

# Executive Summary

for

Expansion Project

of

Mining of Laterite from 1,25,000 TPA to 6,19,030.40 TPA (33.03 Ha.)  
at Sy. No.: 111 & 115 of Markagondi Village, Tahsil: Jiwati, Dist.:  
Chandrapur, Maharashtra

ToR Ref. No.: SEAC-MINUTES-0000005380



Project Proponent:

**M/s. Royal Pottery Ceramics Industries,**

Old SBI Colony, Opposite Mount Carmel High School,  
Mul Road, Chandrapur, Dist.: Chandrapur, Maharashtra

Environment Consultant:



**Sri Sai Manasa Nature Tech Pvt. Ltd.,**

QCI/NABET Certificate No.: NABET/EIA/1720/RA 0111

Plot No. 74/A, Flat No 102, Central Bank Building

Kalyan Nagar, Hyderabad 500038

E-mail: [ssmntpl@gmail.com](mailto:ssmntpl@gmail.com) , web: [www.ssmntech.com](http://www.ssmntech.com)

Contact no. 040-2316333, Fax No.: 040-23816222

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## Executive Summary

### 1.0 Introduction

**M/s. Royal Pottery Ceramics Industries** has been granted mine lease for Laterite over an Extent of 33.03 hectares at Khasra Nos.: 111 & 115 of Markagondi Village, Tahsil: Jiwati, Dist.: Chandrapur, Maharashtra State for a period of 30 years by Industries, Energy and Labour Department, Govt. of Maharashtra vide ref. no.: MMN-2702/395/IND-9 Dated: 21/03/2003. i.e.; valid from 19/07/2003 to 18/07/2033. Now, project proponent proposes increase in production capacity of Laterite from existing 125000 TPA to 619030.40 TPA.

### 1.1 Environmental Clearance & Consent for Operate

M/s. Royal Pottery Ceramics Industries applied for grant of Environmental Clearance for mining activity at Khasra Nos.: 111 & 115, Village Markagondi, Tahsil: Jiwati, Dist.: Chandrapur to State Environment Impact Assessment Authority (SEIAA), Maharashtra State and obtained environmental clearance from SEIAA, MoEF&CC, Maharashtra. SEIAA, MoEF&CC, Maharashtra grant Environmental Clearance to M/s. Royal Potteries Ceramics Limited for Laterite mining of the production capacity of 1,25,000 TPA vide ref. no.: SEIAA Meeting No. 139, Meeting Date: 28<sup>th</sup> September 2018 (SEIAA-STATEMENT-0000000792) SEIAA-MINUTES-0000000653, SEIAA-EC-0000000460.

After obtaining Environmental Clearance for the Laterite production capacity of 125000 TPA, project proponent applied for obtaining "Consent for Operate" to Maharashtra Pollution Control Board. Project proponent obtained the CFO from MPCB vide reference no.: RO-CHANDRAPUR/CONSENT/1911000787 Dated: 19/11/2019.

### 1.2 Terms of Reference

Now, the project proponent is proposed to increase the production capacity of Laterite mining from 1,25,000 TPA to 6,19,030.40 TPA. Hence, project proponent is applied for grant of Environmental Clearance for increased production capacity of 619030.4 TPA of Laterite mining.

The application for obtaining Terms of Reference for expansion project from 125000 TPA to 619030.40 TPA was submitted to SEAC1/SEIAA, MoEF&CC, Maharashtra State, Govt. of India VIDE Unique No.: SEIAA/STATEMENT-0000003722 on Dated: 23/07/2019 and Terms of Reference (ToR) granted in 178<sup>th</sup> Meeting of State Level Expert Appraisal Committee (SEAC-1) Dated: 18/02/2020 vide ref. no.: (SEIAA-STATEMENT-0000003722) SEAC-MINUTES-0000005380.

It is proposed to produce 6,19,030.40 TPA of Laterite from the mining lease by adopting semi mechanized open cast method with drilling and blasting. The estimated project cost will be about Rs. 180.00 Lakhs. Based on the documents submitted and presentation, the committee prescribed the Terms of Reference (ToR) for preparing EIA/EMP report, by considering the project under the category 'B1' 1 (a) Mining of Minerals of the Schedule of EIA Notification 2006.

### 1.3 Project Proponent

M/s. Royal Pottery Ceramics Industries is the proprietary firm registered in the name of Mr. Abdul Kader Bhai and now, Mr. Mohammad Aamir S/o. Late Abdul Kader Bhai is the legal heir of Late Abdul Kader Bhai. M/s. Royal Pottery Ceramics Industries is in the mining and marketing of the Laterite from last two years. Laterite is one of the raw material that is used in cement manufacturing and is abundantly available in and around Chandrapur District of Maharashtra.

#### **M/s. Royal Pottery Ceramics Industries,**

Office Address:

Old SBI Colony, Opposite Mount Carmel High School,

Mul Road, Chandrapur, Maharashtra - 442401

Phone No.: 07172-227749 Mobile: +91-9158301786/

Email ID: [aamirconcretemix@gmail.com](mailto:aamirconcretemix@gmail.com), [aamir14janu@gmail.com](mailto:aamir14janu@gmail.com) & [ykasharma@gmail.com](mailto:ykasharma@gmail.com)

Site Address:

Khasra Nos.: 111 & 115, Village: Markagondi,

Tahsil: Jiwati, Dist.: Chandrapur, Maharashtra.

### 1.4 Brief Description of Nature, Size & Location of the Project

Map showing general and specific location of proposed mine site, 10 km topomap study area and Google imagery are given in **Figure 1.1**, **Figure 1.2** and **Figure 1.3**. The environmental settings of the study area are given in **Table 1.1**.

**Table 1.1: Environmental Settings of the Study Area**

S. N.	Particulars	Details		
A.	Nature of project	Laterite		
B.	Size of project			
1.	Mining Lease area	33.03 Ha.		
2.	Proposed Production capacity	Existing – 125000 TPA Proposed – 494030.40 TPA Total – 619030.40 TPA		
C.	Project location			
1.	Village	Markagondi		
2.	Tahsil	Jiwati		
3.	District	Chandrapur		
4.	State	Maharashtra		
5.	Khasra Nos.	111 & 115		
6.	Land	Govt. Waste Land		
7.	Toposheet No. Latitude & Longitude	56M/2 & 56M/3		
		<b>Boundary Pillars</b>	<b>Latitude</b>	<b>Longitude</b>
		BP-1	19°34'48.5"	79°10'32.5"
		BP-2	19°34'48.5"	79°10'34.5"
		BP-3	19°34'48.7"	79°10'38.8"
		BP-4	19°34'43.9"	79°10'41.7"
		BP-5	19°34'43.4"	79°10'37.2"

		BP-6	19°34'38.8"	79°10'38.8"
		BP-7	19°34'38.8"	79°10'41.6"
		BP-8	19°34'38.4"	79°10'42.1"
		BP-9	19°34'38.4"	79°10'43.0"
		BP-10	19°34'44.1"	79°10'42.9"
		BP-11	19°34'44.2"	79°10'46.1"
		BP-12	19°34'40.4"	79°10'46.9"
		BP-13	19°34'39.2"	79°10'50.0"
		BP-14	19°34'53.2"	79°10'50.4"
		BP-15	19°34'56.0"	79°10'49.8"
		BP-16	19°35'05.3"	79°10'50.6"
		BP-17	19°35'12.4"	79°10'52.3"
		BP-18	19°35'14.0"	79°10'48.9"
		BP-19	19°35'15.1"	79°10'39.3"
		BP-20	19°35'08.8"	79°10'41.1"
		BP-21	19°35'09.8"	79°10'42.4"
		BP-22	19°35'04.4"	79°10'42.5"
		BP-23	19°35'02.9"	79°10'40.6"
		BP-24	19°35'01.1"	79°10'40.5"
		BP-25	19°35'01.3"	79°10'41.7"
		BP-26	19°35'53.7"	79°10'43.8"
		BP-27	19°35'53.5"	79°10'38.2"
		BP-28	19°35'52.3"	79°10'38.3"
		BP-29	19°35'52.2"	79°10'32.7"
<b>D.</b>	<b>Environmental Settings Details (With approx. aerial distance and direction from the mining lease boundary)</b>			
1.	Nearest Village	Markagondi village – 0.7 km (E)		
2.	Nearest Town, city, district Headquarters	Nearest Tahsil Place – Jiwati – 12 km - NE Nearest Town – Gadchandur – 15 km - N Nearest District HQ – Chandrapur – 42 km - NE		
3.	Nearest National Highway, Nearest State Highway Nearest Motorable Road	NH 7 – Nagpur – Hyderabad National Highway – 71.00 km (W) SH 264 - Rajura – Asifabad State Highway – 17.00 km (E) Gadchandur – Tekamandwa – 1.0 km (NW)		
4.	Nearest Railway station, Airport & Sea port	Virur Railway Station – 27.0 km (NW) Dr. Babasaheb Ambedkar International Airport, Nagpur – 165 km – N Visakhapatnam Sea Port – 474 km - SW		
5.	Interstate boundary	Nil within 5 km. Telangana state boundary is at a distance of 6.5 k m from project site on East.		
6.	Archeological Place	None within the study area.		
7.	National Park, Wild Life Sanctuary, Wildlife Corridors, Biosphere Reserves, Migratory	No any National Park, Wild Life Sanctuary, Wildlife Corridors, Biosphere Reserves, Migratory routes for Birds falls in study area.		

	routes for Birds. Protected Forest etc. within 10 Km radius study area	Reserved Forest – Manikgarh RF – 0.5 km (W)
8.	Reserve Forest and Protected Forest within 10 Km radius	Reserved Forest – Manikgarh RF – 0.5 km (W)
9.	Water bodies within 10 km radius	Kusumbi Mine Pit Reservoir - 7 km (NW) Kurud Nallah – 5.0 km (S) Lamdi Nallah – 8.0 km (SW) Bapur Nallah – 9.0 km (S) Bhodam Nallah – 9.0 (SE) Masbok Nallah – 9.0 km (E)
10.	List of Industries in 10 km Study Area	Warsi Mining Company – 1.5 km (SE) Aditya Minerals – 0.5 km (E) Sai Minerals Company – 2.5 km (NE)
11.	Seismic Zone	Zone III (Moderate)
<b>E.</b>	<b>Cost Details</b>	
1.	Total Project Cost	Rs. 180.00 Lakhs
2.	Cost for Environmental Protection Measures	Capital Cost = Rs. 10.01 Lakh Recurring Cost = Rs. 9.33 Lakh

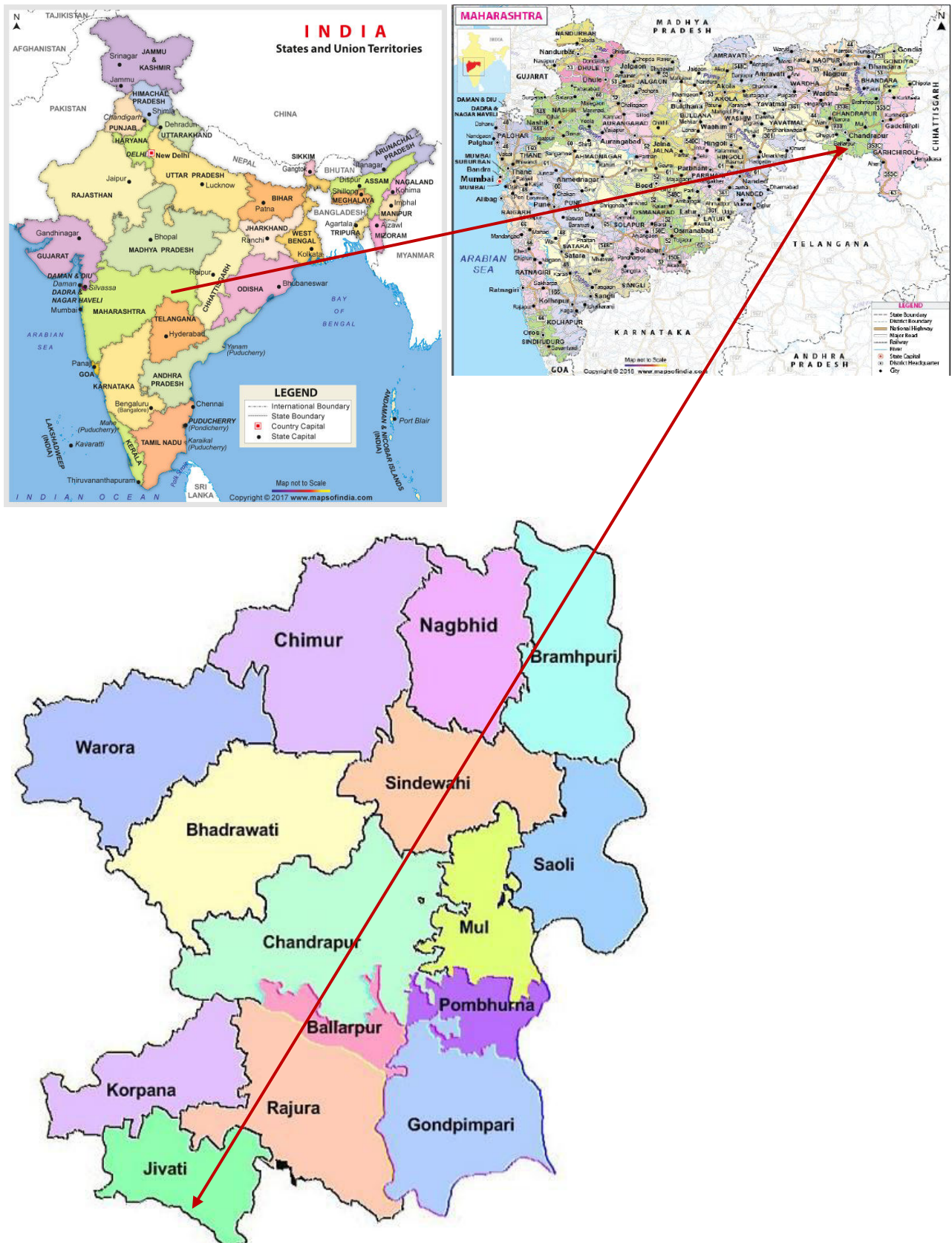


Fig. 1.1: Location Map



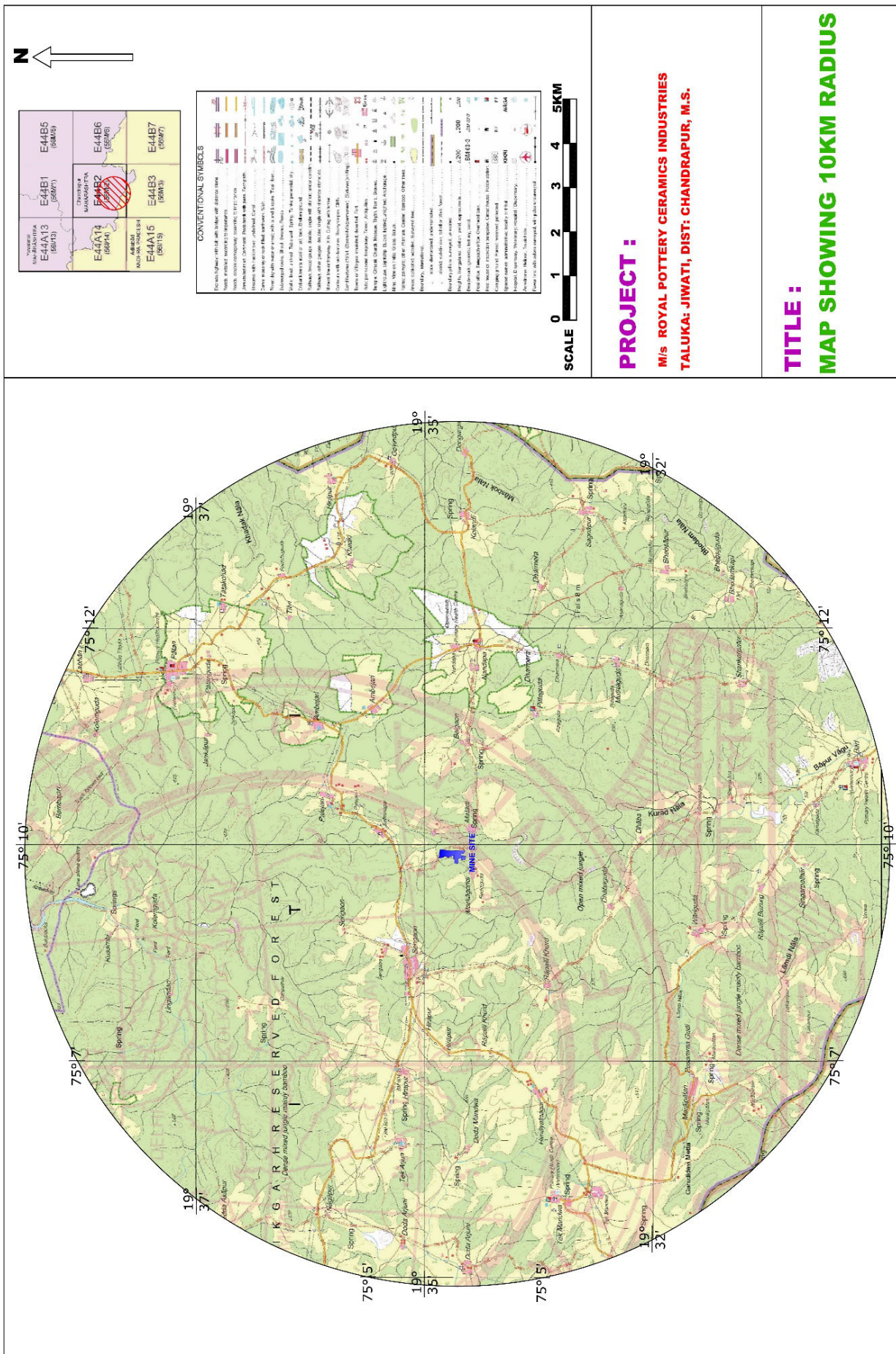


Fig. 1.2: 10 KM Study Area Map of the Project Site

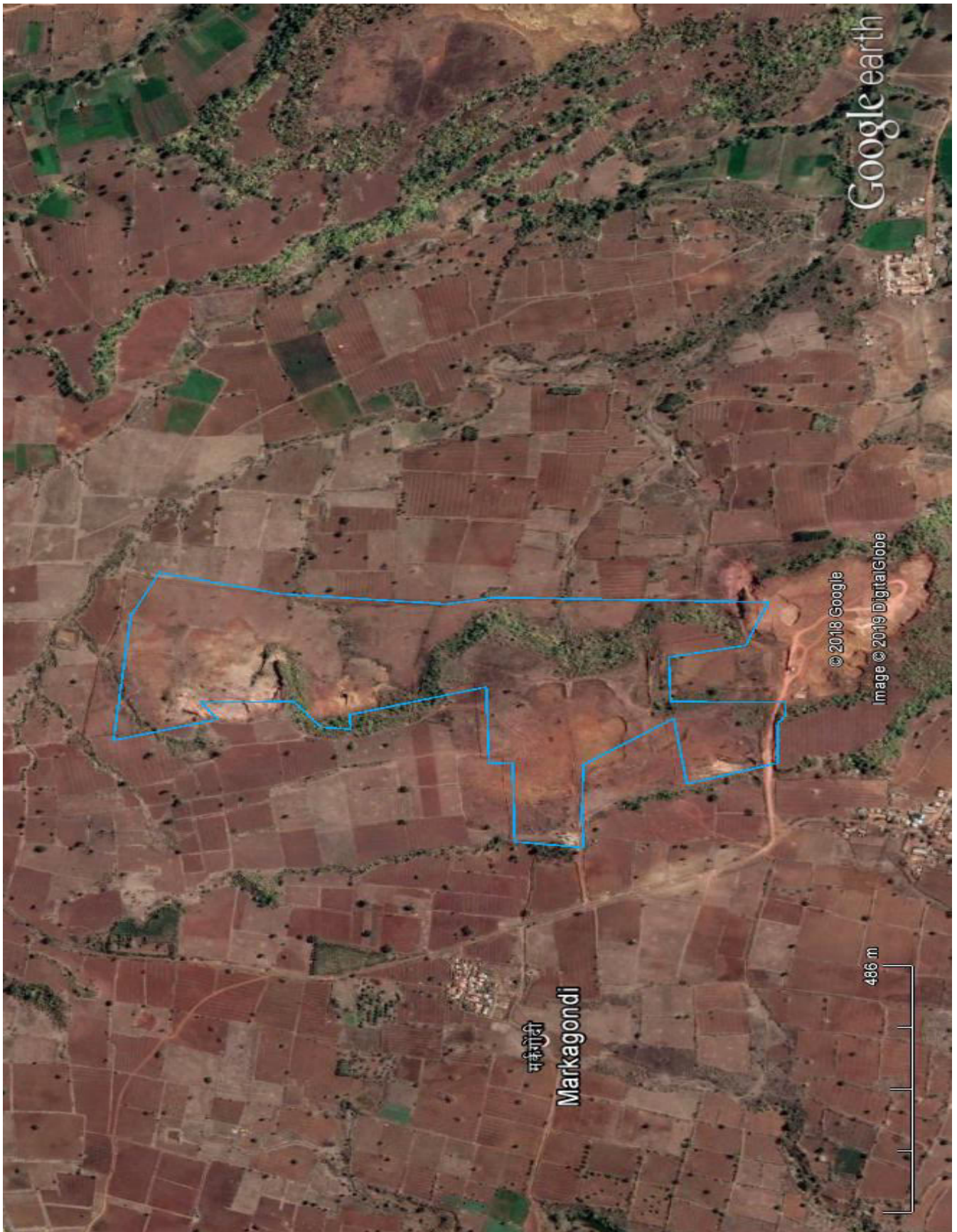


Fig. 1.3: Google Image of the Project Site

## 1.5 Description of the Environment

The study area covers 10 km radius around the proposed expansion project of Laterite mine located at Khasra Nos.: 111 & 115 of Markagondi Village, Tahsil: Jiwati, Dist.: Chandrapur, Maharashtra.

As part of Environmental Impact Assessment study, baseline environmental monitoring was carried out covering the months of December 2019 to February 2020 i.e.; Winter season.

Ambient air quality of the study area has been assessed through a network of eight ambient air quality locations. Results of the ambient air quality at all the above locations were found to be well within the limits of National Ambient Air Quality (NAAQ) Standards specified for Rural, Residential and Industrial areas. Concentrations of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are mainly contributed due to vehicular traffic and local activities. Summary of ambient air quality in the study area is given in the below **Table 1.2**.

**Table 1.2: Summary of Ambient Air Quality (µg/m<sup>3</sup>)**

	98 <sup>th</sup> Percentile Values			
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>
Mine Site	63.9	23.4	10.5	15.7
Study Area (Max)	52.6	23.0	11.8	12.8
NAAQ standards (24hr)	100	60	80	80

*Note: CO values are observed less than 1 mg/m<sup>3</sup> during study period.*

Noise levels were monitored at 8 locations in the study area of 10km radius. Noise levels recorded were found to be in the range of 48.5 to 57.7 dB (A) during daytime and in the range of 40.3 to 45.7 dB (A) during nighttime in the buffer zone.

Eight water samples were collected from different locations. Ground water samples collected from the study area showed compliance of all parameters with the drinking water standard of IS 10500: 2012.

Soil samples were collected from eight locations in the study area for assessing the soil quality. All the soil samples showed average to good fertility. There are no endangered flora/fauna species in the study area.

## 1.6 Anticipated Environmental Impacts and Mitigation Measures

### 1.6.1 Air Environment

The air borne particulate matter is the main air pollutant contributed by opencast mining. Predictions have been carried out for the worst-case scenario considering all the operations of the mine will be under simultaneous continuous operation of 24 hours for the proposed emissions.

### 1.6.2 Air Pollution Control Measures

The following air pollution control measures will be implemented in the mine to control the impact of air pollution.

- In order to minimize the dust emanating from the mining operations water sprinkling is proposed at the mine pit, waste dump and also on the haulage roads to suppress the dust.
- Dust masks will be given to the mineworkers.
- Regular grading of haul roads will be done to clear the accumulation of loose materials on the roads.
- Transport vehicles are maintained regularly in order to minimize the emissions from them.
- Overloading of tippers will be avoided to prevent the material spillage on the roads.
- Loaded tippers will be covered with tarpaulin before they are allowed on to the main roads.

The air pollution impacts on the nearby villages will be negligible with this small scale mining after adoption of the above air pollution control measures.

### **1.6.3 Noise Environment**

Noise levels in the proposed mine will be produced due to movement of vehicles for transportation of Laterite and Mining operations like Blasting and Drilling. But the pronounced effect of noise is felt only near the active working area.

Since the proposed mine will adopt open cast fully mechanized method for mining, there will not be much impact on the surrounding villages due to the mining operations.

### **1.6.4 Noise Pollution Control Measures**

The following are the noise pollution control measures proposed in the mine.

- Ear plugs will be provided to the mine workers whenever needed.
- Vehicles used for transportation will be regularly maintained.
- Greenbelt will be provided all along the mine in 7.5 m barrier zone to reduce the noise levels.
- Speed of the vehicles entering or leaving the mine will be limited to 25kmph to avoid undue noise from empty trucks.

### **1.6.5 Impact due to Ground Vibrations**

The proposed mine will adopt opencast semi mechanized with Category A method for mining with drilling and blasting. Hence, the impact on ground vibrations due to mining will be negligible.

### **1.6.6 Water Environment**

The total water requirement for the above operations will be 31 m<sup>3</sup>/day and domestic water requirement will be met from bore well at the mine site and other requirement will be met from water tankers. Waste water generation from the above consumption is from domestic consumption i.e., 4.5 m<sup>3</sup>/day. Wastewater generated from the Domestic front will be mainly from toilets. This waste water will be treated in septic tank followed by soak pit.

There are no natural drainage channels within the site, except local drainage pattern of mining lease area.

The ground water table is available at a depth of 5 to 10 m from the general ground level. No seepage water is envisaged in the mine as no other mine pits exist above the present working level of subject mine. Hence there will not be much impact on the ground water table due to mining activities.

It is proposed to construct garland drains with sedimentation pits all along the mine pits to avoid erosion and sedimentation due to storm water. Only fresh water will be left into the nearby seasonal stream as after de-siltation.

### 1.6.7 Land Environment

5% mineral reject will be generated during five year mining plan period. The total waste generated will be 148078.75 Tons. Generated mineral reject will consist of hard soil which includes clay with small pebbles. Generated mineral reject will be utilized for levelling of haulage roads in the mine site as well as for filling of approach road to the mine site. Stacked generated waste will be used periodically for filling of roads as and when required basis.

The total lease area is 33.03 Ha. out of which, area under mining is 22.81 Ha, safety zone green belt is 2.97 Ha., open land greenbelt is 7.03 Ha. and 0.13 Ha. area is covered under roads. Land use pattern of the mine lease area is given in below **Table 1.3**.

**Table 1.3: Land Use Pattern at the Mine Site**

S. N.	Area Particulars	Land use at the end of plan period in Ha.
1	Area under mining	22.8106
2	Storage for Soil	-
3	Mineral Storage	0.0468
4	Infrastructure office etc.	0.0216
5	Roads	0.1285
6	Reject Dump area	0.0225
	<b>Subtotal</b>	<b>23.03</b>
7	Greenbelt Area	
7a	Greenbelt development in 7.5 m barrier zone	2.9693
7b	Greenbelt development in virgin land	7.0307
	<b>Subtotal</b>	<b>10.0</b>
	<b>Grand Total</b>	<b>33.03</b>

### 1.6.8 Greenbelt Development

Each year some part of the barrier zone will be subjected to afforestation and care will be taken to protect the saplings. Greenbelt development is proposed on safety zone covering an area 2.97 Ha. and virgin land 7.03 Ha. within mine site. Total area covered by greenbelt up to plan period will be 10.0 Ha. which is 33% of the total mine lease area. As of now, 3000 saplings were planted in 2.97 Ha. mine lease area and 21878 saplings will be planted in next five year mining plan period in 7.03 Ha. mine lease area. Native species with broad leaves and fruit bearing will be preferred for greenbelt development. Since terrain is rocky, soil will be brought from outside for plantation on safety zone and virgin land within mine site. The plantation work for green belt development will be carried in consultation with a horticulturist which will help minimizing adverse impact on the flora found in the area. Detail greenbelt development programme is given in below **Table 1.4**.

**Table 1.4: Greenbelt Development Programme**

S. N.	Year	Area to be covered in Sq. m	No. of plants to be planted considering 75% survival of the planted saplings
1	Ist Year – 2020-21	14300 (1.43 Ha)	3575
2	IIInd Year – 2021-22	14000 (1.4 Ha)	4394
3	IIIRD Year – 2222-23	14000 (1.4 Ha)	4598
4	IVth Year – 2223-24	14000 (1.4 Ha)	4649
5	Vth Year – 2224-25	14000 (1.4 Ha)	4662
	<b>Total Quantity</b>	<b>70300 (7.03 Ha.)</b>	<b>21,878</b>

### 1.6.9 Socio Economic Environment

The mine area does not cover any habitation. Hence, the mining activity does not involve any displacement of human settlement. No public buildings, places, monuments etc. exist within the lease area or in the vicinity. The mining operations will not disturb/relocate any village or need resettlement. Thus, no adverse impact is anticipated.

The mining activity can improve the economic status of the people around the mine area. Local people will get employment with the continued mining activities and infra-structural facilities will be developed. Local people will be get benefited by hiring their vehicles for transportation of Laterite and will earn good amount from it. For existing production of Laterite hired vehicles for transportation of Laterite are from local villagers of surrounding villages only. Hence there is possibility of positive impact on socio- economics of people living in the nearby villages.

### 1.6.10 Environmental Monitoring Programme

To evaluate the effectiveness of environmental management programme, regular monitoring of the important environment parameters will be taken up. The schedule, duration and parameters to be monitored are shown in below **Table 1.5**.

**Table 1.5: Monitoring Schedule for Environmental Parameters**

Attributes	Sampling		Measurement	Test Procedure
	Network	Frequency	Method	
<b>A. Air Environment</b>				
<b>Pollutants</b> PM <sub>10</sub> PM <sub>2.5</sub>	4 locations in the project impact area (Minimum 2 locations in upwind side, 2 sites in downwind side / impact zone)	Once in a season.	Gravimetric method	-
			Gravimetric method	-
EPA Modified West & Geake method			Absorption in Potassium Tetra Chloromercurate followed by Colorimetric estimation using P-Rosaniline hydrochloride and Formaldehyde (IS: 5182 Part - II).	
Arsenite modified Jacob & Hochheiser			Absorption in dil. NaOH and then estimated calorimetrically with sulphanilamide and N (I-Nephthyle) Ethylene diamine Dihydrochloride and Hydrogen Peroxide (CPCB Method).	
SO <sub>2</sub>				
NO <sub>2</sub>				
<b>B. Water Environment</b>				
pH, Turbidity, Colour, Odour, Taste, TDS, Total Hardness, Calcium hardness, Magnesium hardness, Chloride, Fluoride, Sulphate, Nitrates, Alkalinity, Iron, Copper, Manganese, Mercury, Cadmium, Selenium, Arsenic, Cyanide, Lead, Zinc, Chromium, Aluminum, Boron, Phenolic Compounds	Set of grab samples during pre and post monsoon for ground and surface Water in the 10 km vicinity.	Diurnal & Season wise	As per IS 10500-2012	Samples for water quality should be collected and analyzed as per : IS : 2488 (Part 1-5) methods for sampling and testing of Industrial effluents Standard methods for examination of water and wastewater analysis published by American Public Health Association.

Water level of wells	In surrounding villages of 10 km vicinity	Premonsoon		
<b>C. Noise</b>				
Noise levels at Day & night time - Leq dB (A)	Mine boundary High noise generating areas within the lease and in surrounding villages	Quarterly	As per CPCB norms	As per CPCB norms

### 1.6.11 Locations of Monitoring Stations

The location of the monitoring stations were selected on the basis of prevailing micro – meteorological conditions of the area like wind direction & wind speed, Relative Humidity, Temperature. Eight AAQM stations are selected (including minimum 2 locations in upwind side, more sites in downwind side / impact zone) to assess ambient air quality of the area.

Noise level monitoring were carried out on lease boundary & in high noise generating area within the lease. Water & soil monitoring locations were decided on the basis of general slope of the area & drainage pattern. Locations for the post project monitoring will be given in below **Table 1.6.**

**Table 1.6: Post Project Monitoring Locations**

S. N.	Description	Frequency	Location
1	Ambient Air Quality	Quarterly	Mine site, Villages in downwind and upwind direction from the mine site
2	Noise Level Monitoring	Quarterly	Mine Boundary, High noise generating areas within the Mine boundary
3	Water Quality		
	Ground Water Sample	Six Monthly	From surrounding villages in 10 km periphery
	Surface Water Quality	Six Monthly	From flowing streams/ Nallah or pond/Talav within 10 km periphery
5	Health Check-up	Six Monthly	Workers

## 1.7 Additional Studies

### 1.7.1 Risk Assessment



The anticipated risks are mentioned below:

#### **Fall of Sides**

- Overall slopes angles of benches will be 60°.
- No disaster like land slide, flood or inundation or fire is anticipated as the height of benches will be 6 m and width will around be 6 m.

#### **Storage and Use of Explosives**

- Proper and safe storage of explosives in approved and Licensed Magazine.
- Proper, safe and careful handling and use of explosives by competent Blasters having Blaster's Certificate of Competency issued by DGMS.
- Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette or Bidi etc.

#### **Water**

- Proper drainage will be maintained to eliminate inundation of working pits during rains from run-off water.
- There is no danger of flood or inundation as the ground level.
- Mining operations are not carried below the ground water table; therefore, there will be no disturbance to ground water quality due to mining activity.

#### **Natural Resource Conservation**

- A green belt will be developed so that minimum soil erosion takes place.
- The excavated soil will be used for levelling and filling of haulage and approach roads in order to minimize the impact on environment by use of fresh mooram.
- Water conservation techniques will be employed.

#### **Fire**

- Sufficient fire extinguishers will be installed at selected locations such as mine office, garage, stores etc. Besides, sufficient water hydrants with sufficient length of hosepipes will be made available on the surface for fire protection.

#### **Health Hazards**

- For the purpose of this document, health hazards are interpreted as being harmful dust and noise which is emitted during surface mining operations.

#### **Personal Protective Equipment (PPE)**

- The PPE of good construction, wherever possible ISI certified, suitable for the hazard e.g. a dust respirator fitted with the correct filter to capture the particular hazardous dust and maintained to recommended standards. As personal protective equipment only affords limited protection. It will only be used as a last resort and then as an interim arrangement until other steps are taken to reduce the risk of personal injury to an acceptable level.

#### **Rehabilitation and Resettlement**

- There will be no resettlement or rehabilitation involved in the project.

### **1.8 Environment Management Plan (EMP)**

In order to implement an effective environmental management plan for mitigating the adverse impacts on the environment, regular monitoring of various environmental components is necessary. Mine Manager with the support of Safety and Env. Officer and other workers will monitor the environment management plan of this area. Budget allocated this project Capital Cost is Rs. 10,01,565.00 and Recurring Cost is Rs. 9,33,500.00. Detail budget for Environmental Management Plan is given in below **Table 1.7**.

**Table 1.7: Budget for Environmental Management Plan**

S. N.	Description of Work	Capital cost (in Rs.)	Annual Recurring cost (in Rs.)
<b>I</b>	<b>Occupational Health &amp; Safety</b>		
1	Personal Protective Equipment's (PPEs) like Ear Plugs, Ear Muffs, Dust Mask, Safety Shoe etc.	12,225	22,500
2	First Aid Kit	3,000	6,000
3	Health Check Up	--	11,000
<b>II</b>	<b>Air Pollution Control</b>		
1	Dust Suppression on haulage roads and approach road	--	2,20,000
2	Gunny bags/cloth for covering drill rods	--	50,000
<b>III</b>	<b>Water Pollution Control</b>		
1	Constructing garland drains with silt traps & Check dam	3,00,000	50,000
<b>IV</b>	<b>Greenbelt Development</b>		
1	Greenbelt Development in Core Zone i.e.; within mine site	6,56,340	4,00,000
2	Greenbelt Development in Buffer Zone includes Avenue Plantation and Gram Panchayat Bhavan, Village Schools and Primary Health Centers i.e.; outside of the mine site	30000	32000
<b>V</b>	<b>Environment Monitoring</b>	--	1,42,000
	<b>Total Amount</b>	<b>10,01,565</b>	<b>9,33,500</b>
	<b>Total Amount in Lakh</b>	<b>10.01</b>	<b>9.33</b>

### 1.9 Corporate Environment Responsibility

The proposed project would proactively promote the public interest through provision of basic amenities such as roads, transportation, electricity, education, sanitation and healthcare facilities. The CER budget allotted based on the capital cost of the proposed project shall be Rs.

1.8 Lakhs (1 % of the Project Cost Rs. 180 Lakhs). The details break up and activities considered under CER activities are given in below **Table 1.8**.

**Table 1.8: Proposed CER activities and its budget**

S. N.	Planned Activities under CER as per specific needs	Total Rs. in Lakh
1	<b>Community Health Improvement</b> <ul style="list-style-type: none"> <li>• Health camps and health awareness programs in Project surrounding villages</li> <li>• Health awareness camps for child and mother care, health and hygiene practices</li> <li>• Sanitary facilities in surrounding villages of buffer zone like Markagondi, Sengaon, Nandapa</li> </ul>	0.40
2	<b>Community Education Facilities</b> <ul style="list-style-type: none"> <li>• Award scholarship to meritorious students &amp; Education (Vocational training)</li> <li>• Distribution of educational books, stationary, uniforms and aids etc.</li> <li>• Providing desktop computers to schools</li> </ul>	0.28
3	<b>Infrastructural Development</b> <ul style="list-style-type: none"> <li>• Maintenance/ Repair of Hand Pumps/ Bore wells</li> <li>• Gram Panchayat dug well de-siltation &amp; deepening</li> <li>• Surface water bodies de-siltation &amp; deepening</li> <li>• Maintenance/ Repair of surrounding village roads</li> </ul>	0.25
4	<b>Afforestation Programs</b> <ul style="list-style-type: none"> <li>• Plantation of trees in villages road side/ Panchayat House/ Public Health Center/ schools</li> <li>• Development of nursery</li> <li>• Scientific support and awareness to local farmers to increase yield of crop and fodder</li> </ul>	0.62
5	<b>Community Welfare Activities</b> <ul style="list-style-type: none"> <li>• Sports &amp; culture activities (Parks, Playgrounds and library)</li> </ul>	0.25
<b>Total Amount (Rupees in Lakh)</b>		<b>1.8</b>

### 1.10 Project Benefits

It is proposed to employ about 11 persons for carrying out mining operations and the lessee proposed to give preference to the local people in employment. In addition there will be indirect employment to many people in the form of contractual jobs, business opportunities, service facilities etc. this will enhance the economic status of the local people.

The impact of mining activity in the area will be positive on the socio- economic environment of the region. The employment directly and indirectly will be increased and better infrastructure and communication facilities will be provided.

M/s. Royal Pottery Ceramics Industries would be required to initiate the following measures to minimize the possible negative impacts:

- Implemetation of adquate dust control measures to check air pollution.
- Organize six monthly health camps in the area to check the incidence of any respiratory and other related disorders.
- Conduct Entrepreneurship Development Camps to nurture entrepreneurial talents among the local youth.

### **1.11 Conclusion**

Based on the EIA study, it is observed that there will be a marginal increase in the dust pollution, which will be controlled by sprinkling of water and transportation of Laterite in trucks by covering the material with Tarpaulin.

There will be negligible impact on ambient environment & ecology due to mining activities, more over the mining operations will lead to direct and indirect employment generation in the area.

Hence, it can be summarized that the mining of minerals from the proposed Laterite mine of M/s. Royal Pottery Ceramics Industries Mine will have a positive impact on the socio-economic environment of the area.

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