MULTI COLOUR GRANITE QUARRY

S.F.NO:511/1,513/26 (Part) & 513/33 (Part), Arasiramani Bit II Village, Sankari Taluk, Salem District, Tamilnadu

Quarry lease area – 1.05.5Ha

Proposed Multi Colour Granite Quarry Production -665m^3 / per year

FORM -1, PREFEASIBILITY REPORT,

MINING PLAN

APPLICANT

AT PRESENT ADDRESS

TVL. MURUGAN GRANITES,

NO. 77, TINY SECTOR,

SIDCO INDUSTRIAL ESTATE,

EKKADUTHANGAL,

CHENNAI- 600 032.

PREPARED BY

R.RAJASEKAR M.Sc.,
Recognized Qualified Person
RQP/CNN/264/2015/A
Cuddalore-606 105.

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FORM -1

Form-1, Prefeasibility Report, Mining Plan for Multi Colour Granite Quarry, S.F.No.511/1,513/26 (Part) & 513/33 (Part) in Arasiramani Bit II village, Sankari Taluk, Salem district, Tamil nadu of TVL. Murugan Granites, (Extent – 1.05.5 Ha).

FORM – I

TVL. Murugan Granites

(I) Basic Information

S.No	Item	Detail
1	Name of the project/s	Multi Colour Granite Quarry
2	S.No. in the schedule	1 (a)
3	Proposed capacity/area/length /tonnage to be handled /command area/lease area /number of wells to be drilled.	**Multi Colour Granite Quarry Production = 665 m^3 Per Year** Extent = **1.05.5 Hectares.**
4	New/Expansion/Modernization	New quarry
5	Existing Capacity/Area etc.	1.05.5Ha
6	Category of Project i.e. 'A' or 'B'	B2
7	Does it attract the general condition? If Yes, please specify.	No. It doesn't attract any items mentioned in the general conditions
8	Does it attract the specific condition? If Yes, please specify.	No. It doesn't attract the specific Conditions
9	Location:	
	Plot/Survey/Khasra No.	511/1,513/26 (Part) & 513/33 (Part)
	Village	Arasiramani Bit II
	Taluk	Sankari
	District	Salem
	State	Tamilnadu
10	Nearest railway station/airport along with distance in kms	Sankari – 13kms Salem (Omalur) – 50 kms
11	Nearest Town, city, district Headquarters along with distance in kms.	Town - Sankari- 13Kms city - Sankari- 13 kms District - Salem- 50 Kms
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Village - Arasiramani Bit II Village Panchayat - Arasiramani Bit II Taluk - Sankari District - Salem
	Name of the applicant	**TVL. Murugan Granites**
14	Registered Address	No. 77, Tiny Sector, Sidco Industrial Estate, Ekkaduthangal, Chennai -600 032.
	Address for correspondence:	Same as above
	Name	**TVL. Murugan Granites**
	Designation (Owner/Partner /CEO)	Owner

	Address	Same as above
	Pin code	600032
	E-mail	rao@murugangranites.in
	Telephone No.	9383343316
	Fax No.	Nil
16	Details of Alternative Sites examined, if Any. Location of these sites should be shown on a topo sheet.	There is no alternative site examined as the project is site specific.
17	Interlinked Projects	There is no inter linked projects
18	Whether separate application of Interlinked project has been submitted?	There is no inter linked projects
19	If yes, date of submission	Does not arise
20	If no, reason	Since the project involves Multi Colour Granite Quarry Operation only, there is no interlinked projects.
21	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. i. The Forest (Conservation) Act, 1980? ii. The Wildlife (Protection) Act, 1972? iii. The C.R.Z. Notification, 1991?	(i)The project doesn't attract the Forest (Conservation) Act 1980. There is no Forest land involved within the quarry lease applied area (ii) There is no wild life with in 10 km radius from the project site area under the Wildlife (protection) Act1972. (iii) The quarry is located 350 km away from Bay of Bengal. Hence, the project doesn't attract the C.R.Z. Notification, 1991.
22	Whether there is any Patta Order/Policy relevant/ relating to the site.	Nil
23	Forest Land involved (hectares)	No Forest land is involved in the core zone.
24	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the Court b) Case No. c) Orders/directions of the Court, if any and its relevance with the proposed project.	No litigation is pending with court as against this project.

(II) Activity

Construction,operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	No	Nil
1.2	Clearance of existing land, Vegetation and buildings?	No	Not required, since the project is dry, vacant, uncultivable area, strewn with boulders of various sizes, few shrubs and weeds, No cutting of trees or demolition of buildings involved.
1.3	Creation of new land uses?	No	The total quarrying activity is proposed to be carried out within the quarry lease applied area and hence there is no proposal for the creation of new land use
1.4	Pre-construction investigations E.g. bore houses, soil testing?	No	As Multi Colour Granite Quarry deposit is running quarry, so that there is no further exploratory drilling is necessary.
1.5	Construction works?	yes	Office building will be constructed within the lease applied area.
1.6	Demolition works?	No	No demolition work is involved.
1.7	Temporary sites used for construction works or housing of construction workers?	No	No temporary site for construction works is involved.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or	No	There will not any high rise buildings
1.9	Underground works including mining or tunnelling?	No	No underground working is involved.
1.10	Reclamation works?	No	There is no proposal for backfilling. The Quarrying operation will be performed to exploit 20**%** of the total reserves.
1.11	Dredging?	No	There is no scope for dredging
1.12	Offshore structures?	No	There is no such activities involved
1.13	Production and Manufacturing Process	Yes	Multi Colour Granite Quarry production for 665m3 and there is no manufacturing process here.

1.14	Facilities for storage of goods or Materials?	No	Topsoil (overburden) 3255**M^3** shall proposed to dumped in along the lease boundary. The wastes are generated during the mining period is **2660m^3** shall be dumped in along the boundary.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	yes	The wastes are generated during the mining period is **2600m^3** shall be dumped in along the boundary.
1.16	Facilities for long term housing of operational workers?	No	The proposed project is for 5 years. Where local people will be employed and there is no scope for long term housing for workers.
1.17	New road, rail or sea traffic During construction or operation?	No	The existing road is adequate. It will be properly re laid or strengthened.
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	Not required.
1.19	Closure or diversion of existing Transport routes or infrastructure leading to changes in traffic movements?	No	This project will not cause any changes to the existing traffic movement
1.20	New or diverted transmission lines or pipelines?	No	The project doesn't involve diversion of transmission or pipe lines
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	The project does not involve impoundment, damming, culver ting, realignment or other changes.
1.22	Stream crossings?	No	There is no stream crossing within the proposed area
1.23	Abstraction or transfers of water Form ground or surface waters?	No	About 2.5 KLD water will be used for dust suppression, green belt and domestic sanitary needs.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	No changes in the water bodies or the land surface under this project.
1.25	Transport of personnel or Materials for construction, operation or de commissioning?	No	There is no proposal for transport of personnel or material for construction, operation or de-commissioning
1.26	Long-term dismantling or Decommissioning or restoration works?	No	No dismantling, De-commissioning or Restoration works required or planned.

1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	No such type of activities involved in the project
1.28	Influx of people to an area in either temporarily or permanently?	Yes	Considering the small magnitude of the operation of the employment of locals mainly, no major influx of the people will happen.
1.29	Introduction of alien species?	No	No introduction of any species is involved
1.30	Loss of native species or genetic diversity?	No	As the area is devoid of vegetation and habitation, there is no loss of any native species.
1.31	Any other actions?	No	None

2. Use of Natural resources for Construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S.No.	**Information/checklist confirmation**	**Yes/ No**	**Details there of (with approximate quantities /rates, wherever possible) with source of information data**
2.1	Land especially undeveloped or agricultural land (ha)	Yes	The mining area of 1.05.5 Hectares is a Patta land. The land dry, uneven and unfit for any other use. It becomes fit for Rainwater storage use after removal of Multi Colour Granite Quarry.
2.2	Water (expected source & competing users) unit: KLD	Yes	About 2.5 KLD water will be used for dust suppression, green belt and domestic sanitary needs. Drinking & Domestic Purposes (in KLD): 0.750 KLD Dust Suppression (in KLD): 1.500 KLD Green belt (in KLD): 0.250 KLD Total: 2.500 KLD
2.3	Minerals (MT)	Yes	Multi Colour Granite Quarry Production for 5 years = **665m^3**
2.4	Construction material –stone, aggregates, Sand /soil (expected source – MT)	No	The proposed working is open cast Mechanised mining method for quarrying Multi Colour Granite Quarry. Drilling and blasting will be required for obtaining blasted boulders.
2.5	Forest and Timber (Source-MT)	No	Not Applicable

2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	Diesel will be utilized for operating compressors and other machineries. Electricity will be used only for administrative and other buildings.
2.7	Any other natural resources (use appropriate standard units)	No	None.

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S.No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	No	No hazardous materials used in this project.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Not envisaged
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	Welfare of the nearby people will get improved due to the employment generation activities of this project.
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	There is no effect for the mentioned Vulnerable groups.
3.5	Any other causes	No	No other cause envisaged

4. Production of solid wastes during operation or decommissioning (MT/month)

No	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or Quarry wastes	Yes	Nil
4.2	Municipal waste (domestic and or commercial wastes)	No	No Municipal waste will be generated during this project
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	No	The proposed quarrying of boulders will not produce any hazardous waste.
4.4	Other industrial process wastes	No	No industrial process is undertaken and thereby no such waste is generated.

4.5	Surplus product	No	No Surplus product developed.
4.6	Sewage sludge or other sludge from effluent treatment	No	No sewage sludge or other sludge is generated y this project activity.
4.7	Construction or demolition wastes	No	Does not involve any construction or demolition activities.
4.8	Redundant machinery or equipment	No	No machinery is left redundant
4.9	Contaminated soils or other materials	No	There is no contaminated soil or other material noticed in the area
4.10	Agricultural wastes	No	No agricultural waste envisaged
4.11	Other solid wastes	No	The project does not generate any other solid waste than the items mentioned against 4.1 above.

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	Only minor quantities of gaseous pollutants due to operation of diesel operated machineries like hydraulic excavators, compressors, transport vehicles, etc. But these will be controlled through proper effective remedial measures and proper environment management plan.
5.2	Emissions from production processes	Yes	Due to simple process of small drilling and soft blasting no major emission of gases from the process involved.
5.3	Emissions from materials handling including storage or transport	Yes	Fugitive emissions will be abated to insignificant minimal levels due to water sprinkling on roads, black topping of roads, good maintenance practices, green belt development, etc.
5.4	Emissions from Construction activities including plant and equipment	No	No construction activities are planned.

5.5	Dust or odours from handling of materials including mining materials, sewage and waste	Yes	No sewage will be generated from this project. There is no Sewage System available in the Quarrying proposed area. There will be dust emission with in permissible limit during handling of over burden, drilling and transport by excavator and tippers which will be controlled by sprinkling water and wet drilling. The project will not have any odours, since it is removal of Blasted boulders only.
5.6	Emissions from incineration of waste	No	The project does not involve waste incineration.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	No incineration of solid waste or materials
5.8	Emissions from any other sources	No	There are no emissions from other Sources.

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities/rates, wherever possible) with source of information data with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	During drilling the noise will be under the permissible limit. During blasting delay electric detonators will be used for control of noise and vibration. The sound produced during vehicle movement will be under permissible limit.
6.2	From industrial or similar processes	No	There is no processing plant involved
6.3	From construction or demolition	No	No construction or demolition work envisaged
6.4	From blasting or piling	No	The noise will be in the permissible limit. During blasting, delay electric detonators will be used for control of noise and vibration.
6.5	From construction or operational traffic	Yes	Noise generation will be from excavator and tippers. It should be maintained less than 85dB as prescribed by DGMS.
6.6	From lighting or cooling systems	No	No lighting or cooling system required
6.7	From any other sources No	No	Nil

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	No hazardous materials area used or spilled in the quarry lease area. However, for sake of precaution the provisions of hazardous waste (Management and Handling) rules 1989 and subsequent amendments of same will be strictly observed, in case of need. Hence no risk is involved in this regard.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	No sewage or disposal of effluents or waste
7.3	By deposition of pollutants emitted to air into the land or into water	Yes	All the emissions from the quarry operations will be controlled and will be in compliance with CPCB/SPCB norms.
7.4	From any other sources	No	The project does not utilize any other sources which can cause risk of contamination.
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	There is no scope for long term built up of pollutants in this project

8. Risk of accidents during construction or operation of the Project, which could affect

Human health or the environments	Information/Checklist confirmation	Yes/No	Details thereof (with Approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	No	During blasting explosions will be produced in the blasted area. Nitrous Oxide gas will be generated. For safety purposes all the workers in the quarry hence will be kept away 300mts from the blasting time. All regulations under MMR 1961 will be followed.
8.2	From any other causes	Yes	Mines safety precautions will be followed while Quarrying. The labours will be provided with safety equipments. No unauthorised persons will be allowed inside the quarry while working in the quarry face.

8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	No	The quarrying area is in the safe zone as far as the earthquake is concerned.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S.No	Information/Check list confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting**.** Utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other	Yes	The supporting infrastructure like roads of the area will be improved leading to improved transportation facilities. The socio-economic condition will be improved by way of generation of direct/indirect employment opportunities, improved water facilities, etc.
9.2	Lead to after-use of the site, which could have an impact on the environment	Yes	After excavation the excavated Area will be used as water reservoir and this will enable to increase the ground water potentiality in the nearby areas.
9.3	Set a precedent for later developments	Yes	This project will be set precedence in the area for environmental preservation and socio-economic improvement.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	No such effects will occur

(III) Environmental Sensitivity

<table>
<tr><th>S.No</th><th>Areas</th><th>Name/ Identity</th><th>Aerial distance (within 15 km.)
Proposed project location boundary</th></tr>
<tr><td>1</td><td>Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value</td><td>No</td><td>No.</td></tr>
<tr><td>2</td><td>Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests</td><td>No</td><td>There are no sensitive water bodies, biospheres, national parks, sanctuaries, reserve forest in 500m radius from proposed project site. No Coastal zone is located in the nearby area. Bay of Bengal lies more than 350Km.</td></tr>
<tr><td>3</td><td>Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration</td><td>No</td><td>Nil.</td></tr>
<tr><td>4</td><td>Inland, coastal, marine or underground waters</td><td>No</td><td>Nil.</td></tr>
<tr><td>5</td><td>State, National boundaries</td><td>No</td><td>Nil</td></tr>
<tr><td>6</td><td>Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas</td><td>No</td><td>There are no routes or facilities used by the public for access to recreation or other tourist in the proposed project site</td></tr>
<tr><td>7</td><td>Defence installations</td><td>No</td><td>There are no Defence installations nearby</td></tr>
<tr><td>8</td><td>Densely populated or built-up area</td><td>Yes</td><td>
<table>
<tr><th>Direction</th><th>Village</th><th>Distance in Kms</th><th>Population</th></tr>
<tr><td>N-W</td><td>Chettipatti</td><td>2 ½ km</td><td>1000</td></tr>
<tr><td>N-E</td><td>Arasiramani</td><td>1 1/2 km</td><td>1500</td></tr>
<tr><td>S-W</td><td>Kallampalayam</td><td>1 1/2 km</td><td>300</td></tr>
<tr><td>N-NW</td><td>Olapparaiyanur</td><td>1 km</td><td>400</td></tr>
</table>
</td></tr>
<tr><td>9</td><td>Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)</td><td>No</td><td>There is no hospital or Primary school, village temples and primary health centres within 500m radius of the quarry.</td></tr>
</table>

10	Areas containing important, high quality or scarce Resources *(ground water resources, surface resources, forestry, agriculture, fisheries, tourism, Minerals)*	No	There is no high quality or scarce resources such as ground water resources, surface resources, forestry, agriculture, fisheries, tourism, rare Minerals near the site.
11	Areas already subjected to pollution or environmental damage. *(those where existing legal environmental standards are exceeded)*	No	Nil
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (*earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions*)	No	No. Area is not prone to earthquakes, floods etc.

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance give, if any to the project will be revoked at our risk and cost."

Date:
Place:

Signature of Project Proponent\Applicant

PREFEASIBILITY REPORT

Form-1, Prefeasibility Report, Mining Plan for Multi Colour Granite Quarry, S.F.No.511/1,513/26 (Part) & 513/33 (Part) in Arasiramani Bit II village, Sankari Taluk, Salem District,Tamil nadu of TVL. Murugan Granites, (Extent – 1.05.5 Ha).

CHAPTER -1
EXECUTIVE SUMMARY

1.1. INTRODUCTION OF THE PROJECT /ACKGROUND INFORMATION:

TVL. Murugan Granites has been granted a quarrying lease for Multi Colour Granite Quarry over an extent of 1.05.5 **Ha**. In **S.F.No.511/1,513/26 (Part) & 513/33 (Part)** in **Arasiramani Bit II Village, Sankari** Taluk, **Salem** District .

The District Collector, Salem vide their letter:**17192/MMB2/2005-2 Dated 05.01.2006** have conveyed to **TVL. Murugan Granites** to submit the approved mining plan through the Department of Geology and Mining, Salem and also obtain Environmental Clearance from SEIAA.

Department of Geology and Mining, Salem vide their Letter: **Rc No.8307/MM5 Dated 05.01.2006** have approved the Mining Plan over an extent of **1.05.5** Ha in S.F.Nos.**511/1,513/26 (Part) & 513/33 (Part)** in **Arasiramani Bit II** village, **Sankari** Taluk, **Salem** District, and Tamil Nadu. (Copy of Mining plan approved letter enclosed)

TVL. Murugan Granites, Propose to quarry **665m^3** of Multi Colour Granite Quarry for 5 years. From this lease area by open cast semi- mechanized mining technique. This feasibility report is prepared towards obtaining the Environmental Clearance.

As per MOEF O.M. No.L - 11011/47/2011 –A.II (M) dated 18th May, 2012, leases of minor Minerals also require environmental clearance. For getting environmental clearance, depending on the nature magnitude and capacity, the projects are categorized as “A” Category & “B” Category. “A” Category projects have to be cleared by MOEF while “B” Category by the State Environmental Impact Assessment Agency (SEIAA). **This being a small quarry of just 1.05.5Ha (< 25 Ha) it can be treated as B-2 category.**

1.2 DETAILS OF THE AREA:

Patta Land.

2.1. PROJECT DETAILS:

2.1.1SITE DESCRIPTION:

Salient details of the site &its environs are as follows:

<table>
<tr><th colspan="3">SALIENT ASPECTS OF SITE AND ITS ENVIRONS</th></tr>
<tr><td>1.</td><td>Name of the Project</td><td>Multi Colour Granite Quarry</td></tr>
<tr><td>2.</td><td>Project Proponent/ (Company)</td><td>TVL. Murugan Granites</td></tr>
<tr><td>3.</td><td>ML area</td><td>1.05.5 Ha</td></tr>
<tr><td>4.</td><td>Land use</td><td>
<table>
<tr><th>Land Use</th><th>Present Area (Hect)</th><th>Area in use during the quarrying period (Hect)</th></tr>
<tr><td>Quarry</td><td>Nil</td><td>0.10.50</td></tr>
<tr><td>M. Reject Dump</td><td>Nil</td><td>0.15.00</td></tr>
<tr><td>Infrastructure</td><td>Nil</td><td>0.01.00</td></tr>
<tr><td>Roads</td><td>Nil</td><td>0.03.00</td></tr>
<tr><td>Area Under Plantation</td><td>Nil</td><td>0.03.50</td></tr>
<tr><td>Unutilized</td><td>Nil</td><td>0.72.50</td></tr>
<tr><td>Total =</td><td>1.05.50</td><td>1.05.50</td></tr>
</table>
</td></tr>
<tr><td>5.</td><td>Nearest Railway station</td><td>Sankari – 13kms</td></tr>
<tr><td>6.</td><td>Nearest Airport</td><td>Salem (Omalur) – 50 kms</td></tr>
<tr><td>7.</td><td>Nearest water bodies</td><td>Nil</td></tr>
<tr><td>8.</td><td>Nearest Town / city</td><td>Sankari- 13Kms</td></tr>
<tr><td>9.</td><td>Nearest Village</td><td>
<table>
<tr><th>Direction</th><th>Village</th><th>Distance in Kms</th><th>Population</th></tr>
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<tr><td>N-NW</td><td>Olapparaiyanur</td><td>1 km</td><td>400</td></tr>
</table>
</td></tr>
<tr><td>10.</td><td>Notified Archaeologically important places, Monuments</td><td>Nil</td></tr>
<tr><td>11.</td><td>Local Places of Historical and Tourism interest</td><td>Nil</td></tr>
<tr><td>12.</td><td>Environmental sensitive area , Protected area (Tiger reserve, elephant reserve, Biospj Heres, National parks, Wildlife</td><td>Nil</td></tr>
</table>

sanctuaries, Community reserves and conservation reserves)	
13. Reserved / Protected Forests	Nil
14. Defence installations	Nil
15. Seismic Zone	Nil
16. Other Industries in the area	Nil

2.1.2 PROJECT DESCIPTION

Salient of the project are as follows:

1. Production Capacity	**665m^3** Multi Colour Granite production for 5 years.
2. Geological reserves	**16000m^3** for Multi Colour Granite
3. Total waste	**2660 m^3**
4. Method of Mining:	Opencast mining with drilling & blasting.
5. Main mining equipment	Hydraulic excavator, jack hammers, Tippers,
6. Bench height & Slope	Bench height of 5m and bench width of 5m is proposed for Multi Colour Granite .
7. Man power	14 including managerial staff
8. Water Requirement & source	2.5 KLD will be met from the bore well within the ML area or through tankers.
9. Infrastructure	Mine Office, store room, toilet, first-aid room and, magazine will be provided on semi- permanent structures with the lease area. Portable drinking water can be transported to the work site in tippers or can be at from bore well.
10. Use of Multi Colour Granite Quarry & Gravel	Multi Colour Granite are used mainly in construction .
11. Environmental status	Being a small Quarry, impact of mining on environment will be negligible. The mining operation will provide more employment to the rural people and environment friendly operations.

Drinking & Domestic Purposes (in KLD)	0.750 KLD
Dust Suppression (in KLD)	1.500 KLD
Green belt (in KLD)	0.250 KLD
Total	2.500 KLD

DISPOSAL OF WASTE:

The wastes are generated during the mining period is **2660m^3** shall be dumped in lease boundary.

Section	Granite Waste @80%
I-YEAR	580
II-YEAR	520
III-YEAR	520
IV-YEAR	520
V-YEAR	520
TOTAL	**2660**

2.3 LAND USE PATTERN:

The area is a rural area. Multi Colour Granite exposes in the lease area and it is strewn with boulders of various sizes ranging from a few cm to one to half meter in diameter. The deposit in this lease area is found below the ground level and already quarried to certain level. Except some small bushes there are no other trees in the applied area.

3.1. SITE ANALYSIS:

3.2. CONNECTIVITY:

Salem – Sankari = 50km

Sankari – Idappadi = 13km

Idappadi (Kumarapalayam Road) – Arasiramani = 3km

Arasiramani - Quarry site = 1 ½ Km

The Quarry site is located in South of Arasiramani village .

3.3. PROJECT LAYOUT IN RELATION TO PRIME NATURAL FEATURES:

There is no declared biosphere, wild life Sanctuaries, or tiger Sanctuary or migrating corridor or Coastal Zone in the Zone and 10km buffer zone.

As already mentioned, the entire Quarry lease area is Patta Land. There are no habitations, power line in the lease area.

4.1. PLANNING CONCEPT:

Multi Colour Granite Mined from this quarry will meet the domestic and export demands. The production and method of mining is planned considering the geological factors, availability of proven technology, demand for the material etc. Safety barriers as per State Government order is left in the planning stage itself.

4.2. GREENBELT:

Green belt will be developed in the safety zone area etc, and at all possible places. Local species will be used for plantation.

5.1 REHABILITATION AND RESETTLEMENT (R&R) PLAN:

The entire quarry lease areas of 1.05.5Ha are Patta Land. The area is totally barren. There are no human habitations also. As such no rehabilitation and resettlement plan is involved.

6.1. PROJECT SCHEDULE AND COST ESTIMATES:

As soon as environmental clearance and other statutory clearance are obtained, the mining operations will be commenced

The project cost would be around **Rs. 23,25,000/-** for deployment of machinery and creation of infrastructural facilities like approach road, Mine Office / Workers Shed, first Aid Room etc., Including electrifications and water supply.

7.1 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATION)

The proposed Multi Colour Granite Quarry of TVL. Murugan Granites Multi Colour Granite Quarry will bring prosperity and improvements in physical and social infrastructures in the area like

- Direct employment to about 18 persons
- Indirect employment to more than 100 persons
- Financial gains for the state and central Government as, through collection of various taxes like Royalty, cess, etc.
- Increase in General Awareness of the People
- Improvement of the General Living Standard of the people in the vicinity
- Overall Improvement in HDI (Human Development Index)
- Growth of Allied Industries in the Area.
- Reduction in migration of local people and at the same time increase in Inflow from outside.
- Improvement in Per Capital Income.
- Providing certain faculties' for the local schools and panchyats

In short, the working mining project will region in the fields of potential employment opportunities, improved per capita for local people , improved social welfare facilities like infrastructural build – up , etc.

A meticulously well planned Environmental Management Plan, with various programme schedules and timely execution objectives will ensure that the future environmental quality in the area will be maintained within statutory limits.

With proper environmental management strategy, it is possible that industrial growth, if properly planned with all environmental concerns and appropriate remedial measures can go a long way to improve life pattern and living conditions of the local community around the project.

In view of above factors, the proposed project is worthy of approval for improving the social, physical and financial status of the region, the state and the country as a whole.

CHAPTER-II

INTRODUCTION OF THE PROJECT / BACK GROUND INFORMATION

2.1. IDENTIFICATION OF PROJECT AND PROJECT PROPONENT:

TVL. Murugan Granites has been granted a quarrying lease for Multi Colour Granite Quarry over an extent of 1.05.5 **Ha**. In **S.F.No.511/1,513/26 (Part) & 513/33 (Part)** in **Arasiramani Bit II Village, Sankari** Taluk, **Salem** District .

The District Collector, Salem vide their letter:**17192/MMB2/2005-2 Dated 05.01.2006** have conveyed to **TVL. Murugan Granites** to submit the approved mining plan through the Department of Geology and Mining, Salem and also obtain Environmental Clearance from SEIAA.

Department of Geology and Mining, Salem vide their Letter: **Rc No.8307/MM5 Dated 05.01.2006** have approved the Mining Plan over an extent of **1.05.5** Ha in S.F.Nos.**511/1,513/26 (Part) & 513/33 (Part)** in **Arasiramani Bit II** village, **Sankari** Taluk, **Salem** District, and Tamil Nadu. (Copy of Mining plan approved letter enclosed)

TVL. Murugan Granites, Propose to quarry **665m^3** of Multi Colour Granite Quarry for 5 years. From this lease area by open cast semi- mechanized mining technique. This feasibility report is prepared towards obtaining the Environmental Clearance.

As per MOEF O.M. No.L - 11011/47/2011 –A.II (M) dated 18th May, 2012, leases of minor Minerals also require environmental clearance. For getting environmental clearance, depending on the nature magnitude and capacity, the projects are categorized as “A” Category & “B” Category. “A” Category projects have to be cleared by MOEF while “B” Category by the State Environmental Impact Assessment Agency (SEIAA). **This being a small quarry of just 1.05.5Ha (< 25 Ha) it can be treated as B-2 category.**

1.2 DETAILS OF THE AREA:

Patta Land.

2.1.2. PROJECT PROPONENT:

Name : TVL. Murugan Granites,
Address No. 77, Tiny Sector,
Sidco Industrial Estate,
Ekkaduthangal,
Chennai 600 032.

2.2 NEED FOR THE PROJECT &ITS IMPORTANCE TO THE COUNTRY AND OR REGION:

Multi Colour Granite is used in the constructions Work . The smaller domestic sales will also bring good returns financially to State Government in the form of taxes, cesses, duties, etc.,

As the Multi Colour Granite operations in the proposed Quarry will employ about 14 persons directly and about 100 persons on indirect basis through allied opportunities in logistics, trading, repining works etc good employment potential will arise in this internal rural backward area, which will provide a great fillip for raising income levels and standards of living in the area.

CHAPTER-III
PROJECT DESCRIPTION

3.1. TYPE OF PROJECT:

Multi Colour Granite project.

3.2. LOCATION:

This Project is for Quarrying of Multi Colour Granite over an extent of **1.05.5** Ha in S.F.No.**511/1,513/26 (Part) & 513/33 (Part)** in **Arasiramani Bit II** village of **Sankari** Taluk, **Salem** District, Tamilnadu .The area Lies in the North Latitude **11°33'5.55"N** and East Longitude of **77°48'29.88"E** in the survey of India Topo sheet No. **58 E/14.**

3.3. PROJECT DESCRIPTION:

3.3.1. GEOLOGY:

REGIONAL GEOLOGY:

Precambrian rocks of Tamil Nadu in their mutual interactions and intercalations and younger intrusive granite given rise varieties of dimensional stone granite which are well known in world market.

Younger intrusive granite mainly of Pegmatoidal granite in the Garnetiferous. Hornblende.biotite gneiss occurs as lensoidal body in between ldappadi granite and Tiruchengode. Susequent introduction of Pink granite in to the white Pegmatoidal granite has added pinkish colour to the granite. When the Pegmatoidal granite is white, is commercially known as Tippu white and when it is pinkish it is commercially known as "Imperial White".

GEOLOGY OF THE AREA

The rock are the younger intrusive of pegmatoidal nature in to the country rock .(Hornblende Biotite gneiss) The coloured granite deposit is well exposed at many places. The white pegmatoidal granite is trending NE-SW with vertical dip and deviates upto $N10^0$ E to $S10^0$ W. The intrusive young granite is pegmatoidal in nature, which was intruded by pink granite veins seen within the white pegmatoidal granite.

	Age	Rock Formation
1.	Recent	Soil, Alluvium
2.	Archaean	Pegmatite and Quartz Veins ,Basic Dykes (Charnockite)Granite Migmatites .Charnockite and associated Biotite Gneiss

3.3.2. RESERVES:

3.3.2.1 EXPLORATION:

Nil

3.3.2.2 METHOD OF ESTIMATION OF RESERVES:

The geological and Mineable reserves are estimated by cross-sectional method. Depth of mining is taken as 13m from the Ground Profile.

3.3.3 GEOLOGICAL RESERVES & MINEABLE RESERVES:

The geological reserves are estimated for the area by the Cross-Sectional method is as **16000m^3** upto the estimated depth. The reserves details are as follows:

ESTIMATION OF GEOLOGICAL RESERVES FOR MULTI COLOUR GRANITE :

The area applied for is =1.05.5 Ha

Area Contains Granites = 0.80.0Ha

Proposed Depth =13m

Top Weathred Granite =3m

Thickness of Granite =10m

Recovery of Granite Blocks =20%

Area	Thickness	20% Recovery	Geological Reserves
8000	10	0.20	16000

MINEABLE RESERVES:

The Mineable reserves and the recoverable reserves are **8228m^3** respectively,

Section	L (m)	W (m)	D (m)	20%Recovery	Volume m^3
North - East	66	34	10	0.20	4488
South - West	85	34	10	0.20	3740
TOTAL					8228

3.3.3.1. SELECTION OF QUARRY BOUNDARY:

The Quarry boundary is demarcated in the field map sketched (FMB) and also confirmed by State Government.

3.3.4. MINING METHOD:

Open cast method of semi –mechanized mining will be adopted to quarry the Multi Colour Granite

3.4.1 BENCH DESIGN PARAMETERS:

Multi Colour Granite Quarry benches will be formed to a height of 5m and width not less than 5m for movement of machineries and slope shall not be more than 60º for waste bench and therefore the working face is designed to a height of 5m and the width not less than 5 – 10m and the working slope will be vertical, however the final slope will be 45º while abutting the ultimate pit limit. Construction of parapet as a fencing

around such ultimate pit limit on top of opencast workings will be arranged to safeguard the Quarry from inadvertent entry and hazards.

.

The development involves only removal of small amount of rejects (i.e.80%). The average production for 5 years **665m^3** Year Wise Production for Multi Colour Granite:

Year	**Top Soil weathered granite Cu.Mts.**	**ROM Cu.Mts.**	**Salable granite Cu.Mts. 20%**	**Granite Waste Cu.Mt. 80%**	**Total waste**
1	1155	725	145	580	1735
2	525	650	130	520	1045
3	525	650	130	520	1045
4	525	650	130	520	1045
5	525	650	130	520	1045
	3255	3325	665	2660	5915

3.3.6 PROPOSED MECHINERIES:

The following machineries are proposed exclusively for the development for the development and production works at this Quarry:

S.No	**Machineries**	**Numbers**	**Unit**	**Size/Capacity**	**Make**
1	Jack hammer with	6	Mm	32Hand held	Atlas Copco
2	Compressor Hydraulic excavator	1	M^3	1.7	Ex 300
3	Tipper	2	MT	10	Ashok Leyland

The above machineries are adequate to meet out the simultaneous development and production schedule.

3.3.7. BLASTING:

The massive formation shall be broken into pieces of portable size by drilling and blasting using jack hammers and shot hole blasting. Powder factor of explosives for breaking such hard rock shall be in the order of 6 to 7 tonnes per K.g of explosives. Blasting parameters are as follows.

Diameter of the hole	:	32-36 mm
Spacing	:	60 Cms
Depth	:	2-5m
Charge / Hole	:	D.Cord with water or 5 gms of gun powder or Gelatine.
Pattern of hole	:	Wirezag Cutting
Inclination of hole	:	90^0 from the horizontal.
Quantity of rock broken	:	2 M^3 (5x5=25)
Blasting efficiency @ 20%	:	25 20% ($5M^3$)
Charge per hole	:	5 gms of 25mm dia cartridge
Quantity of Granite broken per day	:	$2.3M^3$.

3.3.8. DISPOSAL OF WASTE:

The wastes are generated during the mining period is **2660m^3** shall be dumped in lease boundary.

Section	Granite Waste @80%
I-YEAR	580
II-YEAR	520
III-YEAR	520
IV-YEAR	520
V-YEAR	520
TOTAL	**2660**

3.4. USES OF PRODUCTS FROM QUARRY:

Multi Colour Granite is mainly used in construction Work**.**

3.5 LAND USE PATTERN:

Land Use	Present Area (Hect)	Area in use during the quarrying period (Hect)
Quarry	Nil	0.10.50
M. Reject Dump	Nil	0.15.00

Infrastructure	Nil	0.01.00
Roads	Nil	0.03.00
Area Under Plantation	Nil	0.03.50
Unutilized	Nil	0.72.50
Total =	**1.05.50**	**1.05.50**

3.6 REQUIREMENTS:

3.6.1 Man Power:

Total manpower required will be 14 on direct basis. Indirectly more than 100 persons can derive benefits in allied services like logistics, polishing, loading/ unloading repair works trading etc.

3.6.2 Water:

About 2.5 KLD water will be used for dust suppression, green belt and domestic sanitary needs.

Drinking & Domestic Purposes (in KLD)	0.750 KLD
Dust Suppression (in KLD)	1.500 KLD
Green belt (in KLD)	0.250 KLD
Total	2.500 KLD

3.6.3 Effluent System:

The only effluent arising from project consists of domestic water, to the tune of about .5 KLD which is discharged into septic tanks with soak pits.

3.6.4 Electricity requirement:

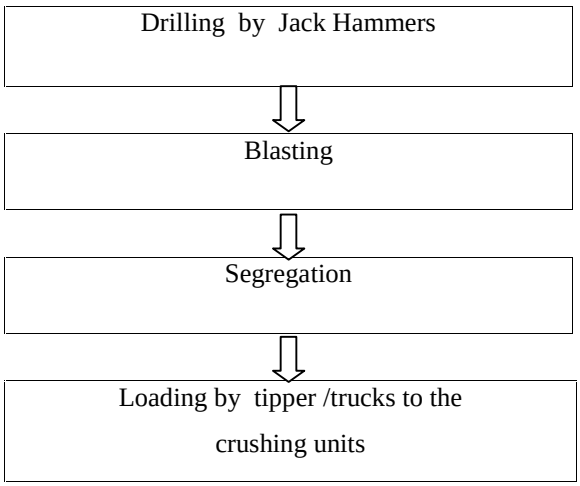
No electricity is needed for quarry operations etc as only diesel operated mining machinery are used for quarrying. The mining work is restricted to one general shift during daytime only. However, the power requirement of the administrative buildings, roads etc are met from state grid. Besides, standby generators can be used to meet the negligible power requirement of the Mines.

3.7. SITE SERVICES:

The simple methods adopted and the limited scale of activities involved in Multi Colour Granite dimensional stone quarrying does not require huge worship facilities. Major Machinery repair works are attended at Salem town and minor repairs are carried out by the company's staff at the quarry site itself. Mine Office, store room, toilet, first – aid room and, magazine will be provided on semi- permanent structures within the lease area.

3.8 SCHEMATIC REPRESENTATION FOR MINING AND PROCESSING OF MULTI COLOUR GRANITE QUARRY AND ITS FEASIBILITY:

The line diagram of Mining Operation is given below:



CHAPTER-IV

SITE ANALYSIS

4.1 CONNECTIVITY:

Salem – Sankari = 50km

Sankari – Idappadi = 13km

Idappadi (Kumarapalayam Road) – Arasiramani = 3km

Arasiramani - Quarry site = 1 ½ Km

The Quarry site is located in South of Arasiramani village .

4.2 LAND FORM, LAND USE AND LAND OWNERSHIP:

Quarry lease is a plain terrain this land is not fit for agricultural usage and the land belongs to TVL.

Murugan Granites

4.3 TOPOGRAPHY:

The quarry lease area is almost plain terrain. Temperature of the region is reported to be 20 ºC to a maximum of 40º C during summer. Rain fall of this area is about 800 mm to 900 mm during monsoons in a year. Regional crops are ragi, paddy and maize. There are no monuments or area of public interest is found in the vicinity.

4.4 PROJECT LAYOUT IN RELATION TO IMPORTANT NATURALFEATURES:

There are No declared biosphere, wild life Sanctuaries, or tiger Sanctuary or migrating corridor or Coastal Zone and 10km buffer Zone

As already mentioned, the entire Quarry lease area is Patta Land is in Applicants possession. There no habitation and there is no power line in this area

<table>
<tr><td>1</td><td>Nearest villages</td><td>
<table>
<tr><th>Direction</th><th>Village</th><th>Distance in Kms</th><th>Population</th></tr>
<tr><td>N-W</td><td>Chettipatti</td><td>2 ½ km</td><td>1000</td></tr>
<tr><td>N-E</td><td>Arasiramani</td><td>1 1/2 km</td><td>1500</td></tr>
<tr><td>S-W</td><td>Kallampalayam</td><td>1 1/2 km</td><td>300</td></tr>
<tr><td>N-NW</td><td>Olapparaiyanur</td><td>1 km</td><td>400</td></tr>
</table>
</td></tr>
<tr><td>2</td><td>Nearest Water bodies</td><td>Nil</td></tr>
<tr><td>3</td><td>Notified Archaeologically important places ,monuments</td><td>Nil</td></tr>
<tr><td>4</td><td>Local Places of Historical and Tourism Interest</td><td>Nil</td></tr>
<tr><td>5</td><td>Environmental sensitive areas , Protected areas as per Wild life Protection Act,1972 (Tiger reserve ,Elephant reserve , iospheres ,National Parks ,Wild life Sanctuaries ,community reserves and conservation reserves)</td><td>Nil</td></tr>
</table>

6	Reserved /Protected Forests	Nil
7	Defence Installations	Nil
8	Seismic Zone	Zone –II (lease active)
9	Other Industries in the area	No other industries in this area.

4.5 EXISTING INFRASTRUCTURE:

The area is well accessible by road .The mining work is restricted to one general shift during daytime only .Major Machinery repair Works are attended at Salem town and minor repairs are carried out by the company's staff at the quarry site itself .Mine Office, store room ,toilet ,first –aid room and , magazine will be provided on semi –permanent structures within the lease area .

4.6 CLIMATIC SCENARIO:

The area receives rainfall about 800 mmto 900 mm/per annum and the rainy season is mainly from Oct –Dec. The summer is hot with maximum temperature of 40°C and winter records a minimum temperature of 20°C.

4.7 SOIL STATUS:

The quarry lease area is almost plain terrain .Topsoil Present in this area The Multi Colour Granite is overlain by Weathered Formation.

4.8 SOIL INFRASTRUCTURE:

The Project area and its immediate surroundings do not contain any human habitations,

1. Post Office	Kullampatti – 4 ½ kms
2. Police Station	Idappadi – 12 ½ kms
3. Fire service	Sankari– 13 kms
4. Nearest Railway Station	Salwm – 50kms
5. School	Arasiramani – 1 ½ km
6. Nearest Airport	Salem (Omalur) – 50 kms
7. Nearest Seaport	Chennai – 350 kms

CHAPTER – V
PLANNING BRIEF

5.1 PLANNING CONCEPT:

Multi Colour Granite Mined from this quarry will meet the domestic demands. The production and method of mining is planned considering the geological factors, availability of proven technology, demand for the material etc. Safety barriers as per State Government order is left in the planning stage itself.

5.2 POPULATION PROJECTIONS:

The project will give employment opportunities to about 14 persons directly. Indirectly about 100 persons will find employment prospects in allied service sectors such as Multi Colour Granite Quarry crushing units, logistics, trading, etc.

While skilled persons for the project may have to be brought from outside initially, till local persons attain proficiency in skilled operations, ultimately the nearby villagers may upgrade their operational skills for finding good source of employment in the project late on.

5.3 LAND USE PLANNING:

The present land use of the entire Quarry lease area of 1.05.5Ha is a Patta Land. The land use plans at the end of the mining period and in the ultimate stage of mining are described in para 3.5 chapter III earlier.

5.4 GREEN BELT PROPOSALS:

Green belt will be developed in the safety zone area etc, and at all possible places. Local trees like, Neem, will be planted North Western side of lease boundary and avenues as well as over Non- active dumps at a rate of 10 trees per annum with interval 5m in between. The rate of survival expected to be 80% in this area. Land use and Afforestation plan is given Plate No.VII

5.5 ASSESSMENT OF INFRASTRUCTURE DEMAND:

Salem – Sankari = 50km

Sankari – Idappadi = 13km

Idappadi (Kumarapalayam Road) – Arasiramani = 3km

Arasiramani - Quarry site = 1 ½ Km

The Quarry site is located in South of Arasiramani village .

The logistics details of the product area as follows:

Proposed Multi Colour Granite production	: 665m^3
No of days for this lease period	: 1800 days
No of working days	: 1500 days
No of salable Granite per Month	: 11m^3

The existing roads are adequate to meet this negligible transport need.

5.6 AMENITIES AND FACILITIES:

Good site services will be set up in project area by establishing Mine Office, rest shelter, first aid room, toilets etc.

Drinking water facilities will be on bore well supply basis to all operational personnel. Toilet facilities will also be created through sewage pit and dispersion trench installations. Medical help on part time basis will also be created to treat injured persons etc. Besides, occupational health problems will also be minimised through proper pre-entry medical inspections and regular check – up thereafter during operational phase.

CHAPTER VI

PROPOSED INFRASTRUCTURE

6.1 INFRASTRUCTURAL LAYOUT IN MINING PROJECT AREA:

All necessary infrastructural facilities like Mine Office, rest shelter, first aid room, toilets etc will be created for this project.

6.2 RESIDENTIAL AREA:

For the present limited scale of Mining operations, no residential areas are envisaged

6.3 GREEN BELT:

As mentioned earlier in V- chapter, green belt will be raised along the inner boundary of ML area and in all possible places

6.4 SOCIAL INFRASTRUCTURE:

The proposed project will give following employment prospects.

Direct basis - 18 persons

Indirect basis – More than 100 persons

The former category will be of skilled pattern and initially outside sources will be tapped. Later on, through skill up-gradation, local community will also be benefitted.

The advent of the project will improve the social infrastructure through skills up-gradation, better drinking water facilities, improvement in medical and educational services etc. As a result, the social infrastructure in the area will improve considerably. Consequently the human development index of the area will also go up.

6.5 CONNECTIVITY:

Salem – Sankari = 50km

Sankari – Idappadi = 13km

Idappadi (Kumarapalayam Road) – Arasiramani = 3km

Arasiramani - Quarry site = 1 ½ Km

The Quarry site is located in South of Arasiramani village .

6.6 DRINKING WATER MANAGEMENT:

Drinking water facilities will be arranged from bore well within the lease or through tankers, as the demand will be meagre at about 2.5 KLD.

Drinking & Domestic Purposes (in KLD)	0.750 KLD
Dust Suppression (in KLD)	1.500 KLD
Green belt (in KLD)	0.250 KLD
Total	2.500 KLD

6.7 SEWERAGE SYSTEM:

As there will be only about 14 persons during operational phase of project, the only effluent arising from project consists of domestic waste, to the tune of about .5 KLD which is discharged into septic tanks with soak pits.

6.8 INDUSTRIAL WASTE MANAGEMENT:

No industrial effluents or waste will arise from the project, except for solid waste, description of which is given in para 3.3.8, Chapter – III.

6.9 POWER REQUIREMENT, SUPPLY AND SOURCE:

As already mentioned the simple methods adopted and the limited scale of activities involved in Multi Colour Granite Quarry dimensional stone mining does not require high- tension electric power. The mining work is restricted to one general shift during daytime only. No electricity is needed for quarry operations etc as mainly diesel operated mining machinery are used for quarrying However, the power requirement of the administrative buildings, roads etc can be met from state grid. Besides, standby generator will be available to meet the emergency power requirement of the Mines.

6.0.9 .REHABILITATION AND RESETTLEMENT (R&R) PLAN

The entire quarry lease area of **1.05.5**Ha is a Patta Land. The quarry is totally barren. There are no human habitations also. As such no rehabilitation and resettlement plan is involved.

6.1.1 PROJECT SCHEDULE AND COST ESTIMATES

6.1.2 TIME SCHEDULE FOR THE PROJECT:

As soon as environmental clearance and other statutory clearances are obtained the mining operations will be commenced.

6.1.3 PROJECT COST AND ECONOMIC VIABILITY OF THE PROJECT

6.1.4 PROJECT COST:

The project cost would be around **Rs. 23,25,000/-** for deployment of machinery and creation of infrastructural facilities like approach road, Mine Office / Workers Shed, First Aid Room etc.., including electrifications and water supply.

6.1.3 ECONOMIC VIABILITY:

Infact there will be a great demand for Multi Colour Granite Quarry for construction industries. Hence, the economic viability of the project will be greatly sustainable.

CHAPTER VII

ANALYSIS OF PROPOSAL (FINAL RECOMMENDATION)

7.1 CONCLUSION:

The proposed Multi Colour Granite Quarry of **TVL. Murugan Granites,** will bring prosperity and improvements in physical and social infrastructures in the area like:

- Direct employment to about 18 persons
- Indirect employment to about 100 persons
- Financial gains for the state and central Pattas, through collection of various taxes like royalty , cess, etc
- Increase in General Awareness of the People.
- Improvement of the General Living Standard of the People in the vicinity
- Overall Improvement in HDI (Human Development Index)
- Growth of Allied Industries in the Area.
- Reduction in migration of local people and at the same time increase in Inflow from Outside.
- Improvement in Per Capita Income.
- Providing certain facilities for the local schools and panchayat.

In short, the working mining project will benefit this region in the fields of potential employment opportunities, improved per capita income for local people, improved social welfare facilities like infrastructural build – up, etc.

A meticulously well planned Environmental Management Plan, with various programme schedules and timely execution objectives will ensure that the future environmental quality in the area will be maintained within statutory limits.

With proper environmental management strategy, it is possible that industrial growth, if properly planned with all environmental concerns and appropriate remedial measures can go a long way to improve life pattern and living conditions of the local community around the project.

In view of above factors, the proposed project is worthy of approval for improving the social, physical and financial status of the region, the state and the country as a whole.

Date: Signature of Project Proponent\Applicant

Place:

TVL. Murugan Granites