

ROUGH STONE QUARRY

**S.F.NO:98/1,98/2, Irampali Village, Kulathur Taluk,
Pudukkottai District, Tamilnadu**

Quarry lease area – 0.70.0Ha

Proposed Rough Stone Production - 8034m³ / per year

FORM -1, PREFEASIBILITY REPORT, MINING PLAN

APPLICANT

**Thiru.G.MURUGESAN,
S/O.GANESAN,
PUTHUPATTI VILLAGE,
MATHIYANALLUR (POST),
ANNAVASAL VIA,
KULATHUR TALUK,
PUDUKKOTTAI DISTRICT.**

PREPARED BY

**V.GOTHANDARAMAN M.Sc.,
Recognized Qualified Person
RQP/MAS/138/99/A
Chennai-600 073**

CONTENTS

S.No.	Particulars	Page No
1.	Form -1	
2.	Pre Feasibility Report	
3.	Letter from District Collector, Pudukkottai to produce Approved Mining Plan and Environmental Clearance from SEIAA.	
4.	Mining Plan Approved Letter from Department of Geology and Mining, Pudukkottai	
5.	Approved Mining Plan	

FORM -1

**Form-1, Prefeasibility Report, Mining Plan for Rough Stone, S.F.No.98/1,98/2 in
Irampali village, Kulathur taluk, Pudukkottai district, Tamil nadu of
Thiru.G.Murugesan, (Extent – 0.70.0 Ha).**

FORM – I

Thiru.G.MURUGESAN

(I) Basic Information

S.No	Item	Detail
1	Name of the project/s	Rough stone
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.	Rough stone Production = 40169m³ Extent = 0.70.0 Hectares.
4	New/Expansion/Modernization	New quarry
5	Existing Capacity/Area etc.	0.70.0Ha
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.	98/1,98/2
	Village	Melur
	Taluk	Kulathur
	District	Pudukkottai
10	Nearest railway station/airport along with distance in kms	Pudukkottai – 13kms
		Trichy – 46 kms
11	Nearest Town, city, district Headquarters along with distance in kms.	Town - Kulathur city - Kulathur District - Pudukkottai
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Village - Melur Village Panchayat - Kulathur Taluk - Kulathur District - Pudukkottai
	Name of the applicant	Thiru.G.MURUGESAN
14	Registered Address	S/o.Ganesan, Puthupatti Village, Mathiyannallur (Post), Annavaasal Via, Kulathur taluk, Pudukkottai district.
15	Address for correspondence:	Same as above
	Name	Thiru.G.MURUGESAN
	Designation (Owner/Partner /CEO)	Owner
	Address	Same as above
	Pin code	

	E-mail	
	Telephone No.	
	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 rough stone 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 150 km away from Bay of Bengal. Hence, the project doesn't attract the C.R.Z. Notification, 1991.
22	Whether there is any Government 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
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 Rough stone 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 98% 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	Rough stone production for 40169m³ and there is no manufacturing process here.

1.14	Facilities for storage of goods or Materials?	No	The 616 m³ overburden of the topsoil is dumped in along the lease boundary. The 804 m³ Waste are dumped in along the lease boundary.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	yes	The 804m³ Waste are dumped in along the lease 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 0.70.0 Hectares is a Government land. The land dry, uneven and unfit for any other use. It becomes fit for Rainwater storage use after removal of Rough Stone.								
2.2	Water (expected source & competing users) unit: KLD	Yes	<p>About 2.5 KLD water will be used for dust suppression, green belt and domestic sanitary needs.</p> <table border="1"> <tr> <td>Drinking & Domestic Purposes (in KLD)</td> <td>0.750 KLD</td> </tr> <tr> <td>Dust Suppression (in KLD)</td> <td>1.500 KLD</td> </tr> <tr> <td>Green belt (in KLD)</td> <td>0.250 KLD</td> </tr> <tr> <td>Total</td> <td>2.500 KLD</td> </tr> </table>	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
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	Rough stone Production for 5 years = 40169M³								
2.4	Construction material –stone, aggregates, Sand /soil (expected source – MT)	No	The proposed working is open cast Mechanised mining method for quarrying Rough stone. 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 mine 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 Mining 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.: <ul style="list-style-type: none"> • 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

S.No	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary			
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	No.			
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	No	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 150Km.			
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	No	Nil.			
4	Inland, coastal, marine or underground waters	No	Nil.			
5	State, National boundaries	No	Nil			
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	There are no routes or facilities used by the public for access to recreation or other tourist in the proposed project site			
7	Defence installations	No	There are no Defence installations nearby			
8	Densely populated or built-up area	Yes	Direction	Village	Distance in Kms	Population
			North	Sittanavalal	2 km	1000
			East	Madiyanallur	1 km	500
			South	Panangudi	2 km	500
			West	Annavasal	3 km	1500
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	No	There is no hospital or Primary school, village temples and primary health centres within 500m radius of the quarry.			

10	Areas containing important, high quality or scarce Resources (<i>ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals</i>)	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. (<i>those where existing legal environmental standards are exceeded</i>)	No	Nil
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	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