



**Lessee: Sri. R. Balaramudu**

## EXECUTIVE SUMMARY

### INTRODUCTION

Sri. R. Balaramudu has applied for TOR in order to prepare EIA report for grant of Environmental Clearance as per MoEF Notifications S.O. 1533(E) dated 14-09-2006 for extraction of Quartz having lease area of 1.58 Acres located in Survey. No. 84 of Appalapura Village, Sandur Taluk Ballari District, Karnataka.

The application for TOR was submitted in order to prepare EIA report for grant of Environmental Clearance under violation category (Form-1, Pre-Feasibility Report and Approved Quarry Plan) for Quartz was considered vide proposal no. SIA/KA/MIN/35263/2019 to SEIAA, Karnataka. The proposal was considered by SEAC Karnataka during its 234<sup>th</sup> SEAC meeting dated 14<sup>th</sup> November 2019. SEAC, Karnataka decided to recommend for grant of Terms of Reference (TOR) under violation category as the proponent has worked in the year 2015-16 without obtaining Environmental clearance and has violated the Hon'ble NGT order dated 13.01.2015. SEIAA, Karnataka issued Terms of Reference (TOR) for preparing EIA/EMP report and conducting public consultation vide its letter no. SEIAA 374 MIN 2019 dated 28.01.2020.

### Location of the Project

The Quartz Quarry with an extent of 1.58 Acres of mining lease area of located in Survey. No. 84 of Appalapura Village, Sandur Taluk Ballari District, Karnataka:

**TABLE 1: SALIENT FEATURES OF THE PROJECT SITE**

Sr. No.	Particulars	Details		
		Corner Point No	Latitude	Longitude
1.	Latitude/Longitude	BP-1	N 15° 06' 18.4"	E 76° 44' 09.60"
		BP-2	N 15° 06' 20.7"	E 76° 44' 05.40"
		BP-3	N 15° 06' 19.3"	E 76° 44' 05.00"
		BP-Y	N 15° 06' 17.8"	E 76° 44' 06.90"
		BP-X	N 15° 06' 17.5"	E 76° 44' 08.90"
		2.	Site elevation above MSL	54.0 MSL to 543.0 MSL
3.	Land use at the proposed project site	<b>Particulars</b>	<b>Existing land use (Acres/Cents)</b>	
		Quarry Workings	0.25	
		Waste Dump Yard	--	
		Roads	--	
		Mineral Storage	0-12	



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Sr. No.	Particulars	Details	
		Proposed Buffer Zone	0.59
		Undisturbed area	0.62
		Total	1.58
4.	Nearest roadway	NH 63 – 8.85 Kms (NW)(Bellary –Hubli Road) SH 132 (Kudatini –Ballary Road)- 6.00 Kms(NE) Major District road – Anthapura – Tumati Road – 0.22 Kms(S)	
5.	Nearest Railway Station	Toranagallu Railway Station – 13.20 Kms(NW)	
6.	Nearest Railway line	Bellary – Guntakal broad-gauge section of South western railways	
7.	Nearest Air Port	Jindal Vijaynagar Airport ~ 14.03 km, towards Northwest	
8.	Nearest village/major town	Appalpura Village – 1.80 Kms (NE) Bellary Town ~ 20.0 km, towards East	
9.	Hills/valleys	No major hills and valleys within 10 km radius	
10.	Ecologically sensitive zone	Chikkantapur Reserved Forest -0.30 kms (N) Bellary Reserved Forest – 2.00 KMs(SE) The Project site does not come under Western Ghats	
11.	Reserved/ Protected forests	Chikkantapur Reserved Forest -0.30 kms (N) Bellary Reserved Forest – 2.00 KMs(SE)	
12.	Historical/tourist places	None within 5 km radius area	
13.	Nearest Industries	Suvan Steel: 0.07 Km, E Haraginadona Iron Ore mine: 5.65 Km, SW	
14.	Nearest water bodies	Avinamadagu Kere – 2.30 kms(S)	

## PROJECT DESCRIPTION

### Method of Mining

An open cast Other than Semi Mechanized method will be adopted to operate the area. Since, the annual production is about 22,000 Tonnes per annum for five years, the Open cast method will be followed during the plan period

### Anticipated life of the mine

It may be seen that during plan period, it is proposed to maintain a suitable quartz production of about 22,000 tons per annum for 24 years.

### Conceptual Mine Plan

Based on reserves of quartz as Production capacity of 22,000 Tonnes per annum and will be excavated for the 5 years plan period, thus the anticipated life of the quarry shall be 24 years.



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### **Waste Generation & Disposal**

There is no generation of waste from the quarry as the recovery will be 100%.

### **Water Requirement & Source**

Total water requirement for the project will be 12.60KLD, Requirement is met by procurement of water from the bore well nearby Tankers.

### **Manpower Requirement**

The said mine provides direct employment to 50 people and generate indirect employment for several hundred people. Most of the directly employed manpower falls under skilled category Preference will be given to the local people as per their eligibility.

### **Site Infrastructure**

The Quarry will have its own office premises, 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.

## **EXISTING ENVIRONMENTAL SCENARIO**

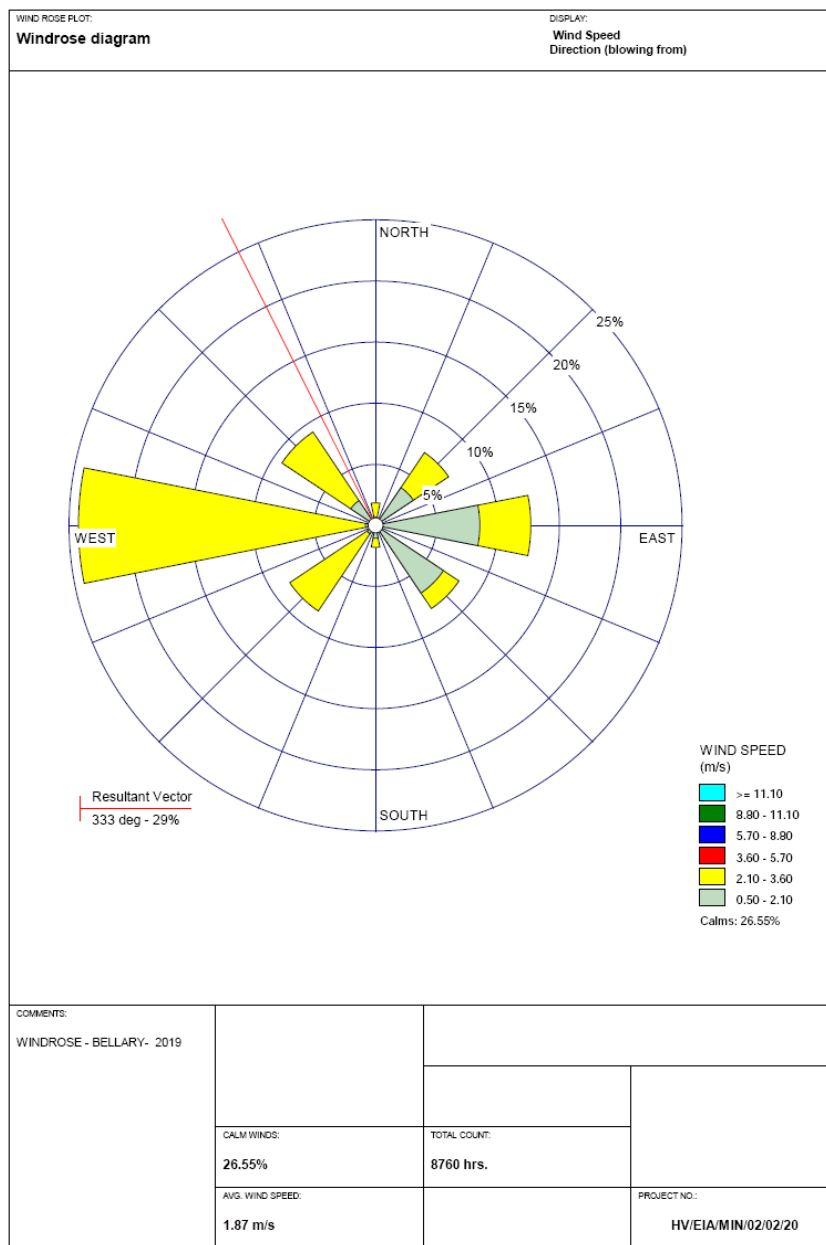
### **Baseline Environmental Studies**

#### **Meteorology & Ambient Air Quality**

##### **Summary of Meteorological data generated at site (October 2019 to January 2020)**

Temperature (°C)	15.6°C to 34.2°C
Relative Humidity (%)	39% to 73%
Wind Direction	W
Calm wind %	26.55%

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### Ambient Air Quality Status

From the results, it is observed that the ambient air quality with respect to PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> at all the monitoring locations is within the permissible limits specified by CPCB.

### Ambient Noise Levels

Ambient noise level monitoring was carried out at the 9 monitoring locations, those were selected for ambient air quality monitoring. The monitoring results are within limits.



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## **Biological Environment**

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

There are 2 Reserved Forests:

Chikkantapur Reserved Forest -0.30 kms (N)

Bellary Reserved Forest – 2.00kKms(SE)

## **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.

## **Socio-economic Environment**

- There is no habitation or private land in the Quartz Quarry. There is no rehabilitation and resettlement involved in the project.
- The said Quarry provides direct employment to 50 people and generate indirect employment for several hundred 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 Quartz 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.

## **ENVIRONMENTAL MONITORING PROGRAM**

An Environmental Management Cell (EMC) will be established in the Quarry under the control of Mines 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.

## **RISK ASSESSMENT & DISASTER MANAGEMENT PLAN**

The assessment of risk in the Quartz Mining project has been estimated for Slope failure, Movement of HEMM, 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/EMP report.

## **PROJECT BENEFITS**

The Quartz Mining 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



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this CER policy, Sri. R. Balaramudu will carry out community welfare activities in the following areas:

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

A budget of Rs. 22.3 Lakh per annum as recurring expenses has been proposed for implementation of Socio-economic welfare activities in the nearby villages.

### **ENVIRONMENTAL MANAGEMENT PLAN**

Judicious 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. Rs329Lakhs. It is proposed to provide an amount of Rs. 18.7 Lakh as capital cost and Rs. 22.3 Lakhs per annum as recurring expenses towards implementation of the environmental action plan

### **CONCLUSION**

The Quartz Quarry project of Sri. R. Balaramudu, 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 equipment, etc., will form regular practice in the project. Additional pollution control measures and environmental conservation measures will be adopted to control/minimize impacts on the environment and socio-economic environment of the area. Measures like development of thick green belt and plantation within quarry lease area and along transport road, adoption of rainwater harvesting in the quarry etc. will be implemented. The CSR measures proposed to be adopted by the quarry management will improve the social, economic status of the nearby villages.

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