

## EXECUTIVE SUMMARY

For

# JAKKERY COLOUR GRANITE QUARRY OVER AN EXTENT OF 27.04.5 Ha.

(Schedule 1(a) Mining of Minerals 'B1' (Violation) Category)

Located at

Survey No's : 486(Part) & 736/4

Village : Jakkery

Taluk : Denkanikottai

District : Krishnagiri

State : Tamil Nadu

By



**M/s. Tamil Nadu Minerals Limited**

No. 31, Kamarajar Salai, Chepauk, Chennai – 600 005

**EIA Consultant**



**M/s. EHS360 Labs Private Limited**

Ashok Nagar, Chennai

NABET Certificate No. NABET/EIA/2225/IA 0098\_Rev.01 validity 24th June 2025

**NOVEMBER- 2024**

## **1 Introduction**

M/s. Tamil Nadu Minerals Ltd, (An undertaking of Government of Tamil Nadu) was established in the year 1978, to carry out systematic mining and development of different minerals all over the state. Ever since its inception TAMIN has developed expertise in the mining of granite dimensional stones of different varieties including Black Granite(Dolerite), Kashmir White(Leptynite), Paradiso(Migmatite Gneiss), Green Onyx(Syenite-porphyry), Red wave (Pink Feldspathic Gneiss) Colombo Juparana (Pegmatitic Granite Gneiss of magmatic origin), Raw silk(Yellow Feldspathic Leptynite) and a number of other coloured granite varieties apart from other industrial minerals viz., Quartz and Feldspar, Graphite, Limestone, Vermiculite etc.,

The Color granite quarry has been set up over a total extent area of 27.04.5 Ha located at S. F. No. 486 (Part) & 736/4, Jakkery Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu State. Quarry Land is classified as Government Poramboke land and lease obtained by Tamil Nadu Minerals Limited (TAMIN).

The lease was granted over an extent of 27.04.5 Ha. vide G.O. Ms. No. 238 Industries (MMEI) Department, dated: 17.03.1999. The period of lease is for 20 years. The lease is valid from 21.06.1999 up to 20.06.2019.

The Mining plan was approved by the Commissioner of Geology & mining, Chennai vide letter No. 4997/MM9/2003, dated 09.02.2005. Modified scheme of mining-I pertaining to the years 2010-2011 to 2014-2015 due to increase of production vide this office Lr. No. 15657/ML2/2009, dated 30.09.2009. Taking in to consideration deemed approval of both mining plan under Rule 17 (6) of GDCR 1999 and the modified scheme of mining- I, under Rule 18 (5) of GCDR 1999, the present scheme of mining –II pertaining to the years 2015-2016 to 2019-2020 has been prepared and submitted to the Department of Geology and Mining for approval, vide this office letter RC. No 10319/ML2/2014 dated 10.09.2014.

M/s Tamil Nadu Mineral Limited applied for seeking Environmental Clearance at Tamil Nadu-SEIAA vide letter no.Rc.No.3446/ML3/2015 dated 08.09.2015. ToR obtained from SEIAA-TN vide Letter No. SEIAA-TN/F.No. 3891/SEAC-LXVIII/TOR-232/2015 dated 06.11.2015. As per obtained ToR, Public Hearing is conducted on 02.12.2016.

The project falls under B1 violation category due to operational without Environmental Clearance as per MoEF & CC Gazette Notification No. S.O.804 (E) dated 14th March, 2017. The EC Application submissions under violation at MoEF & CC vide Proposal No SIA/TN/MIN/68345/2017 dated: 11.09.2017.

As per MoEF & CC Gazette Notification No.S.O.804 (E) dated 14th March, 2017 and its subsequent amended gazette notification no. S.O. 1030 (E) dated 8th March, 2018 and OM F. No. Z-11013/22/2017-IA. II (M) dated 15th & 16th March, 2018, MoEF&CC transferred the proposal to SEIAA-TN vide New Proposal No. SIA/TN/MIN/27166/2018 dated: 02.06.2018.

The EC application is submitted under violation at TN SEIAA vide Proposal No. SIA/TN/MIN/23921/2018 dated 09.04.2018. ToR was issued Lr No. SEIAA-TN/F-3891/TOR-408/2018 dated 22.05.2018 for the preparation of EIA/EMP report. Based on the previous Baseline study and PH on 02.12.2016 final EIA/EMP report is submitted in SEIAA-TN. PoD is submitted vide TAMIN Letter Rc. No.3446/ML3/2015 dated: 27.02.2019.

The lease of the quarry was expired on 20.06.2019. During the EC Violation period (15.01.2016 to 10.01.2017), TAMIN had transported 1634.603 m<sup>3</sup>. Hence, TAMIN remitted the 100% sale value of the mineral to the tune of Rs.2.01Cr. (Rs.2,01,74,270/-). Accordingly, the Director of Geology and Mining has issued NoC to get EC vide Letter Rc. No. 553/MM4/2020, dt. 27.07.2020. TAMIN was obtained the quarry lease renewal vide Letter Rc. No.643/ML2/2018 dated: 21.04.2018. HACA recommended during 80th Meeting held on 26.06.2023 vide Town and Country Planning Department Letter Roc. No. 11938/2023/HACA dated: 26.07.2023.

The Government of Tamil Nadu has issued the precise area communication letter to furnish the approved Mining plan under Go. TN, Natural Resources (MME.1) Department for quarrying Colour Granite over an extent of 27.04.5 Ha of Government poramboke land in SF No. 486(Part) & 736/4, Jakkery Village, Denkanikottai Taluk, Krishnagiri District for a period of 20 years vide Govt. Letter No. 5883890/MME.2/2023-1, dated: 14.02.2024. The Precise Area Communication Letter is enclosed as **Annexure-3**.

Accordingly, TAMIN submitted the Mining Plan for the subject area and the same was approved by the Commissionerate of Geology and Mining Up to lease period as pr Rule 18(1) GCDR,1999 Chennai vide Letter Rc. No. 8664/MM4/2019, dated: 22.05.2024. The mining plan approval letter is enclosed as **Annexure-4**. The mining plan is enclosed as **Annexure-6**. TAMIN has applied for ToR vide Online proposal No.SIA/TN/MIN/488460/2024 dated: 18.07.2024. Accordingly, TAMIN remitted the amount of Rs. 3.5 Lakh Processing fee as per New G.O vide SEIAA-TNF.No.10771/2024, dt. 21.03.2024.

The proposal was appraised under violation during 492th SEAC Meeting held on 29.08.2024 vide SEIAA No. 11115, Unit: VI, Online Proposal No. SIA/TN/MIN/488460/2024. ToR was issued under violation with Public Hearing vide identification No. TO24B0108TN5942228N dated: 21.09.2024 for the preparation of EIA/EMP report.

## 2 Project Description

### Project summary

S. No	Particulars	Details
1.	Project Location	S. F. No. 486 (Part) & 736/4, Jakkery Village, Denkanikottai Taluk, Krishnagiri District, Tamil Nadu State.
2.	Land classification	Government Poramboke land
3.	Extent of lease area (Ha.)	27.04.5
4.	Quarry Lease	Govt. Letter. No. 5883890/MME.2/2023-1, dated: 14.02.2024
5.	Lease Period	20 years
6.	Estimated Geological Reserves (ROM) M <sup>3</sup>	37,00,465
7.	Estimated Mineable Reserves (ROM) M <sup>3</sup>	29,53,169
8.	Colour Granite production per annum M <sup>3</sup>	RoM 2500 with 25% recovery
9.	Depth of Mining	30m above ground level (from Top of the hill)
10.	Method of Mining	Open cast semi mechanized method
11.	Water Requirement (KLD)	3.5
12.	Source of Water	Authorized vendors and local panchayat
13.	Power requirement (kVA)	60
14.	Power Backup (DG set) kVA	1* 125
15.	Fuel requirements (Lts/Day)	200
16.	Manpower (Nos)	30
17.	Municipal Solid Waste Generation (kg/day)	13.5
18.	Waste Oil generation (Lts/Year)	3.0
19.	Project Cost in Lakhs	99.97

### 2.1 Proposed Method of Mining

The Colour granite quarry in the lease area up to an area of 27.04.5 Ha. It is proposed to quarry the colour granite by open cast, semi mechanized method by developing the bench of 6m height and the bench width not less than the height. The slope angle of such benches and sides should not exceed 60° from horizontal.

Based on the Recovery Factor (25%), it is proposed to adopt opencast semi mechanized method of mining.

There is no blockage of minerals due to presence of benches, barriers, internal roads, electrical lines etc. The internal roads are temporary in nature and suitable benches will be formed. No Electrical Lines are passing over the subject area.

Jack Hammers (32m dia), Compressors, Tractors Mounted Air Compressors, Diamond wire saw (capacity- 30 m<sup>3</sup>/day) etc shall be used for drilling the granite, Excavation and loading shall be carried out with excavators (3000 LC). These shall be utilized for developmental work, excavation and loading into the trucks. Dumpers of 25 T capacity shall be utilized for all transportation purposes. In addition, certain service equipment like water tankers (for dust suppression), pick-up vehicles etc. will be used.

### 3 Description of Environment

**Study Period:** The baseline environmental surveys were carried out during (March 2024 – May 2024) within the study area.

#### Ambient Air Quality

The monitoring results of ambient air quality were compared with the National Ambient Air Quality Standards (NAAQS) Prescribed by MoEFCC; Gol Notification dated 16.11.2009. The baseline levels of PM10 (37.2 – 67.6 µg/m<sup>3</sup>), PM2.5 (20.5 – 37.2 µg/m<sup>3</sup>), SO<sub>2</sub>(5.1 – 12.6 µg/m<sup>3</sup>), NO<sub>2</sub>(14.6 – 30.9 µg/m<sup>3</sup>), While thus it was found that concentration of pollutants was within the limits of NAAQ standards.

All the results of ambient air quality parameters have been found within the limit as per NAAQS. Based on comparison study of results for tested parameters with NAAQS, it is interpreted that ambient air quality of studied locations is average. This interpretation narrates to the results found for corresponding locations and study period.

#### Noise Environment

The observations of day equivalent and night equivalent noise levels at all locations are given below

- In Industrial areas daytime noise levels were about 51.5 dB(A) and 42.8 dB(A) during nighttime, which is within prescribed limit by CPCB (75 dB(A) Day time & 70 dB(A) Nighttime).
- In residential areas daytime noise levels varied from 48.5 dB(A) to 54.0 dB(A) and nighttime noise levels varied from 39.6 dB(A) to 44.2 dB(A) across the sampling stations. The field observations during the study period indicate that the ambient noise levels are well within the prescribed limit by CPCB (55 dB(A) Day time & 45 dB(A) Nighttime).

#### Water Environment

The prevailing status of water quality at 8 locations for surface water and 8 locations for ground water were assessed during the study period. The standard methods prescribed in IS were followed for sample collection, preservation, and analysis in the laboratory for various physiochemical parameters.

### **Surface water quality**

The surface water results were compared with IS 2296:1992 standard and in respect of CPCB water Quality Criteria for designated best use. Based on comparison study of test results with Surface water Quantity Standards (Is 2296 Class A), it is interpreted that water qualities of studied locations are classified under Class E, which can be used for irrigation industrial cooling, and controlled waste disposal.

- ✓ The pH value ranges from 7.12 to 7.85 and within the limits (6.5 – 8.5) of IS 2296:1992.
- ✓ The Electrical Conductivity (EC) of the collected surface water ranges from 625 µS/cm to 1100 µS/cm.
- ✓ The chloride content in the collected surface water ranges from 113 mg/l to 220 mg/l.
- ✓ The sulphate content in the collected surface water sample ranges from 28.2 mg/l to 55.0 mg/l.
- ✓ The Total hardness of the collected surface water sample ranges from 108.8 mg/l to 240.7 mg/l.
- ✓ COD of the collected surface water sample ranges from 24.6 mg/l to 40.5 mg/l.
- ✓ BOD of the collected surface water sample ranges from 1.1 mg/l to 4.5 mg/l.

### **Ground Water Quality**

Physio-chemical characteristics of ground water samples collected from the selected villages. The Ground water results were compared with drinking water standards (IS 10500:2012).

- The ground water results of the study area indicate that the pH range varies between 7.18 and 7.68. It is observed that the pH range is within the limit of IS 10500:2012.
- The Total Dissolved Solids range varies between 439 mg/l – 728 mg/l for the ground water. All the samples are well within the permissible limit of IS 10500: 2012.
- The acceptable limit of the chloride content is 250 mg/l and permissible limit is 1000 mg/l. The chloride content in the ground water for study area ranges between 123 mg/l – 208 mg/l. It is observed that all are well within the Permissible Limit and Acceptable Limit of IS 10500:2012.
- The desirable limit of the sulphate content is 200 mg/l and permissible limit is 400 mg/l. The sulphate content of the ground water of the study area varies between 30.7 mg/l – 52.1 mg/l. It is observed that all the samples are within the Acceptable Limit and permissible limit of IS 10500: 2012.

Based on comparison study of test results with drinking water standard, it is interpreted that water qualities of studied locations meet with the drinking water standards as per IS 10500: 2012 Permissible Limit. These interpretations relate to the sample tested for

location only. To prevent ground water contamination and improving the quality and Quantity, rainwater harvesting, and groundwater recharging may be helpful.

## **Soil Environment**

Assessment of soil characteristics is of paramount importance since vegetation growth, agricultural practices and production is directly related to the soil fertility and quality. Soil sampling was carried out at eight (08) locations in the study area. It is observed that,

- The pH of the soil samples ranged from 6.99 to 7.77 Indicating that the soils are slightly acidic to moderately alkaline in nature.
- Conductivity of the soil samples ranged from 138  $\mu\text{mhos/cm}$  to 385  $\mu\text{mhos/cm}$ .
- Nitrogen content ranged from 71 kg/ha to 141 kg/ha.
- Phosphorous ranged from 15 kg/ha to 25 kg/ha.
- Potassium content ranges from 58 kg/ha to 91 kg/ha.

## **Biological Environment**

- ✓ Baseline Biological survey was carried out to assess the ecology of the study area. The floral diversity is grouped into trees, shrubs, climbers, and herbs. Similarly, the faunal diversity is grouped into mammals, birds, reptiles, and amphibians. There are no extinct flora and fauna species found in the study area.
- ✓ This area hosts common animals. Indian Dogs, Jungle and Domestic cat, Rhesus macaque, Domestic Cows, Buffaloes, Bullocks, and Goat etc. are found amongst mammals. There are some Schedule species like Columba livia (Blue rock pigeon) – Sch – IV, Pavo cristatus (Indian peafowl) - Sch I (Part III), Sus scrofa (Wild boar)- Sch III, Mellivora capensis (Honey badger)- Sch I (Part I), Muntiacus muntjak (Southern red muntjak)- Sch III, Felis chaus (Reed cat) - Sch II (Part I), Viverricula indica (Small Indian civet) - Sch II (Part I), Paradoxurus hermaphroditus (Asian palm civet) - Sch II (Part I), Ratufa macroura (Grizzled giant squirrel) - Sch I (Part I) & Naja naja (Nalla Pambu) - Sch II (Part II) and some vulnerable species like Panthera pardus fusca (Indian leopard)- Sch I (Part I), Melursus ursinus (Indian bear) - Sch I (Part I), Bos gaurus (Indian bison) - Sch I (Part I), Albino gaur (White bison)- Sch I (Part I), Semnopithecus johnii (Nilgiri langur) - Sch I (Part I), Semnopithecus entellus (Gray langurs) - Sch I (Part I), Macaca radiata (Bonnet macaque) - Sch I (Part I), Tetracerus quadricornis (Four-horned antelope) - Sch I (Part I), Rusa unicolor (Sambar) - Sch I (Part I) and Chevrotains (Mouse-deer) - Sch I (Part I). There are few endangered species like Elephas maximus (Asian elephant) - Sch I (Part I), Macaca Silenus (Lion-tailed macaque) - Sch I (Part I), Cuon alpinus (Dhole) - Sch I (Part I), Scandentia (Tree Shrew) - Sch I (Part I) identified in the buffer zone of the study area. There are no rare species identified in the study



area.

## **Socio Economic Environment**

- ✓ In the 10 km radius study area, as per 2011 census, the study area consists of 123840 persons in 23 villages. The statistics regarding the list of villages, number of households and human population.

## **4 Anticipated Environmental Impacts**

### **4.1 Air Environment**

The emissions mainly generated from the mining activities are Blasting, Drilling, Scrapping, Excavation, Loading, Unloading, and transportation etc. Machinery like compressors and jack hammers are used for Drilling.

It was observed that the maximum ground level concentration observed due to mining activities and traffic movement without control measures for PM10, PM2.5 and NOx are 3.29  $\mu\text{g}/\text{m}^3$ , 1.54  $\mu\text{g}/\text{m}^3$  and 2.51  $\mu\text{g}/\text{m}^3$  respectively. The highest concentration levels identified at the project site only. So, it can be concluded that even during operation of quarry the impact envisaged is moderate.

#### **Impacts:**

- ✓ Mining operation and associated activities are potentially air polluting, and the major air pollutant is suspended particulate matter.
- ✓ Impact of fugitive dust emission on flora and fauna
- ✓ Reduce photosynthesis in plants due to dust deposition.
- ✓ The intensity of dust generation in the mining is influenced by factors such as hardness of rock, mining technology and material handling etc.
- ✓ Fugitive dust from quarrying operation affects the mine workers who are directly exposed.
- ✓ Diseases like asthma and bronchitis are induced by particulate emission due to mining activities.

#### **Proposed Mitigation Measure:**

- ✓ Wet Drilling and Control Blasting will be used.
- ✓ Developing green belts which act as pollution sinks.
- ✓ Regular water sprinkling on haul and access roads.



- ✓ Material coverage during transportation to avoid Dust and Mist.
- ✓ Vehicular Emissions will be minimized by proper training and maintenance of vehicles and other oil - operated equipment.
- ✓ Speed controls on vehicle movements.
- ✓ Periodic health checkups for the workers shall be done.
- ✓ Dust masks will be provided to the workers.
- ✓ Greenbelt development along approach roads and surrounding the Quarry Lease area.

## 4.2 Noise Environment:

### Impacts:

- ✓ Noise Generation by mining activities,
- ✓ Impact of vibrations including damage to materials/structures due to blasting.
- ✓ Hearing impairment problems in workers and nearby area people due to mining activities. Impact on ambient noise level due to rock excavation, transportation, processing equipment and ancillaries.

### Proposed Mitigation Measure:

- Controlled blasting with proper spacing, burden and stemming will be maintained.
- No secondary blasting.
- The blasting will be carried out during favorable atmospheric conditions and less human activity timings.
- The prime movers/diesel engines will be properly maintained.
- Provision of sound insulated chambers for the workers deployed on machines.
- Proper designing of plant & machinery by providing inbuilt mechanisms like silencers, mufflers and enclosures for noise generating parts and shock absorbing pads at the foundation of vibrating equipment.
- Greenbelts around infrastructure site, service building area and township.
- Trees will be planted on both sides of haul roads.
- Personal Protective Equipment (PPE) like earmuffs/ear plugs will be provided to the operators.

## 4.3 Water Environment

### Impacts:

- ✓ Runoff from mining areas and contaminated the inland water bodies.
- ✓ Impact on groundwater regime/streams/odai/ springs due to mining activities,
- ✓ Runoff from Spillage during handling of materials.
- ✓ Loss of surface features such as lakes, streams, and ponds through settling.
- ✓ Ground water inflows into the quarry & may contact pollutants.

**Proposed Mitigation Measure:**

- ✓ There are no major streams and rivers which can be affected by the proposed mining. Hence there will be no major effect on the surface water environment.
- ✓ The Colour Granites will not produce any harmful toxic effluence in the form of solid, liquid or gas.
- ✓ Garland drains will be constructed on all sides of the quarry.
- ✓ All the garland drains will be routed through adequately sized catchpits or settling pits to remove suspended solids from flowing into storm water.
- ✓ The water will be used after settling for irrigation/greenbelt and dust suppression.
- ✓ The overall drainage planning will be done so that the existing pre-mining drainage conditions will be maintained to the extent possible so that run off distribution is not affected.
- ✓ Rainwater harvesting by constructing check dams on natural nallah and developing water bodies should be planned for recharging groundwater.
- ✓ Sewage (0.63 KLD) is being sent to septic tank followed by soak pit. There is no industrial effluent generation during quarry operation.
- ✓ 13.5 kg/ Day Municipal Solid Wastes including food waste are being disposed of into local municipal waste disposal bins.

#### **4.4 Biological Environment**

**Impacts:**

- ✓ Loss of vegetation and wildlife habitat.
- ✓ Impact on surrounding agricultural land & Impact on groundwater quality due to leachate.

**Proposed Mitigation Measure:**

- ✓ This area hosts common animals. Indian Dogs, Jungle and Domestic cat, Rhesus macaque, Domestic Cows, Buffaloes, Bullocks, and Goat etc. are found amongst mammals. There are some Schedule species like Columba livia (Blue rock pigeon) – Sch – IV, Pavo cristatus (Indian peafowl) - Sch I (Part III), Sus scrofa (Wild boar)- Sch III, Mellivora capensis (Honey badger)- Sch I (Part I), Muntiacus muntjak (Southern red muntjac)- Sch III, Felis chaus (Reed cat) - Sch II (Part I), Viverricula indica (Small Indian civet) - Sch II (Part I), Paradoxurus hermaphroditus (Asian palm civet) - Sch II (Part I), Ratufa macroura (Grizzled giant squirrel) - Sch I (Part I) & Naja naja (Nalla Pambu) - Sch II (Part II) and some vulnerable species like Panthera pardus fusca (Indian leopard)- Sch I (Part I), Melursus ursinus (Indian bear) - Sch I (Part I), Bos gaurus (Indian bison) - Sch I (Part I), Albino gaur (White bison)- Sch I (Part I), Semnopithecus johnii (Nilgiri langur) - Sch I (Part I), Semnopithecus entellus (Gray langurs) - Sch I (Part I), Macaca

radiata (Bonnet macaque) - Sch I (Part I), Tetracerus quadricornis (Four-horned antelope) - Sch I (Part I), Rusa unicolor (Sambar) - Sch I (Part I) and Chevrotains (Mouse-deer) - Sch I (Part I). There are few endangered species like Elephas maximus (Asian elephant) - Sch I (Part I), Macaca Silenus (Lion-tailed macaque) - Sch I (Part I), Cuon alpinus (Dhole) - Sch I (Part I), Scandentia (Tree Shrew) - Sch I (Part I) identified in the buffer zone of the study area. There are no rare species identified in the study area.

- ✓ There are no National Parks, Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Reserve, wildlife migratory routes in core and buffer zones within the 1km radius of the project site.
- ✓ No wildlife is found in the quarry Lease area. To minimize the impacts and to improve up on the existing eco system Afforestation plan will be envisaged with native plants.
- ✓ Lighting will be avoided during night time in the quarry. However, the operations will be carried out only in daytime.

#### **4.5 Socio Economic**

##### **Impacts:**

- ✓ Impact on the cropping pattern and crop productivity in the buffer zone.
- ✓ Impact on community resources such as grazing land
- ✓ Mining activity may affect the health of the workers and village people directly.
- ✓ Existing roads shall be damaged due to heavy vehicle movement.
- ✓ Spillages of material transportation
- ✓ Dust deposition on plants and trees.
- ✓ Accidental Risks during mining due to unsafe measures

##### **Proposed Mitigation Measure**

- ✓ Quarrying in this area is not going to have any negative impact on the social or cultural life of the villagers in the nearby vicinity.
- ✓ The quarry activity will provide job opportunities, which will help them to develop economically.
- ✓ Around 30 people are directly and 20 people indirectly employed, including mining operations. Local villagers residing in the nearby villages will be employed as semi-skilled workers.
- ✓ At the end of quarry operations, the total area excavated will be fenced properly and Greenbelt will be developed.
- ✓ Control of Spillages and Regular Water sprinkling.
- ✓ Avenue Greenbelt development with native plants.
- ✓ Renovation of existing roads will be done.
- ✓ Rainwater harvesting by constructing check dam on natural nallah and developing water bodies should be planned for recharging groundwater.

- ✓ 2% of the project cost is Rs.1,99,940 is allocated under CER & TAMIN will spend 2.5% of project profit under Corporate Social Responsibility (CSR) to the neighborhood villages.

## 5 Alternative Studies

No Alternative Studies for Site and Technology are considered Since Quarry project is a Site specific. The open cast mining method is sustainable method.

## 6 Environmental Monitoring Program

A monitoring schedule with respect to Ambient Air Quality, Water & Wastewater Quality, Noise Quality as per Tamil Nadu State Pollution Control Board (TNPCB) will be maintained.

## 7 Additional Studies

### Public Hearing

This EIA report contains information as per TOR and has been prepared as per generic structure given in Appendix III of EIA notification 2006 by MOEF & CC, Govt. of India.

The draft EIA prepared will be submitted for Public Consultation. Upon incorporating the minutes of the public consultation along with proponent action plan the final EIA will be submitted to SEIAA-TN for further appraisal of the project and obtaining Environmental Clearance.

### Disaster Management Plan

- ✓ The salient features of Disaster Management Plan shall be included.
- ✓ Emergency shutdown procedure
- ✓ Fire protection system, Emergency safety equipment & Reporting and response to emergency. Emergency Help from nearby industries and tie up with nearby industries.

### Corporate Environmental Responsibility

No Relocation and Rehabilitation is involved in the proposed project since it is a government land. Most villages have benefitted mutually where the mining industry has provided indirect jobs for labor and villages provide accommodation for the labor and staff. Supportive industries like food supply and essential shops are economic growth in the villages. The project proponent has earmarked an investment of Rs. 1,99,940 /- towards CER (being 2% of the total capital cost) and this budget will be allocated as per the committee recommendation during the Public Hearing.

## 8 Benefits of the Proposed Project

- ✓ The quarrying activities in this belt will benefit the local people both directly 30 persons & indirect persons are 20 Nos.

- ✓ Improvement in Per Capita Income.
- ✓ The socio - Economic conditions of the village and distance will enhance due to the project, hence the project should be allowed after considering all the parameters.
  
- ✓ It can thus be concluded that the project is environmentally compatible, financially viable and would be in the interest of the construction industry thereby indirectly benefiting the masses.

## **9 Environmental Benefit Analysis**

Not recommended during scoping stage.

## **10 Environment Management Plan**

The EMP provides a delivery mechanism to address potential adverse impacts, to instruct contractors and to introduce standards of good practice to be adopted for all project works. For each stage of the program, the EMP lists all the requirements to ensure effective mitigation of significant biophysical and socio-economic impacts identified in the EIA. The project proponent is proposed EMP budget is Rs 2,05,000/.

## **11 Conclusion**

The proposal is since the current market Colour Granite stone material has a good requirement in civil construction & another field. There is no agriculture and forest land are involved in the proposed mining land. There are no areas which are important or sensitive for ecological reasons like Wetlands, coastal zone, biospheres, mountains, other than Udedurgam RF ~ 2.99 km (SSE), Denkanikotta RF ~ 3.21 km (S). Few water bodies are in the 15km radius of the project site are Lake near Puvanapalli ~ 2.61 km (WSW), Lake near Dodde Gaunapalli ~ 3.58 km (NNW), etc.,

There are no major industries within this area. A comprehensive listing of the mitigation measures (actions) will be prepared and implemented and the parameters that will be monitored to ensure effective implementation of the action. Also, the timing for implementation of the action to ensure that the objectives of mitigation are fully met to minimize the Impacts on environmental attributes. The quarrying activities will provide benefits to the local people both directly 30 Nos & 20 indirect persons. A total cost of Rs.2,05,000 under Environmental Management Plan cost.