

Form I as per EIA Notification 2006 for  
Arasiramani Bit-II Multi - Coloured Granite Quarry of  
**Tvl. Imperial Granites (Pvt) Limited** in Arasiramani Bit-II  
Village, Sankari Taluk, Salem District, Tamilnadu

Application Form for Obtaining Environmental Clearance from  
State Level Environmental Impact Assessment Authority (SEIAA)  
Tamilnadu

**FORM I**

**(I) BASIC INFORMATION**

S.No	Item	Details																								
1	Name of the project/s	<i>Arasiramani Bit-II Multi - Coloured Granite</i> Quarry project																								
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	The proposed quantity of reserves (10%) is <b>1201m<sup>3</sup></b> of Multi – Coloured Granite for during this scheme period. Area = <b>4.83.0Ha</b> . It is a shallow open cast quarry. The lease area exhibits slightly elevated topography. The gradient is gentle towards Northern side. Hence no wells are proposed not drilled.																								
4	New/ Expansion/ Modernization	It is New proposal Multi – Coloured Granite Quarry Project (the area has been quarrying operation earlier) in Arasiramani Bit-II Village.																								
5	Existing capacity/Area etc.	<p>The proposed quantity (10%) is about <b>1201m<sup>3</sup> (or) 212</b> Lorry Loads of Multi-Coloured Granite for a during this scheme period of two years. Per year for lorry loads = 212 lorry loads/2 years =106 lorry loads per years. Total number of effective working days = 280days per year Per months for lorry loads = 106 lorry loads /12 months (280days)= <b>Maximum 9 lorry loads per months</b> The applicant proposed Multi-Coloured Granite up to a depth of <b>6m</b> (1m top soil + 5m Multi coloured Granite) of during this scheme period of two years.</p> <table border="1"> <thead> <tr> <th>Description</th> <th>ROM (m<sup>3</sup>)</th> <th>Reserves 10%(m<sup>3</sup>)</th> <th>Granite waste 90% (m<sup>3</sup>)</th> <th>Topsoil in m<sup>3</sup></th> <th>Side burden in m<sup>3</sup></th> </tr> </thead> <tbody> <tr> <td>Geological reserves</td> <td>142508</td> <td>14251</td> <td>128257</td> <td>3959</td> <td>-</td> </tr> <tr> <td>Mineable Reserves</td> <td>104508</td> <td>10451</td> <td>94057</td> <td>2960</td> <td>33100</td> </tr> <tr> <td>Remaining two years Scheme of mining plan</td> <td><b>12008</b></td> <td><b>1201</b></td> <td><b>10807</b></td> <td><b>1036</b></td> <td><b>5700</b></td> </tr> </tbody> </table>	Description	ROM (m <sup>3</sup> )	Reserves 10%(m <sup>3</sup> )	Granite waste 90% (m <sup>3</sup> )	Topsoil in m <sup>3</sup>	Side burden in m <sup>3</sup>	Geological reserves	142508	14251	128257	3959	-	Mineable Reserves	104508	10451	94057	2960	33100	Remaining two years Scheme of mining plan	<b>12008</b>	<b>1201</b>	<b>10807</b>	<b>1036</b>	<b>5700</b>
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6	Category of project i.e. 'A' or 'B'	Category - B2																								
7	Does it attract the general condition? If yes, please specify.	7.5m safety distance maintained from the all along the boundary barrier.																								
8	Does it attract the specify condition? If yes, please specify.	50m safety distance maintained from the odai.																								
9	Location	Topo sheet No: 58-E/14 Latitude: 11°32'23''N to 11°32'39''N Longitude: 77°47'33'' E to 77°47'44'' E																								

	Plot/ Survey/ Khasra No.	569/1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 17 (P), 570/3A, 3B, 3C, 577/2 & 4
	Village	Arasiramani Bit-II
	Taluk	Sankari
	District	Salem
	State	Tamilnadu
10	Nearest railway station/ airport along with distance in kms	Sankari Railway station - 12km – SE Coimbatore Airport - 110km - SW
11	Nearest Town, city, District Headquarters along with distance in kms	Town – Edappadi - 7.0km- NE Nearest City – Salem - 40km - NE District – Salem - 40km - NE
12	Village Panchayats, ZilaParishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Village - Arasiramani Bit-II Panchyat Union - Sankari Taluk - Sankari District - Salem
13	Name of the applicant	Tvl. Imperial Granites (Pvt) Limited,
14	Registered Address	Tvl. Imperial Granites (Pvt) Limited, No.76, Cathedral Road, Chennai-600 086
15	Address for correspondence:	
	Name	Tvl. Imperial Granites (Pvt) Limited,
	Designation (Owner/Partner/CEO)	Proprietor
	Address	Tvl. Imperial Granites (Pvt) Limited, No.76, Cathedral Road, Chennai-600 086
	Pin Code	600 086
	E-mail	<a href="mailto:infogeoexploration@gmail.com">infogeoexploration@gmail.com</a>
	Telephone No.	9443742494
	Fax No.	-
16	Details of Alternative Sites examined, if any. Location of these sites should be shown on a Topo sheet.	There is no alternative sites are examined. The project is site specific.
17	Interlinked Projects	There is no interlinked project.
18	Whether separate application of interlinked project has been submitted?	This project is site specific to win the Multi - Coloured Granite blocks from the parent sheet mass; hence separate application for interlinked project has not submitted.
19	If yes, date of submission	This project is site specific to win the Multi - Coloured Granite blocks from the parent sheet mass; hence separate application for interlinked project has not submitted.
20	If no, reason	This site specific project involves Multi - Coloured Granite Quarry only.

21	<p>Whether the proposal involves approval/ clearance under: if yes, details of the same and their status to be given.</p> <p>(a) The Forest (Conservation) Act, 1980?</p> <p>(b) The Wildlife (Protection) Act, 1972?</p> <p>(c) The C. R. Z. Notification, 1991?</p>	<p>(a) The project does not attract the Forest (Conservation) Act 1980.</p> <p>(b) There is no wild life in the project site area under the Wildlife (protection) Act 1972.</p> <p>(c) The project area does not fall the C.R.Z Notification, 1991.</p>
22	<p>Whether there is any Government Order/ Policy relevant/ relating to the site?</p>	<p>The Mining lease was granted in <b>G.O. (3D) No: 54, Industries (MMB-II) Department Dated: 4.4.2007.</b></p> <p>The Mining Plan was Approved by the Commissioner of Geology and Mining, Chennai vide <b>Letter. No: 2717/MM5/2005 Dated: 22.03.2007</b> (Enclosed as Annexure – I).</p>
23	<p>Forest land involved (hectares)</p>	<p>There is no forest land involved in the lease area.</p>
24	<p>Whether there is any litigation pending against the project and/ or land in which the project is propose to be set up?</p> <p>(a) Name of the Court</p> <p>(b) Case No.</p> <p>(c) Orders/ directions of the Court, if any and its relevance with the proposed project.</p>	<p>There is no court case pending, litigations relating to the project directly and indirectly.</p>

**(II) Activity**

**1. 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 sources 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)	Yes	<p>The topography will be changed after the quarrying of Multi - Coloured Granite as per the Mining plan, Open cast Semi Mechanized Mining with 5.0 meter vertical bench with a bench width of 5.0 meter is being proposed.</p> <p><b>Dimension of the years wise:</b></p> <table border="1" data-bbox="798 667 1417 734"> <thead> <tr> <th>Description</th> <th>L (m)</th> <th>W(m)</th> <th>D (m)</th> </tr> </thead> <tbody> <tr> <td>Conceptual</td> <td>70</td> <td>84</td> <td>6</td> </tr> </tbody> </table> <p><b>Dimension of end of the quarry lease period:</b></p> <table border="1" data-bbox="794 768 1436 835"> <thead> <tr> <th>Length (m)</th> <th>Width (m)</th> <th>Depth (m)</th> </tr> </thead> <tbody> <tr> <td>121</td> <td>84</td> <td>21</td> </tr> </tbody> </table> <p>Topography will change in respect to overburden excavation. However, measures will be implemented as per mining Plan. As the area of the quarry remains the same, there will not be any increase in intensity of local land use. After the end of the life of the quarry the waste material will be backfilled in the mined work out area.</p> <table border="1" data-bbox="766 1126 1449 1612"> <thead> <tr> <th>Description</th> <th>Present Area (Ha.)</th> <th>Area to be Required at the present Mining plan period(Ha)</th> <th>Area to be required at the End of the lease period(ha)</th> </tr> </thead> <tbody> <tr> <td>Area under quarry</td> <td>0.11.4</td> <td>0.41.7</td> <td>0.95.0</td> </tr> <tr> <td>dump</td> <td>Nil</td> <td>0.43.5</td> <td>0.43.5</td> </tr> <tr> <td>Infrastructure</td> <td>Nil</td> <td>0.0</td> <td>0.01.0</td> </tr> <tr> <td>Roads</td> <td>0.01.0</td> <td>0.01.0</td> <td>0.02.0</td> </tr> <tr> <td>Green Belt</td> <td>Nil</td> <td>0.25.3</td> <td>0.70.0</td> </tr> <tr> <td>Stocking Blocks</td> <td>4.70.6</td> <td>3.58.1</td> <td>2.71.5</td> </tr> <tr> <td>Grand Total</td> <td><b>4.83.0</b></td> <td><b>4.70.6</b></td> <td><b>4.83.0</b></td> </tr> </tbody> </table>	Description	L (m)	W(m)	D (m)	Conceptual	70	84	6	Length (m)	Width (m)	Depth (m)	121	84	21	Description	Present Area (Ha.)	Area to be Required at the present Mining plan period(Ha)	Area to be required at the End of the lease period(ha)	Area under quarry	0.11.4	0.41.7	0.95.0	dump	Nil	0.43.5	0.43.5	Infrastructure	Nil	0.0	0.01.0	Roads	0.01.0	0.01.0	0.02.0	Green Belt	Nil	0.25.3	0.70.0	Stocking Blocks	4.70.6	3.58.1	2.71.5	Grand Total	<b>4.83.0</b>	<b>4.70.6</b>	<b>4.83.0</b>
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1.2	Clearance of existing land, vegetation and building?	No	There is no vegetation and building in this project lease area.																																														

1.3	Creation of new land uses?	No	The total quarrying activity is proposed to carry out within the quarry lease applied area. Hence, <b>there is no proposal for creating of new land uses</b> . Temporary approach road within the area will be form for the easy access of men and machinery which will be well maintained. The Trailers/ trucks will transport the Multi - Coloured Granite to the needy customer by existing road.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	The fresh Multi - Coloured Granite is clearly visible, hence pre-construction investigation and soil testing is not proposed before quarrying operation.
1.5	Construction works?	No	There will be no major civil works, Other than the following: Office building, storeroom, toilet and first aid room which will be provided as permanent structures within the quarry lease applied area, after the grant of quarry lease.
1.6	Demolition works?	No	There are no existing building within the lease applied area hence no demolition work is involved.
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	Sites service on permanent structure will be constructed only after grant of quarry lease, hence no temporary sites are proposed.
1.8	Above ground buildings, structures or earth works including linear structures, cut and fill or excavations	No	There are no tall buildings or linear structure found within the quarry site. There is no requirement of cutting and filling in the site.
1.9	Underground works including mining or tunneling?	No	Open cast semi mechanized quarrying will be adopted. No underground mining or tunneling is proposed.
1.10	Reclamation works?	Yes	It's a fresh project and it is proposed plan <b>6m</b> (1m top soil + 5m Multi coloured Granite) for during this scheme period. Hence, after mine reaches ultimate limit of <b>21m</b> depth the remaining waste will be refilled in the worked out mine area.
1.11	Dredging?	No	It's an inland opencast quarrying operation, hence dredging activities are not proposed.
1.12	Offshore structures?	No	It's an opencast quarrying operation, There is no such type of activities involved.

1.13	Production and manufacturing processes?	No	There is no production or manufacturing is involved in the Multi - Coloured Granite Quarrying. It's an opencast quarrying operation with shallow drilling and limited blasting. The rough Multi - Coloured granite blocks are either exported or sold to needy domestic factories.
1.14	Facilities for storage of goods or materials?	No	There is no proposal for storage of material within the quarry lease applied area. The Multi - Coloured Granite Blocks will be loaded directly to the trailers and transported to needy customers.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	No	<p>The proposed Recovery of Dimensional stone is 10%.The Remaining 90% waste will be dumped on the <b>Southwestern</b> side and later will be used for backfilling at end of life of quarry. The anticipated mineable waste is around the <b>127157m<sup>3</sup></b> (Granite waste @90% 94057m<sup>3</sup> + side burden 33100m<sup>3</sup>) for entire life period and <b>16507m<sup>3</sup></b> (Granite waste @90% 10807m<sup>3</sup> + side burden 5700m<sup>3</sup>) for during this scheme period.</p> <p>There is no toxic effluent anticipated in the form of solid and liquid or gas.</p> <p>Domestic waste water will be treated in Septic Tank followed by soak pit. The manure will be treated and used for green belt development. The Multi - Coloured Deposit will not produce any toxic effluent in the form of solid, liquid or gas.</p> <p>The sewage water from the pits will be drained by 5HP motor Pumps and the same will be used for Afforestation on the boundary barrier and dust suppression on haul roads.</p>
1.16	Facilities for long term housing of operational workers?	No	The proposed project is <b>4.83.0Ha</b> . The minimum employees are available in the nearby villages hence long term housing of operational workers are not proposed. Temporary Rest shelter will be constructed on permanent structure within the lease area after the grant of quarry lease.
1.17	New road, rail or sea traffic during construction or operation?	No	No new roads, rail or sea traffic is proposed during operation, the existing road will be utilized for transportation of the Multi - Coloured Granite dimensional stone to the needy customers. However, internal roads within the quarry lease applied area will be developed and maintained.

1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?	No	There is no such type of activities involved in this project. Existing road will be utilized for the transportation of Multi - Coloured Granite dimensional stone to the needy customer.
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	The project will not cause any changes and hindrance in the existing traffic movements. The drivers will be strictly instructed to move the loaded trucks not exceeding 40Km/ Hour. As much of the transportation is carried on main roads vehicles are loaded with specific capacity, checked properly and maintained as per R.T.O norms by the competent and statutory mines foreman.
1.20	New or diverted transmission lines or pipelines?	No	The project does not involve diversion of transmission/pipe lines.
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	The quarrying operation is restricted up to a depth of <b>6m</b> (1m top soil + 5m Multi coloured Granite) for during this scheme period. The Ground water occurrence in this area is <b>55mt</b> depth from ground profile. Hence there is no damage or hindrance for ground water hydrology or subsurface aquifers.
1.22	Stream crossings?	No	There is no Stream crossing in the lease applied area.
1.23	Abstraction or transfers of water from ground or surface waters?	No	The proposed quarrying does not require any abstraction or transfer of water from the Ground or surface water bodies.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	The quarry operation is restricted up to a depth of <b>6m</b> (1m top soil + 5m Multi coloured Granite) for during this scheme period. Quarry operation will not affect the drainage pattern of the lease applied area. There is no change in water bodies or the land surface affected during run off. The seepage water during rainy season will be drained by 5HP Pumps and will be used for green belt development and dust suppression on haul roads.

1.25	Transport of personnel or materials for construction, operation or decommissioning?	No	<p>During operation phase, after grant of lease quarrying personnel will be brought from surrounding villages by applicant town vehicle.</p> <p>The materials and tools shall be transported by trucks and tippers, the existing road and infrastructure facilities are sufficient. No construction operation or decommissioning envisaged.</p>
1.26	Long-term dismantling or decommissioning or restoration works?	No	No Dismantling or decommissioning is proposed in this project. The project is only for removal of Granite blocks from parent sheet mass.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	There is no such type of activities involved in this project.
1.28	Influx of people to an area in either temporarily or permanently?	Yes	<p>During operational phase, the manpower requirement will be around <b>35nos.</b> Local people are available and envisaged in this quarry operation. Inherent entry of public will be strictly prevented.</p> <p>No child labor will be deployed for any type of quarrying operation. All the labors engaged for quarrying operations will be trained, equipped with protective devices and insured till the end of life of quarry.</p>
1.29	Introduction of alien species?	No	There is no proposal to introduce alien species.
1.30	Loss of native species or genetic diversity?	No	There will be no loss of native species or genetic diversity taken during the quarry operation as the lease area is devoid of vegetation and agriculture.
1.31	Any other actions?	No	<p>Temporary approach road will be formed and maintain within the area.</p> <p>The Trucks will be transport the Multi – Coloured Granite Dimensional Blocks to needy customer by existing roads. Trucks will be maintained below 40Km/Hour on roads and the drivers will be inducted to strictly follow the traffic rules during the transportation besides the vehicles will be maintained in good conditions as per RTO norms.</p> <p>No long term dismantling or decommissioning is involved in this project. This project is sites specific and may not have any significant impact on the environment.</p>

**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 thereof (with approximate quantities/rates, wherever possible) with sources of information data										
2.1	Land especially undeveloped or agricultural land (ha)	No	<p>The total quarry lease applied area is <b>4.83.0Ha</b>; it is a patta land vide patta no: <b>1333 &amp; 4018</b></p> <p>The lease area exhibits elevated topography having gentle slope towards Northern side. The altitude of the area is <b>2120m</b> above MSL. The Multi coloured granite is covered with 1m thickness of soil.</p>										
2.2	Water (expected source & competing users) unit: KLD	Yes	<p>The project does not require huge water for quarrying operation, about 1 KLD of water will be used for the project. (More than 5L/ Person)</p> <table border="0" style="margin-left: 20px;"> <tr> <td>1. Drinking Water</td> <td style="text-align: right;">-0.3KLD</td> </tr> <tr> <td style="padding-left: 20px;">&amp; Domestic purpose</td> <td></td> </tr> <tr> <td>2. Dust Suppression</td> <td style="text-align: right;">- 0.3 KLD</td> </tr> <tr> <td>3. Green belt</td> <td style="text-align: right;">- 0.4 KLD</td> </tr> <tr> <td style="padding-left: 40px;">Total</td> <td style="text-align: right;">- 1.0 KLD</td> </tr> </table> <p>0.3 KLD of water for Drinking &amp; Domestic purpose will be brought from the approved water vendors in nearby Village.</p> <p>0.3KLD &amp; 0.4KLD of Water for dust suppression and Green belt development, water also available in existing borehole on near the quarry area.</p> <p>Total requirement for the project is around 1KLD.</p>	1. Drinking Water	-0.3KLD	& Domestic purpose		2. Dust Suppression	- 0.3 KLD	3. Green belt	- 0.4 KLD	Total	- 1.0 KLD
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2.3	Minerals (MT)	No	No minerals are used for construction purposes.										
2.4	Construction material - Stone, aggregates, and/Soil (expected source-MT)	No	The proposed Multi – Coloured Granite Quarry project does not require any construction material for the project.										
2.5	Forests and timber (source-MT)	No	The Multi - Coloured Granite Quarrying operation does not require any timber for the project.										

2.6	Energy including electricity and fuels (source, competing users) unit: fuel (MT),Energy (MW)	Yes	<p>The limited scale of activities adopted in Multi - Coloured Granite Quarrying does not require high-tension electric power supply. The quarrying operation is only for daytime. The electricity will be used only for mine office and lighting around the quarry during night time. The existing electric line near the quarry site will be used.</p> <p>Fuels are used for operating Excavators and compressors for Jack hammer, and vehicles during quarrying process and transportation. Fuel required for this project life is about 167216 liters of HSD for entire project life. And <b>19216</b> liters of HSD for during this scheme period.</p>
2.7	Any other natural resources (use appropriate standard units)	No	Except HSD, no other natural resource will be required for this quarrying operation.

**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 sources 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	There is no proposal for storage, handling or transportation of any hazardous materials or substances as per MSIHC rules in this Multi - Coloured Granite Quarry project.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	The granite quarry project does not produce any toxic effluent in the form of solid, Liquid or gas hence the diseases related to insect or water borne diseases is not envisaged. There is no proposal of storage of water inside the project area. The seepage water and rain water will be drained immediately by 5HP pumps and it will be used for Green Belt Development and for dust suppression on haul roads.

3.3	Affect the welfare of people e.g. by changing living conditions?	No	<p>Welfare of people will get positive change due to the project, where a number of Welfare activities are being undertaken. Due to increase of the employment earning of local people and lifestyle of the village people will enhance, around <b>35</b> peoples will be directly benefit to this project.</p> <p>No child labor will be engaged for any type of quarrying operation. All the labor will be insured and the salary and benefits will be paid as per the Labor enforcement officers (Ministry of labor and welfare) Norms</p>
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children's, the elderly etc.,	No	<p>There is no effect envisaged for the vulnerable groups of people who could be affected by the project. The Multi - Coloured Granite dimensional Blocks will be transported to the needy customer by tarpaulin cover to prevent dust. There is no toxic effluence anticipated in the form of solid liquid or gas. The project area lies in the outside of the district which is devoid of Hospitals, Schools elderly homes and vulnerable group of people.</p>
3.5	Any other causes	No	No other cause are envisaged

**4. Production of solid wastes during construction or operation or decommissioning (MT/mounts)**

S. No	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with sources of information data
4.1	Spoil, overburden or mine wastes	Yes	<p>The proposed Recovery of Dimensional stone is 10%.The Remaining 90% waste will be dumped on the Southwestern side with dimension of 75mx 58mx17.5m(H) later will be used for backfilling at the end of life of quarry. The anticipated mineable waste is around the <b>127157m<sup>3</sup></b> (Granite waste @90% 94057m<sup>3</sup> + side burden 33100m<sup>3</sup>) for entire life period and <b>16507m<sup>3</sup></b> (Granite waste @90% 10807m<sup>3</sup> + side burden 5700m<sup>3</sup>) for during this scheme period.</p> <p>There is no toxic effluent anticipated in the form of solid and liquid or gas. Domestic waste water will be treated in Septic Tank followed by soak pit. The manure will be treated and used for green belt development. The Multi - Coloured Granite will not produce toxic effluence in the form of solid, liquid or gas.</p> <p>The sewage water from the pits will be drained by 5HP motor Pumps and the same will be used for Afforestation at boundary barrier and dust suppression on haul roads.</p>
4.2	Municipal waste (domestic and or commercial wastes)	Yes	The small quantity of Municipal waste will be generated and the same shall be disposed as per guidelines.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	No	In this quarrying activities waste oil will be generated during the operation period it will be sent to authorize Re- Circulars as per SPCB/ CPCB norms. Care and maintenance of vehicles by experience qualified mechanics will be undertaken to prevent breakdown and spillage of oils and lubes.
4.4	Other industrial process wastes	No	Industrial wastages are not envisaged during the quarrying operation.
4.5	Surplus product	No	There is no such type of activities anticipated in this quarry.

4.6	Sewage sludge or other sludge form effluent treatment	Yes	Sanitary facilities will be constructed as permanent structure and the sewage waste will be disposed periodically and will be used as manure after treatment.
4.7	Construction or demolition wastes	No	No Construction or demolition wastes involved in this quarry.
4.8	Redundant machinery or equipment	No	No redundant machineries involved in this project.
4.9	Contaminated soils or other materials	No	There is no a contaminated material or soil observed in the quarry lease applied area.
4.10	Agricultural wastes	No	There is no agricultural waste anticipated during the granite quarrying operation.
4.11	Other solid wastes	No	There is no other solid waste anticipated.

#### 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 sources of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	The emissions of SO <sub>2</sub> (Sulfur dioxide) & NO <sub>2</sub> (Nitrogen dioxide) may be due to use of diesel operated quarry machinery and vehicles. Better maintenance of equipment in good condition as per RTO norms will help to reduce such emissions.
5.2	Emissions from production processes	Yes	Dust is the main pollutant produced in the proposed activity. Emission from loading, drilling and blasting but they will be maintained within limits by proper maintenance and sprinkling of water and Afforestation developments. Tarpaulin covers will be covered in vehicles during transportation. The emission in diamond wire saw cutting is minimal and Negligible.
5.3	Emissions from materials handing including storage or transport	Yes	Fugitive dust will be generated from material handling activities. Dust suppression by water sprinklers will be provided to prevent the fugitive dust emissions during loading. Tarpaulin covers will be covered in vehicles during transportation.
5.4	Emissions form construction activities including plant and equipment	No	No major construction activities are envisaged. No plant is proposed inside the quarry project.

5.5	Dust or odors form handling of materials including construction materials, sewage and waste	No	Minor dust will be generated during drilling, blasting and wire saw cutting, and it will be controlled by carry out the operation in wet conditions. There is no possibility of odor generation as this Granite does not produce any toxic effluent in the form of Solid, liquid or Gas of this Eco friendly quarrying operation.
5.6	Emissions from incineration of waste	No	The Multi – Coloured Granite Quarrying does not produce any toxic effluent. No emissions are envisaged in this quarrying operation.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	There is no such type of activities involved in this quarry project.
5.8	Emissions from any other sources	No	Emissions from other sources are not envisaged.

**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 sources of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Due to operation of machineries there is likely hood of some increase in noise level. The noise level at site will be maintained below permissible limit. Measures like lubrication & preventive maintenance shall be taken to control noise from the machineries. The vibration during the moment of machinery will be minimal for a short span of time and the noise and vibration during the Diamond wire saw cutting be well within the prescribed limits.
6.2	From industrial or similar processes	No	There is no proposal of processing plant
6.3	From construction or demolition	No	No construction or demolition work is proposed, hence noise vibration and emission of heat is not envisaged.
6.4	From blasting or piling	No	The quarrying activity will be carried out by blasting for liberation effect and fracture of the Multi – Coloured Granite. However, controlled blasting measures will be adopted for minimizing ground vibration. The granite industries requires only huge blocks without fractures and fissures, hence the limited low explosives are practiced for liberation effect. Diamond wire saw cutting is necessary process to liberate the Dimensional Granite stone from the parent rock mass. The diamond wire saw cutting is Eco friendly machine.

6.5	From construction or operational traffic	Yes	The transport of Multi – Coloured Granite through trucks and tippers can produce noise but are maintained within permissible limits, by keeping machinery in proper condition as per RTO & TNPCB Norms and maintenance under experience and qualified Mines foreman and mechanics.
6.6	From lighting or cooling systems	No	The quarry operation will be carried out at the day time only hence the lighting and cooling systems are not required.
6.7	From any other sources	No	No other sources are proposed; hence the Noise and vibration are not envisaged.

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

S. No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with sources of information data
7.1	From handling, Storage, use or spillage of hazardous materials	No	No hazardous materials will be used in the process. Oiling and lubrication of hauling vehicles will be done by using oil tray to prevent spillage of oil. Vehicles and machinery will be well maintained to prevent leakage of oil.
7.2	The discharge of sewage will be collected on soap pits will be discharge to a place authorized by municipal authorizes as per guidelines	No	Septic tank will be cleaned periodically and the sludge generated will be used as manure in the green belt.
7.3	By deposition of pollutants emitted to air into the land or into water	No	There is likely hood of increase of Particulate Matter due to quarrying operations. Regular sprinkling of water will suppress dust at points/places of generation.
7.4	From any other sources	No	An efficient and effective management plan is proposed for the project; hence it may not have any significant impact on the surrounding environment.
7.5	Is there a risk of long term buildup of pollutants in the environment from these sources?	No	No such type of activities is not involved in this quarry operation

**8. Risk of accidents during construction or operation of the project, which could affect human health or the environment**

S. No	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with sources of information data
8.1	From explosions, spillages, fires etc., form storage, handling, use or production of hazardous substances	No	The blasting and drillings are involved in the project for liberation and splitting of Granite. Diamond wire saw cutting is mostly practiced to liberate the Dimensional Granite block from the parent sheet. The minimum explosive materials will be brought from explosive vendors during blasting. The blasting will be carried out under the supervision of experienced blaster.
8.2	From any other causes	Yes	The risks of accidents are envisaged in quarry operations, failure of quarry pit slopes, excavators, truck movement, etc. However, all safety measures shall be taken to prevent any accidents. The quarrying activities will be monitored under the supervision of experienced and qualified competent <b>Mines foreman</b> . The mine foreman will be in-charge of first aid. The quarrying operation is carried out only in the stabilized strata.
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc.)?	No	There is no earthquake, floods, Landslides, cloud burst recorded or anticipated in the lease applied area. It's an opencast quarrying, hence this project could not affect severely due to the natural disasters. The quarry operation is proposed to carry out in the stable strata.

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

S. No	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with sources of information data
9.1	<p>Lead to development of supporting cities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:</p> <ul style="list-style-type: none"> <li>• Supporting infrastructure (roads, power supply, waste or waste treatment, etc.)</li> <li>• housing development</li> <li>• extractive industries</li> <li>• supply industries</li> <li>• other</li> </ul>	No	<p>Living standard will be improved of the nearby villagers.</p> <p>The proposed project shall directly/indirectly develop the area by providing employment, tax to government, development of ancillary units, shopkeeper, supermarket, mechanic shed etc.,</p> <p><b>The project is site specific.</b></p> <p>The workers are available from the nearby villages, hence the project will not attract housing Development, Extractive industries, supply industries or any other activities.</p>
9.2	Lead to after- use of the site, which could have an impact on environment	No	<p>The land may not be used after the completion of quarrying operation; fencing will be constructed around the quarried pits to prevent the inherent entry of public. The green belt will be maintained.</p> <p>Hence after mine reaches ultimate pit limit of <b>21m</b> depth, the remaining waste will be refilled in the worked out mine area.</p>
9.3	Set a precedent for later developments	No	A better after use scenario with increase in greenery.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	No cumulative impacts are envisaged.

**(III) Environmental Sensitivity**

S. No	Areas	Name/identity	Aerial distance (within 15km.) Proposed project location boundary			
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	There are no such protected areas like ecological landscape, cultural area etc. identified within the 15 Km radius.			
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	No	There is no wild life, bird sanctuary within 15Km radius from the quarry lease area. There is no coastal zone, CRZ, HACA, forest, Eco sensitive zone within the radius of 15Km. Suriyamalai Reserve forest is situated 700m away from the eastern side of the area. One stream is passing on the 700m away from the North eastern side of the area. Kullampatti lake is situated 3km away from the North western side of the area. Kaveri River is passing on the 7km away from the North western side of the area. The Western Ghats boundary is situated 11km away from the North western side of the area.			
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	No	There is no protected sensitive species are identified within the 15km radius.			
4	Inland, coastal, marine or underground waters	No	There is no Inland, coastal, and marine or underground water around the site.			
5	State, National boundaries	No	There is no State, National boundaries within the radius of 15km.			
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	There is no tourist, pilgrim areas within 15 Km radius.			
7	Defense installations	No	No defense installation is found within 15Km radius from the project area.			
8	Densely populated or built-up area	Yes	S. No	Name of the Village	Approximate Distance & Direction from lease hold area	Approximate population
			1.	Ellapalayam	1.5km -SE	800
			2.	Kallampalayam	1.0km-SW	950
			3.	<b>Arasiramani</b>	4.5km-NE	1350
			4.	Kaveripatti	4.5km-NW	900

9	Areas occupied by sensitive man-made land uses <i>(hospitals, schools, places of worship, community facilities)</i>	Yes	<b>Edappadi</b> is having all the basic facilities like hospitals schools, places of worship, community facilities is at a distance of <b>7.0km</b> on the North eastern side of the lease area.
10	Areas containing important, high quality or scarce resources <i>(ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)</i>	No	The quarry operation is proposed up to depth for <b>21m</b> Multi-Coloured Granite at present scenario considering for the entire lease period. Hence the ground water will not be affected beside the area is devoid of agriculture, Forestry, Tourist place etc.,
11	Areas already subjected to pollution or environmental damage. <i>(those where existing legal environmental standards are exceeded)</i>	No	The atmospheric air is quite fresh. The area has not been subjected to pollution or environmental damage. The project area is a dry land covered mostly by rocky exposures.
12	Areas susceptible to natural hazard which could cause the project to present environmental problems <i>(earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)</i>	No	The areas are not susceptible to natural hazards like landslides, earthquake, it is a high stable land. There are no records in the past for such type of activities.

“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: 08.12.2015

Place: Salem

**1. Signature of the applicant with Name and Full Address**

Tvl. Imperial Granites (Pvt) Limited,

S.R. Asaithambi

(Director)

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