

## EXECUTIVE SUMMARY

### INTRODUCTION

Neelesh G. Madarkhandi 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 Ordinary Sand Quarry having lease area of 5-20 Acres located in Patta land, Sy. No – 54/2 Kolar Village, Koppal Taluk, Koppal District, Karnataka

As the proposed project is coming under cluster situation and in the cluster as the total area extent is greater than 5 Ha & as per the Hon'ble NGT order dated 13th September 2018 and 11th December 2018 it is considered as "B1" category. The application to grant prior Environmental Clearance for the proposed project was considered by the KSEAC in its 269th SEAC meeting dated 27<sup>th</sup> October 2021. SEAC for determination of the Terms of Reference (ToR) for preparation of the Environmental Impact Assessment (EIA) report. The Committee has suggested specific Terms of Reference (ToR) for preparation of the EIA report and Environmental Management Plan and for conducting public hearing vide its letter No. SEIAA 542 MIN 2021.

### Location of the Project

The "Ordinary Sand Quarry" having lease area of 5-20 Acres located in Patta Land, Sy. No – 54/2 Kolar Village, Koppal Taluk, Koppal District, Karnataka.

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

| Sr. No.               | Particulars              | Details   |                            |                            |
|-----------------------|--------------------------|---|----------------------------|----------------------------|
| 1.                    | Project Location         | In Patta Land adjacent to Sy. No – 54/2 Kolar Village, Koppal Taluk, Koppal District, Karnataka.  |                            |                            |
| 2.                    | Latitude/Longitude       | Latitude/Northing: 15 <sup>o</sup> 19'45.4"N to 15 <sup>o</sup> 19'50.8"N   |                            |                            |
|                       |                          | Longitude/Easting: 76 <sup>o</sup> 06'07.3"E to 76 <sup>o</sup> 06'17.3"E   |                            |                            |
|                       |                          | Corner Point No   | Latitude                   | Longitude                  |
|                       |                          | BP-A  | N 15 <sup>o</sup> 19'48.0" | E 76 <sup>o</sup> 06'07.3" |
|                       |                          | BP-B  | N 15 <sup>o</sup> 19'46.5" | E 76 <sup>o</sup> 06'12.4" |
|                       |                          | BP-C  | N 15 <sup>o</sup> 19'45.8" | E 76 <sup>o</sup> 06'14.8" |
|                       |                          | BP-D  | N 15 <sup>o</sup> 19'45.4" | E 76 <sup>o</sup> 06'15.8" |
|                       |                          | BP-E  | N 15 <sup>o</sup> 19'47.8" | E 76 <sup>o</sup> 06'17.3" |
|                       |                          | BP-F  | N 15 <sup>o</sup> 19'50.8" | E 76 <sup>o</sup> 06'08.2" |
| <b>WGS – 84 DATUM</b> |                          |   |                            |                            |
| 3.                    | Toposheet No             | 57A/3   |                            |                            |
| 4.                    | Climatic Conditions      | <ul style="list-style-type: none"> <li>Ambient air temp 16°C to 45°C</li> <li>Avg. annual rainfall 572 mm</li> </ul> Source: CGWB, Koppal |                            |                            |
| 5.                    | Site elevation above MSL | 513m to 509.5m MSL  |                            |                            |



| Sr. No. | Particulars                           | Details   |   |                                      |
|---------|---------------------------------------|---|---|--------------------------------------|
|         |                                       | Type of land use  | Area put on use at start of the plan (Ha) | Area at the end of 4 years plan (Ha) |
| 6.      | Land use at the proposed project site | Area under mining   | --  | 1.821                                |
|         |                                       | Storage of Top soil/ green belt   | --  | 0.404                                |
|         |                                       | Mineral storage   | --  | --                                   |
|         |                                       | Infrastructure  | --  | --                                   |
|         |                                       | Roads   | --  | --                                   |
|         |                                       | Railways  | --  | --                                   |
|         |                                       | Screening Location  | --  | --                                   |
|         |                                       | Mineral separation Plant  | --  | --                                   |
|         |                                       | Township Area   | --  | --                                   |
|         |                                       | Others (Un-utilized area)   | 2.225                                     | --                                   |
|         |                                       | <b>Total</b>  | <b>2.555</b>                              | <b>2.255</b>                         |
| 7.      | Site topography                       | The terrain is almost flat with very slight undulation due East.  |   |                                      |
| 8.      | Nearest roadway                       | Village Road - 0.76 Kms (Dadegal to Hiresindogiroad)SH 23Road - 2.15 Kms(Koppalto Mundargiroad) (SE)<br>NH 67 Road - 3.58 kms (Gadag to Hospete road) (NE). |   |                                      |
| 9.      | Nearest Railway Station               | Koppal Railway Station – 5.15 Kms (NE)  |   |                                      |
| 10.     | Nearest Railway line                  | Koppal Railway Station – 5.15 Kms (NE)  |   |                                      |
| 11.     | Nearest Airport                       | Jindal vijayanagarairpor– 59.35 Kms (NE)  |   |                                      |
| 12.     | Nearest village/major town            | Kolur Village – 0.71Kms (N)   |   |                                      |
| 13.     | Hills/valleys                         | No major hills and valleys within 10 km radius  |   |                                      |
| 14.     | Nearest water bodies                  | Hirehalla Water body – 0.25 kms (E)   |   |                                      |

## PROJECT DESCRIPTION

### Method of Quarrying

An open cast method will be adopted to operate the area. Since, the annual production is about 23498.5Tons per annum for five years; the Open cast method will be followed during the plan period.

Lessee: Neelesh G. Madarkhandi

### **Anticipated life of the quarry**

Life of the mine in this case is for 4 years or till the reserves get exhausted.

### **Conceptual Quarry Plan**

Based on reserves of ordinary Sand as Production capacity of 23,498.5Tons per annum for the 4 years plan period.

### **Waste Generation & Disposal**

There is no such reduction of waste/mineral reject processing possibilities are proposed during plan period. There is no proposal of dumping during the proposed ensuing quarrying period, & concurrent backfilling is proposed.

### **Water Requirement & Source**

Total water requirement for the project will be 6.95KLD, Requirement is met by procurement of water from the bore well nearby Tankers.

### **Manpower Requirement**

The said quarry provides direct employment to 21 people and generates indirect employment for 42 more 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 quarrying machinery deployed.

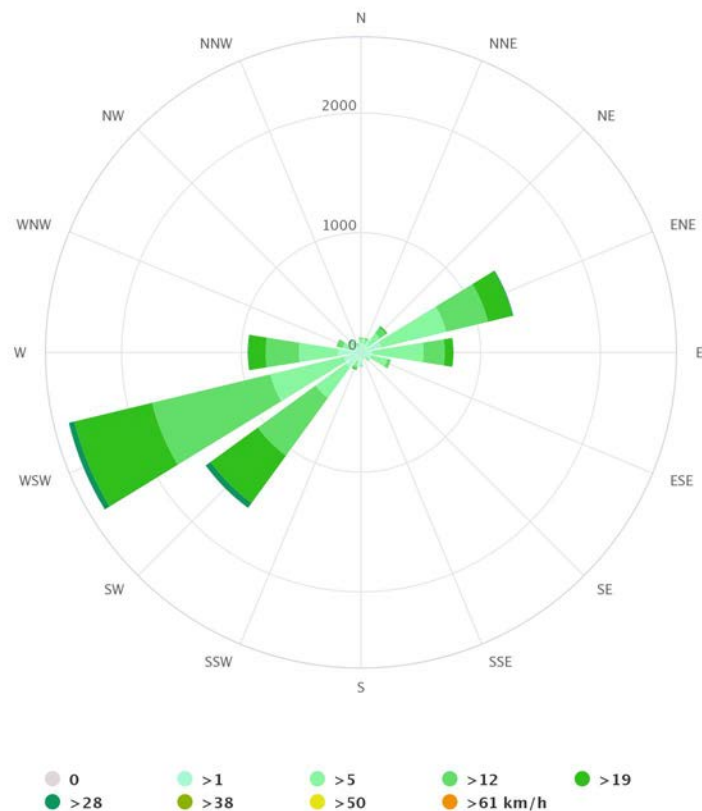
## **EXISTING ENVIRONMENTAL SCENARIO**

### **Baseline Environmental Studies**

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

##### **Summary of Meteorological data generated at site (Nov2021 to Jan 2022)**

|                       |            |
|-----------------------|------------|
| Temperature (°C)      | 16 to 45°C |
| Relative Humidity (%) | 44 to 88%  |
| Wind Direction        | WSW        |
| Calm wind %           | 14.46%     |



### 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.

### 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 along approach road and bank of the river.
- Periodic maintenance of mineral transport road.
- Regular sprinkling of water through mobile tanker on mineral transport road.
- Mineral carrying tippers 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 Ordinary Sand. There is no rehabilitation and resettlement involved in the project.
- The said Quarry provides direct employment to 21 people and generates indirect employment for 42 more 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 Sand 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 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.

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

The assessment of risk in the Sand Blocking 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 Sand 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. Neelesh G, Markhandi will carry out community welfare activities in the following areas:

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

A budget of Rs.0.94 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. Rs110 Lakhs. It is proposed to provide an amount of Rs. 12.8 Lakhs per annum as recurring expenses towards implementation of the environmental action plan.

### **CONCLUSION**

The Sand quarry project of Neelesh G. Madarkhandi will be beneficial for the development of the nearby villages. Some environmental aspects like dust emission, noise, siltation due to surface



Lessee: Neelesh G. Madarkhandi

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 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 Sand Block will be positive and will result in overall socio-economic growth of nearby villages.