within the permissible limits specified by CPCB.

3.2 Ambient Noise Levels

Ambient noise level monitoring is carried out at the 11 monitoring locations, those were selected for ambient air quality monitoring. The monitoring results

are within limits.

3.3 Biological Environment

There is no National Park, Wildlife Sanctuary and Biosphere Reserve within 10 km radius.

Proposed Biological Environment Conservation Measures

- Thick Green belt will be developed around Quarry lease area and along transport road.
- Periodic maintenance of mineral transport road
- Regular sprinkling of water through mobile tanker on mineral transport road
- Mineral carrying trucks are loaded with only the stipulated quantity to avoid overloading and covered with tarpaulin to avoid spillage.

3.4 Socio-economic Environment

- There is no habitation in and adjacent the site. There is no rehabilitation and resettlement involved in the project.
- The said Quarry provides direct employment to 30 people. Most of the directly employed manpower falls under skilled category and the respective distribution / numbers is follows. Preference will be given to the local people as per their eligibility.
- The existing infrastructure facilities are sufficient to cater the needs of the granite Quarry. However, the Quarry management will take efforts as a part of CER for improvement in civic amenities like sanitation, drinking water facilities, transport road, etc. in the nearby villages.

4.0 ENVIRONMENTAL MONITORING PROGRAM

An Environmental Management Cell (EMC) will be established in the Quarry under the control of Quarry Manager. The EMC will be headed by an Environmental Officer having adequate qualification and experience in the field

of environmental management regular and periodic. Environmental monitoring of Ambient Air Quality, Water table depth, Water quality, Ambient Noise Levels, Soil Quality, CSR activities etc. will be carried out through MOEF accredited agencies and reports will be submitted to KSPCB/ Regional office of MoEF&CC.

5.0 RISK ASSESSMENT & DISASTER MANAGEMENT PLAN

The assessment of risk in the grey granite quarry project has been estimated for Slope failure, Movement of Equipment's, Inundation due to surface water, Dust hazards, Hazards associated with use of Diesel Generator Sets and flooding of lower benches and corresponding mitigation measures are suggested in the EIA report.

6.0 PROJECT BENEFITS

The grey granite quarry project would generate additional employment opportunities which would finally result in improvement in the quality of life of people of the nearby villages. In line with this CER policy, Sri Ramanagouda will carry out community welfare activities in the following areas:

- Community development
- Health care
- Drainage and sanitation
- Roads

7.0 ENVIRONMENTAL MANAGEMENT PLAN

An Environmental Management Plan comprised of following set of mitigation, management, monitoring and institutional measures to be taken during implementation and operation of the project, to eliminate adverse environmental impacts or reduce them to acceptable levels.

Use of the environmental management plan addresses the components of environment, which are likely to be affected by the different operations in the project. The capital cost of the project is approx. Rs 50 Lakhs. It is proposed to provide an amount of Rs. 8.5 Lakh as capital cost and Rs. 5.1 Lakhs per annum as recurring expenses towards implementation of the environmental action plan.

8.0 CONCLUSION

The Grey Granite Quarry project of Sri Ramanagouda will be beneficial for the development of the nearby villages. Some environmental aspects like dust emission, noise, siltation due to surface run-off, etc. will have to be controlled within the permissible limit to avoid impacts on the surrounding environment. Necessary pollution control equipment like water sprinkling, plantation, personal protective equipments, etc., will form regular practice in the project. Additional pollution control

The overall impacts of the Grey granite quarry will be positive and will result in overall socio- economic growth of nearby villages.