EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE QUARRY

CATEGORY - B1 (CLUSTER)

APPROVED TOR Lr.No.SEIAA-TN/F.No.10023/SEAC/ToR-1499/2023 Dated: 19.07.2023

PROPOSED QUARRY LEASE DETAILS				
SURVEY NOS	214/1(Part 3 & Part 4)			
VILLAGE	THELLARAMPATTU			
TALUK	СНЕТРЕТ			
DISTRICT	TIRUVANNAMALAI			
EXTENT	3.93.50 Ha			
PROPOSED PRODUCTION QUANTITY	4,06,225 M ³ OF ROUGH STONE &			
FOR FIVE YEARS	15,670 M ³ OF TOP SOIL			
LAND	GOVERNMENT LAND			

(Sector No. 1(a) (Sector no.1 as per NABET)

Category of the Project: B1 Cluster Mining, Total Cluster Area - 5.19.00 Ha

<u>APPLICANT</u>

THIRU. A.R. GOVINDAN
S/o. ARUNACHALAM,
No:302, Raja Agraharam, 3rd Cross Street, Poonamallee,
Tiruvallur – 600 056

ORGANIZATION

M/S. GLOBAL MINING SOLUTIONS
(NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT)
PLOT NO. 6, SF NO. 13/2, A2, VS CITY, RC CHETTYPATTY,
KOTTAMETTUPATTY, OMALUR, SALEM, TAMIL NADU – 636 455
NABET ACCREDITATION NO – NABET/EIA/2326/IA 0110

May -2024



EXECUTIVE SUMMARY

1. Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers.

This proposal is towards obtaining environmental clearance for Rough Stone Quarry located at S.F. No. 214/1 (Part -3 & Part -4) of Thellarampattu Village, Chetpet Taluk, Tiruvannamalai District, Tamil Nadu, for production capacity of 4,06,225 m3 of Rough Stone and 15,670 m3 of top soil for 5 years. The mining plan has prepared and same was approved by Deputy Director, Dept. of Geology & Mining, Tiruvannamalai vide Rc.No.07/Kanimam/2023 dated 14.02.2023.

As per EIA notification, 2006 and its subsequent amendments the proposed "Rough Stone Quarry of Thiru.A.R. Govindan" is falls under Schedule 1(a) Mining of Minerals. It is further classified under Category B1 due to the overall extent of cluster area is 5.19.0 Ha which is >5 Ha. The ToR for the preparation of EIA/EMP was approved vide letter Lr.No.SEIAATN/F.No.10023/SEAC/TOR-1499/2022 dated 19.07.2023. This report has been prepared in line with the approved TOR for production of maximum excavation 4,06,225 m³ of Rough Stone and 15,670 m³ of Top soil for 5 years.

1.1 Details of Project Proponent:

Name of the Proponent : Thiru. A.R. Govindan

Address:

S/o. Arunachalam

No-302, Raja Agraharam,

3rd Cross Street, Poonamallee,

Tiruvallur - 600 056.

Status of the Proponent : Individual



1.2	Size and Location of the Project:						
	1	Co-ordinates of the project	Latitude: 12°31'39.45"N to 12°31'50.90"N Longitude 79°23'22.21"E to 79°23'31.55"E.				
	2	Type of land	Government land				
	3	Extent of lease area	3.93.50 Ha				
	4	Type of lease	Fresh Quarry				
	5	Toposheet No.	57 P/06				
	6	Geological Resource	13,76,305 m ³ of Rough Stone & 19,663 m ³ of Top soil (Depth 35.5 BGL)				
	7	Mineable Resource	5,28,215 m ³ of Rough Stone & 15,670 m ³ of Topsoil (35.5 m BGL)				
	8	Proposed production quantity for five years	4,06,225 m ³ of Rough Stone & 15,670 m ³ of Topsoil (20.5 m BGL)				
	9	Peak Production / year	86,130 m ³ of Rough Stone (1 st Year) & 9,152 m ³ of Topsoil (1 st Year)				
	10	Proposed depth of mining	20.5 m Below ground level				

1.3 Statutory Details: There are no litigation/court cases pending against this project.

- a) Precise Area Communication: The Project Proponent has obtained Precise area communication letter received from the Deputy Director, Department of Geology and Mining, Tiruvannamalai, vide Rc.No.07/Kanimam/2023 dated 10.01.2023.
- b) Mining Plan Approval Letter: The project proponent has prepared Mining Plan under rule 19 (1), 41 & 42 of Tamil Nadu Minor Mineral Concession Rules, 1959 and the same has been approved by the Deputy Director, Dept. of Geology & Mining, Tiruvannamalai vide Rc.No.07/Kanimam/2023 dated 14.02.2023.



- c) 500m radius quarry features: The project proponent has obtained an official letter from Deputy Director, Dept. of Geology & Mining, Tiruvannamalai vide Rc.No. 07/Kanimam/2023 dated 14.02.2023.
- d) VAO certification regarding 300 meter features of the project area: There are no historical places, schools, cemeteries, HT and LT lines, temples, bird sanctuaries, and wildlife sanctuaries within 300 metres of the proposed project area. In this regard, the project proponent has received an official letter from the Village Administrative Officer, Thellarampattu Village, dated 22.02.2023.
- e) Blasting Agreement: The Project Proponent have agreement with Kuberan Explosives & Co to carry out the blasting operation for the proposed quarry.
- **f)** Land document of the proposed lease area: It is a Govt. Poramboke land and the applicant has obtained this land through Govt. tender.

1.4 | Salient Features of the Project

Description	Salient Feature
Name of the Project	Thiru. A.R. Govindan Rough Stone Quarry
Location of the Project	S.F.No: 214 (Part 3 & Part 4), Thellarampattu
	Village, Chetpet Taluk, Tiruvannamalai District,
	Tamil Nadu.
Latitude & Longitude	Latitude: 12°31'39.45"N to 12°31'50.90"N
	Longitude: 79°23'22.21"E to 79°23'31.55"E.
Toposheet No.	57 P/06
ML Area	3.93.50 Ha
Type of Land	Government Land
Geological Resource	13,76,305 m³ of Rough Stone & 19,663 m³ of
	Top soil (Depth 35.5 BGL)
Mineable Reserves	5,28,215 m ³ of Rough Stone & 15,670 m ³ of
	Topsoil (35.5 m BGL)



Life of the mine	5 years
Proposed depth of mining	20.5 m BGL
Method of Mining	Opencast mechanized mining involving drilling
	and blasting
Proposed bench height and width	Bench Height & Width – 5m.
Total Waste	NIL
Top Soil / Overburden	The overburden in the form of topsoil, after
	excavation topsoil will be preserved along the
	boundary barrier and utilized for afforestation
	purpose.
Water Requirement & source	Total – 5.0 KLD. The required water will be
	procured from outside agencies initially. Later,
	water collected in the mine pit will be used to
	meet the needs.
Proposed Manpower Deployment	30 Nos
Total Project Cost	Rs. 2,85,60,000/- Two core eighty five lakhs
	sixty thousand rupees only.
Nearest Highway	The National Highway (NH-38) Tiruvannamalai
	– Vellore is about 24.5km on western side of
	the area.
	The State Highway (SH-4) Arani – Gingee is
	about 5.3Km on western side of the area.
Nearest Railway Station	Arani Road - 22.84 km - NW
	The Nearest Railway line is Tiruvannamalai -
	Vellore line which is about 22.5Km on
	northwestern side of the area.
Nearest Airport	Vellore – 55 Km – NW
Nearest Major Water bodies	Core Zone - NIL
	Buffer Zone



		• Odai – 420 m (SW)					
		• Tank – 530 m – E					
		• Tank – 730 m - NW					
		• Cheyyar River – 4.7 km (NE)					
	Environmental sensitive areas,	NIL within 10 km radius					
	Protected areas as per Wildlife						
	Protection Act, 1972 (Tiger						
	reserve, Elephant reserve,						
	Biospheres, National parks,						
	Wildlife sanctuaries, community						
	reserves and conservation						
	reserves)						
	Reserved / Protected Forests	Vishamangalam R F – 1.1 km (S)					
	reserved / Frotested Forests	Nedunkunam R F – 5.2 km (S)					
		Nambedu R F – 7.7 km (NE)					
	Nearest Village	Thellarampattu – 1.7 km – NW					
	redicat vinage	Alliyandal – 2.0 km - NE					
		Thavani – 1.2 km – SE					
		Konamangalam – 2.5 km - SW					
	Seismic Zone	Zone II (Least active)					
	Seisiffic Zoffe	Zone ii (Least active)					
2.	Project Description						
	The type of the project is opencast	mechanized mining method to excavate Rough					
	Stone within the proposed Mine I	ease area with drilling, blasting, loading and					
	transportation.						
2.1	Location details						
	The proposed quarry project is located in survey nos. 214 (Part 3 & Part 4) of						
		aluk, Tiruvannamalai District, Tamil Nadu. The					
	nearest highway is the State Highway (SH-4) Arani – Gingee is about 5.3Km on						

western side of the area. The nearest railway line is Tiruvannamalai - Vellore line



which is about 22.5Km on northwestern side of the area. The nearest airport is Vellore -55 km (NW).

2.2 Geological resources: The Geological resource was calculated considering the depth of 35.5 m BGL. Availability of Resources is given below.

Section	Length in (m)	Width in (m)	Depth in (m)	Volume in m³	Topsoil in m³	Geological Resources of Rough Stone in m ³
XY – AB	187	119	0.5	11127	11127	-
AT - AD	187	119	35	778855	-	778855
		Sub To	otal (A)		11127	778855
XY-CD	143	81	0.5	5792	5792	-
A1-CD	143	81	35	405405	-	405405
		Sub To	otal (B)		5792	405405
XIYI-CD	59	93	0.5	2744	2744	-
VIII-CD	59	93	35	192045	-	192045
		Sub To	otal (C)	2744	192045	
Grand Total (A+B+C)					19663	1376305

Topsoil Formation 19,663 CBM & Geological Resources of Rough stone 13,76,305 CBM



Mineable resources: The mineable reserves are calculated by considering bench formation and leaving 7.5 m (Safety Barrier all around the applied area) and 10 m safety distance in applied lease areas.

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in m ³	Topsoil in m³	Mineable Reserves of Rough Stone
			(,	(,			in m ³
XY-AB	I	176	104	0.5	9152	9152	-
	II	174	99	5	86130	-	86130
	III	168	86	5	72240	-	72240
	IV	161	73	5	58765	-	58765
	V	155	60	5	46500	-	46500
	VI	148	47	5	34780	-	34780
	VII	142	34	5	24140	-	24140
	VIII	135	21	5	14175	-	14175
			Sub Tota	al		9152	336730
XY - CD	I	132	73	0.5	4818	4818	-
	II	129	71	5	45795	-	45795
	III	123	64	5	39360	-	39360
	IV	116	58	5	33640	-	33640
	V	110	44	5	24200	-	24200
	VI	103	31	5	15965	-	15965
	VII	97	18	5	8730	-	8730
			Sub Tota	al		4818	167690
XIYI - CD	I	40	85	0.5	1700	1700	-
	II	36	83	5	14940	-	14940
	III	23	77	5	8855	-	8855
		•	1700	23795			
		15670	528215				

The available mineable reserve is computed as 5,28,215 m3 of rough stone and 15,670 m3 of Topsoil formation upto a depth of 35.5 m below ground level only.



2.4 Yearwise production resources: The project proponent has proposed to carry out 4,06,225 m3 of Rough Stone and 15,670 m3 of Top soil upto a depth of 20.5 m Below ground level for the period of five years.

Year	Section	Bench	Length	Width	Depth	Volume	Topsoil	Reserves of
			in (m)	in (m)	in (m)	in m ³	in m ³	Rough Stone
								in m ³
I	XY-AB	I	176	104	0.5	9152	9152	-
		II	174	99	5	86130	-	86130
			Sub 7	Γotal			9152	86130
II	XY -	I	132	73	0.5	4818	4818	-
	CD	II	129	71	5	45795		45795
		III	20	64	5	6400		6400
	XIYI- CD	I	40	85	0.5	1700	1700	
		II	36	83	5	14940		14940
		III	23	77	5	8855	-	8855
			Sub	Γotal			6518	75990
III	XY-CD	III	103	64	5	32960	-	32960
	XY-AB	III	110	86	5	47300	-	47300
			Sub 7	Γotal			-	80260
IV	XY-AB	III	58	86	5	24940	-	24940
		IV	161	73	5	58765	-	58765
	Sub Total							83705
V	XY-CD	IV	116	58	5	33640	-	33640
	XY-AB	V	155	60	5	46500	-	46500
		-	80140					
		•	Frand To	tal			15670	406225



2.5 Land use of the project area

The entire project site is Government land and the allotted to PP for rough stone quarry operation by Government of Tamil Nadu through tender. The land use pattern of the mine lease area as of today and conceptual stage is given below.

Description	Present Area in Ha.	Area in use during the quarrying period (Ha)
Quarrying pit	NIL	3.27.0
Infrastructure	NIL	0.01.0
Roads	NIL	0.01.0
Greenbelt	NIL	0.40.0
Unutilized	3.93.5	0.24.5
Total	3.93.5	3.93.5

The ultimate pit dimension at the end of conceptual period is given below.

Pit	Length in m (Max)	Width in m (Max.)	Depth in m (Max.)
I	308	106	20.5

2.6 Method of mining:

Opencast mechanized mining with a bench height of 5m and bench width of 5m and 45° Slope is proposed. The quarry operation involves shallow jack hammer drilling, slurry blasting, excavation, loading and transportation of Rough Stone to the needy customers. Occasionally hydraulic excavators are attached with rock breakers for fragmentation to avoid secondary blasting.

2.7 Greenbelt Development: Green belt development plan is proposed for the 5-year period.

Year	Species	No. of trees	Spacing	Survival
I	Neem, Casuarina,	50		
II	Pongamia pinnata,	50		
III	etc.,	50	3m x 3m	80%
IV		50		
V		50		
Total		250		

3.0 Description of the Environment:

The project area is located in survey nos. 214 (Part 3 & Part 4) of Thellarampattu Village, Chetpet Taluk, Tiruvannamalai District, Tamil Nadu over an extent of 3.93.5 Ha. The project area is considered as Core zone and the area in the surrounding



10km radius is considered as Buffer Zone. The baseline data collected in the study area from October to December 2023. 3.2 **Meteorology:** As per the Köppen-Geiger classification, the prevailing weather conditions in this region are categorized under Aw. The average temperature in Tiruvannamalai is 27.4 °C | 81.3 °F. The rainfall here is around 985 mm per year. The predominant wind direction is NE (Orientation Direction: Blowing From) and SW (Orientation Direction: Blowing Towards). 3.3 **Ambient Air monitoring Data:** Ambient air quality monitoring has been carried out in 5 locations. One in the core zone and remaining four locations are in the buffer zone areas. The concentrations of the monitoring value well within the prescribed government norms. The details are given in table No. – 2. For all the components in the table, the unit are in $\mu g/m^3$ Water Environment: Water samples (3 – Surface Water and 5 Ground Water) were 3.4 collected from 8 different locations and the results are given in Table - 2 & 3 3.5 Noise Monitoring: Noise Monitoring were done at 5 different locations and the results are given in Table – 4. 3.6 Soil Sampling: Soil samples have been collected from the mine lease area and 2 other locations from Thavani village and Namathodu village and the results are given in Table - 5. 4.0 Anticipated Environmental Impacts and Mitigation Measures: In order to maintain the existing environmental scenario of the proposed mine lease area it is mandatorily required to assess the present ecology and environment of the proposed mine lease area and buffer area of the project before starting mining operations. 4.1 Land Environment: This is a proposed Rough Stone Quarry of Thiru.A.R. Govindan at S.F.No. 214 (Part 3 & Part 4) of Thellarampattu Village, Chetpet Taluk, Tiruvannamalai District, Tamil Nadu over an extent of 3.93.5 Ha. The method of mining is Opencast mechanized with a bench width and height of 5m. It is proposed to excavate to 4,06,225 m3 of Rough Stone and 15,670 m3 of Top soil upto a depth of 20.5 m Below ground level for the period of five years.



Anticipated Impacts and Mitigation Measures: The major impact due to this project on land environment is the change in land use. Since this quarry is a small one and the production is less, mining activity will be carried out only up to 20.5 m BGL. Other than quarrying of minerals, no other change will be done since there is no dumping. To prevent soil erosion during monsoon season, garland drain will be constructed with silt traps. At the mine closure stage, 3.27.0 Ha of lease area will be left as rain water harvesting pond. 0.40.0 Ha will be developed with green belt. For this, plants like Pongamia pinnata, Syzigium cumini, Albizia lebbeck, Thespesia populnea, Bauhinia racemose, Cassia siamea, Azadirachta indiaca are selected. A total of 200 trees are planned to be planted in the mine lease area and outside 1800 nos. Spacing will be 3m x 3m.

4.2 Solid Waste Management: The waste generation in the form of Solid waste (Municipal Waste) is very negligible. A detailed solid waste management system for the project area is given below and the same will be executed by proper awareness and sign boards. The sign boards will be in two language i.e., Vernacular language (Tamil) and common language (English). The plastic waste generation is very negligible and it will be collected from the source level in specific dustbin and disposed through the municipal bins.

4.3 Water Environment:

Impacts on Surface Water Resources: There is no seasonal or perennial Odai within the M.L area. Cheyyar River is situated at a distance of 4.7 km in north east direction and an odai passing at 420 m in SW direction. Two tanks at 530 m (East) and 730 m (NW). No other water bodies close to the project site, There is no proposal for discharging of wastewater outside the project area. There is no proposal for a rough stone processing or workshop within the project area, so no effluent is anticipated in the mine.

Since these water bodies are located outside the lease area and there is no discharge of effluent or any untreated water from the mines will be made into these water bodies, there is no major impact. The project proponent will restrict the mining



operation only within the lease and no other work will be carried out near the water bodies or any area outside the mining lease.

Impacts due to water use in Mines: In the proposed mines water will be mainly used for domestic purpose, dust suppression & plantation. Total water requirement for the project is 5.0 KLD which will be sourced from outside agencies. Negligible sewage of 0.3 KLD will be generated, for which a septic tank with soak pit will be set up.

Impacts on Ground Water: The quarrying activity will not intersect ground water table as quarrying is proposed upto a depth of 20.5 bgl and water table is found at a depth of 53 to 56 m BGL. So there will be no chance of intersecting the ground water table by the mining activity. So the impact of mining on the ground water is not envisaged.

Mitigation Measures: Entire lease area will be provided with proper garland drains. Check wears will be provided to prevent solids from wash off. Construction of garland drains around freshly excavated so that flow of water with loose material is prevented. The mine water will be passed through the natural slopes and valleys and gets accumulated in the settling tank (Bottom pit).

4.4 Air Environment:

Impacts due to mining operation:

Mining activities in the proposed lease area not only pollutes the air in the core zone but also the nearby areas. The major air pollutants due to mining operations are fugitive emissions like PM_{10} , $PM_{2.5}$. Other than these pollutants, gaseous emissions of sulfur dioxide (SO_2) and oxides of nitrogen (NO_x) due to excavation/loading equipment and vehicles plying on haul roads are the cause of air pollution in the project area.

Furthermore loading, unloading and transportation of rough stone as well as wind erosion of the exposed area and movement of light vehicles will cause pollution within a 500-meter radius of the project area due to quarrying activities. This has a cumulative impact on the ambient air environment around the project area.



The anticipated data is calculated using AERMOD software and the projected values are found to be within limits.

4.5 Mitigation measures for various impacts:

S. No.	Impact	Mitigation measures
1	Dust emission due to drilling	Using Wet drilling methodsAllowing drilling only with PPE
2	Dust emission due to Blasting	 Carrying out blasting only during specified times Avoiding blasting during unfavourable weather conditions Using explosives of good quality
3	Transportation	 Using mist sprayers Regular wetting of transport roads Covering the materials carried in tippers with tarpaulin Proper maintenance of vehicles used for transportation Conducting regular emission tests for vehicles used for transport Development of greenbelt is proposed in the safety zone of 10m and 7.5m barriers in the lease area.

4.6 Noise Environment: The main noise generating source during mining operation and related activities are drilling, excavation, loading and transportation. Intermittent noise is generated due to operation of diesel generator.

Impacts: Noise generation in mining is due to operation like drilling, blasting and transportation of minerals within and outside the lease area. As per DGMS (Directorate General of Mines Safety) limits, the acceptable noise level is 85 dB(A) for an exposure period of 8 hours. Exposure to loud noise can also cause high blood pressure, heart disease, sleep disturbances, and stress. Noise pollution also impacts the health and well-being of wildlife. Noise exceeding prescribed limits may cause impairment like abnormal loudness perception, tinnitus which causes a persistent high-pitched ringing in the ears, paracusis or distorted hearing.



Mitigation Measures: As the distance between the source and receptor increases, the noise level decreases. Hence, there will be a natural attenuation. The proponent has planned to develop green belt in the periphery of the lease area which diminishes sound volume by dampening them. All the equipment/machinery/tippers involved will be properly maintained to control noise generation. Conducting regular health checkups for employees involved. Employees will be made to work on shifts to reduce their exposure time. Providing earplugs to all employees. Providing green walls/nets wherever possible.

4.7 Socio Economic Impact: No land is acquired from anyone. No rehabilitation is needed. Hence, there is no negative impact. The proponent has planned to spend INR 5,00,000 for CER activities. This amount will be subjected to change after public hearing.

Occupational Health:

Impacts: The occupational risk due to proposed mining may be due to drilling, blasting, excavation and transportation. A total of 30 workers will be engaged in the mining activity. Mining activity may cause various health problems to the mines workers as follows:

- Dust generated during excavation, drilling, stone cutting, sizing and transportation may cause health problems like Silicosis, Asthma, Tuberculosis and other respiratory lungs disorders.
- Heavy weight lifting by the workers may cause injuries to arms, legs and back.
- Noise generated during the mining activity may cause Noise Induced Hearing Loss (NIHL).

Mitigation Measures:

- > The mines worker will be provided with dust mask to minimize the inhalation of the dust.
- Water sprinkling twice in a day is in practice on the haul roads, near excavation and roads to reduce the fugitive dust emission.
- Wet drilling and drilling with dust extractor will be practiced.
- > Ear muffs will be supplied to the workers working in the noise prone area



- The mining site will be supplied with first aid facilities and the entire mines worker will have access to that.
- The mines workers will be well trained about the safety practices in the mining activities.
- As per Mines Rules, 1955, medical examination of employees at the initial stage and periodically, shall be done by a team of qualified medical officers provided by the project proponent.
- Regular medical checkup camps shall also be arranged for detection of occupational diseases and minor disease in the nearby rural population.
- Free checkup and medicine for treatment for their acute and chronic illness shall be provided by the lessee. Conducting periodical Medical Examination as per DGMS.
- Making all first aid kits available in mines office
- Keeping fire extinguisher in place
- Educating the employees about how to handle unexpected happenings
- Posting information containing emergency contact numbers in mines office
- By adopting all these measures, the safety of the employees working in the quarry will be ensured.
- **Analysis of Alternatives (Technology & Sites):** The mining technology is semi mechanized Opencast in single-shift operation without any change in technology. The operation will be carried out as per DGMS norms. No alternate technology will be used.

6.0 | Environmental Monitoring Programme:

Monitoring is done to measure the efficiency of control measures implemented. Regular monitoring of various environmental parameters like air, water, noise and soil environments is needed to assess the status of environment during the project operation.

A schedule is framed with timeline to monitor various parameters during the operation of the project. The schedule is framed based on MoEF & CC and Tamil Nadu State Pollution Control Board. In case the SEIAA/TNPCB/MoEF & CC or other statutory bodies demand monitoring of any additional parameter/factor, the same will also be



done.

The proposed quarry is a small quarry. Hence the Mines-in-charge will be responsible for environmental related activities. After obtaining EC, the conditions mentioned in EC will be strictly followed. The Mines-in-charge will be responsible for implementing the conditions. EC compliance report will also be submitted periodically.

7.0 Additional Studies:

Risk Assessment & Management: Risk assessment is a method in method in which possible threats/hazards which may arise during mining operations are identified so that adequate machinery/equipment are made available in precaution.

Rehabilitation and Resettlement (R&R) Plan: No land is acquired from people dwelling in the area. The lease area is an uninhabited land. No R & R plan is proposed.

Hydrogeological Study: The quarrying activity will not intersect ground water table as quarrying is proposed upto a depth of 20.5 bgl and water table is found at a depth of 53 to 56 m BGL. Cheyyar River is situated at a distance of 4.7 km in north east direction and an odai passing at 420 m in SW direction. Two tanks at 530 m (East) and 730 m (NW). No other water bodies close to the project site, There is no proposal for discharging of wastewater outside the project area. There is no proposal for a rough stone processing or workshop within the project area, so no effluent is anticipated in the mine.

Slope Stability Study: The proposed quarry is a very small quarry and the production is also less. Opencast mechanized mining with a bench height of 5m and bench width of 5m and 80° Slope is proposed. The depth of mining is proposed as 46m below ground level, which is the ultimate pit limit. Also, there is no overburden since the entire mined out material will be utilized.

Disaster Management Plan: Precautionary measures are well explained to all staff by the mines in-charge. PPE necessary for all staff are available in the quarry. No person is allowed to enter inside without PPE. Avoiding quarrying during unfavorable environmental conditions. Carrying out safe blasting by following DGMS norms. Safety equipment like fire extinguisher, first aid kit, etc are present in the mine.



Proper maintenance of machinery used for mining. In case of any emergency, the contact numbers of mines in-charge, mines manager, Management contact are available in the mines office.

Mine Closure Plan: The quarrying operation is proposed up to a depth of 20.5 m below ground level, which will be achieved in 5 years. The ultimate pit dimension will be 308 m \times 106 m \times 20.5 m below ground level. After completion of quarrying operation, the mined out pit will be left as rain water harvesting pond. The quarry will be properly fenced with barbed wire.

8.0 Project Benefits

Financial benefits: This project will contribute financially through payment of taxes like royalty, GST, etc & The project will also contribute via CSR.

Social benefits: This project provides employment to 30 people directly. Local people will be hired for unskilled labour & Through CSR, nearby schools, hospitals will be benefitted & For CSR, INR 5,00,000 is allocated.

- 9.0 Environmental Management Plan: The Environmental Management Plan is developed to ensure that a project is implemented in an environmentally sustainable manner, where all contractors and subcontractors, including consultants, understand the potential environmental risks arising from the project and take appropriate actions to minimize those risks. EMP also ensures that the project implementation is carried out in accordance with the planned design and by taking appropriate mitigation measures to reduce adverse environmental impacts during the project's life cycle. The effective implementation of EMP is not only reduce pollution load and comply the regulatory requirement but also increase productivity and improve marketability of product. Total EMP Cost for 5 years is 177.21 lakhs i.e., Rs.30.01 Lakhs of Capital + Recurring cost Rs. 147.20 lakhs for Five years. The breakup of EMP cost is given in Table 10.2 of Chapter 10.
- 10 Conclusion: Various aspects of mining activities were considered and related impacts were evaluated. Considering all the possible ways to mitigate the environmental concerns Environmental Management Plan was prepared and EMP funds has been allocated. The EMP is dynamic, flexible and subjected to periodic



review. For project where the major environmental impacts are associated, EMP will be under regular review. Thus, the proper steps will be taken to accomplish all the goals mentioned in the EMP and the project will bring the positive impact in the study area.



				Т	able - 1								
				Ambient	Air Quality	/ Data							
	Parameters		Ambient Air Quality							All '	Value in µ	e in µg/m3	
S.NO			PM10			PM2.5			S02			NO2	
	Locations	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max
1	A1-Mine Lease Area	54.6	63.7	72.4	25.2	29.4	33.4	4.5	5.5	6.3	7.3	10.0	12.6
2	A2- Thavani	51.5	58.5	66.6	23.9	27.2	31.0	4.7	5.3	5.9	7.2	8.8	11.2
3	A3- Namathodu	50.3	57.0	65.1	23.3	26.5	30.3	4.2	4.7	5.7	7.4	9.75	12.4
4	A4- Alliyandal	47.0	51.6	56.2	21.9	23.9	26.1	3.8	4.9	6.1	7.7	10.0	12.8
5	A5- Avaniyapuram	46.7	50.9	55.9	21.7	23.6	26.0	3.8	4.4	5.3	7.9	9.8	11.9
6	CPCB NAAQS 2009		100	•		60	•		80	•		80	



	Table – 2 Ground Water Analysis Results						
						Standards as Pe	er IS 10500: 2012
Parameter	GW1	GW2	GW3	GW4	GW5	Acceptable Limits	Permissible Limits
Odour	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
Turbidity, NTU	<1.0	<1.0	<1.0	<1.0	<1.0	1	5
pH at 25 °C	7.37	7.38	7.45	7.31	7.15	6.5- 8.5	No Relaxation
Electrical Conductivity, µS/cm	2226	1955	1224	1645	992.4	-	-
Total Dissolved Solids, mg/l	1340	1190	740	990	596	500	2000
Total hardness as CaCO₃ mg/l	412	343	325	335	392	200	600
Calcium as Ca mg/l	99.6	79.2	65.9	75.6	68.0	75	200
Magnesium as Mg mg/l	39.0	46.6	38.6	35.0	53.3	30.0	100
Calcium as CaCO₃ mg/l	249	198	165	189	170	-	-
Magnesium as CaCO₃ mg/l	163	194	161	146	222	-	-
Total alkalinity as CaCO₃ mg/l	519	433	290	320	241	200	600
Chloride as Cl- mg/l	594	503	105	334	122	250	1000
Free Residual chlorine as Cl ⁻ mg/l	BDL(D.L- 0.2)	BDL(D.L-0.2)	BDL (D.L - 0.2)	BDL(D.L-0.2)	BDL(D.L-0.2)	0.2	1
Sulphates as SO ₄ ²⁻ mg/l	126	86.3	295	216	102	200	400
Iron as Fe mg/l	0.021	BDL(DL-0.01)	BDL(DL- 0.01)	0.05	0.06	0.3	No Relaxation
Nitrate as NO₃ mg/l	5.62	4.33	3.25	2.56	3.32	45	No Relaxation
Fluoride as F mg/l	0.52	0.55	0.39	0.42	0.36	1	1.5
Manganese as Mn mg/l	BDL(D.L- 0.05)	BDL(D.L- 0.05)	BDL (D.L - 0.05)	BDL(D.L- 0.05)	BDL(D.L-0.05)	0.1	0.3



	Table – 3 Surface Water Analysis Results					
Parameter	SW1	SW2	SW3	Surface water standard s (IS 2296 Class-A)		
Odour	Agreeable	Agreeable	Agreeable	Agreeable		
Turbidity, NTU	5.0	12	192	1		
Temperature	30.5	31.0	31.5	-		
pH at 25 °C	7.53	7.69	6.99	6.5- 8.5		
Electrical Conductivity, µS/cm	830.5	856.4	856.4 99.26 -			
Total Dissolved Solids, mg/l	506	526	65.0	500		
Total Suspended Solids, mg/l	12.0	20.0	8.0	-		
Total hardness as CaCO ₃ mg/l	151	157	35.3	300		
Calcium as Ca, mg/l	84.3	88.2	28.4	-		
Magnesium as Mg mg/l	66.6	68.6	6.86	-		
Calcium as CaCO₃ mg/l	33.7	35.3	11.4	-		
Magnesium as CaCO₃ mg/l	16.0	16.5	1.65	-		
Total alkalinity as CaCO ₃ , mg/l	188	194	17.6	-		
Chloride as Cl ⁻ mg/l	132	137	12.3	250		
Free Residual chlorine as Cl ⁻ mg/l	BDL(DL-0.2)	BDL(DL-0.2)	BDL(DL-0.2)	0.2		
Sulphates as SO ₄ ^{2-,} mg/l	166	170	13.8	400		
Iron as Fe, mg/l	BDL(DL-0.01)	BDL(DL-0.01)	0.14	0.3		
Nitrate as NO ₃ , mg/l	2.98	3.19	2.86	20		
Fluoride as, mg/l	BDL(DL-0.1)	BDL(DL-0.1)	BDL(DL-0.1)	1.56		
Manganese as Mn, mg/l	BDL(DL-0.05)	BDL(DL-0.05)	BDL(DL-0.05)	0.1		
COD as O ₂ , mg/l	BDL(DL-4.0)	BDL(DL-4.0)	BDL(DL-4.0)	-		
BOD, 3 days @ 27°C, mg/l	BDL(DL-2.0)	BDL(DL-2.0)	BDL(DL-2.0)	2		
DO, mg/l	5.8	6.4	6.1	6		



Table – 4 Noise Monitoring Report					
Monitoring Location	N1	N2	N3	N4	N5
DAY EQUIVALENT	45.4	47.9	46.7	45.6	49.2
NIGHT EQUIVALENT	37.8	38.2	39.1	37.6	38.8
DAY & NIGHT EQUIVALENT	44.0	46.3	45.3	44.2	47.7

Limits as per MoEF & CC

Day equivalent - 55 dB (A); Night equivalent - 45 dB (A); Work zone Exposure in 8 hr - 90 dB (A)

	Table	e – 5 Soil Quality Repo	rt	
Parameter	Units	S1	S2	S3
PH		8.23	8.43	8.55
EC	µmhos/cm	92.77	187.4	13.09
DRY MATTER	%	88.50	96.86	91.06
WATER CONTENT	%	11.50	3.14	8.94
ORGANIC MATTER	%	0.31	0.20	1.82
SOIL TEXTURE		SILT LOAM	SILT LOAM	SILT LOAM
	GRA	IN SIZE DISTRIBUTIO	V	
SAND	%	25.67	34.53	23.78
SILT	%	58.62	53.20	66.82
CLAY	%	15.71	12.27	9.40
PHOSPHORUS	mg/kg	0.57	0.74	0.56
SODIUM	mg/kg	787	450	472
POTASSIUM	mg/kg	533	340	314
NITROGEN & NITOGENOUS	mg/kg	246	218	155
SULPHATE	%	BDL(D.L - 0.02)	BDL(D.L - 0.02)	BDL(D.L - 0.02)
Water Holding Capacity	%	4.5	3.8	3.5
Porosity	%	16.8	15.6	16.4



ANNEXURE - 1 Precise Area Communication Letter

· 路面面图 *

ரு.க.எண்:07/கனிமம்/2023

தொடர்பாக.

துணை இயக்குநர் அலுவலகம், மாவட்ட ஆட்சியர் அலுவலக வணக்கு ணாமலை மாவட்டம் இயக்குந் அலுவ_{ல், இ}

நாள்:10.01.2023.

அறிவிக்கை

முவன்களாமனவ பொருள் : கனிமங்களும் குவாரிகளும் - கல்குவாரிகள் -GILE பொது ஏலம் - திருவண்ணாமலை மாவட்டம் - சேத்தல்ய வட்டம் - தென்னாரம்பட்டு கிராமம் - அரசு புறம்போக்கு புல எண் 214/1(பகுதி 3 மற்றும் பகுதி 4) பரப்பு ஹெக்டேர் - 10 ஆண்டுகளுக்கு கல்குவாரி செய்ய குத்தகை உரிமம் வழங்கும் பொருட்டு மாவட்ட அரசிதழில் திரு A.R.கோவிந்தன் வெளியீடு செய்யப்பட்டது ஏலம் உறுதி செய்யப்பட்டது -அருணாச்சலம் என்பவருக்கு ஏலத்தொகை முழுவதும் வசூலிக்கப்பட்டு அரசு பெறப்பட்ட சுரங்க செலுத்தப்பட்டது -ஒப்புதல் அறிக்கை மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய

திருவண்ணாமலை மாவட்ட அரசிதழ் சிறப்பு வெளியீடு பார்வை: 1. எண் 43, நாள் 02.12.2022

> அருணாச்சலம் திரு.A.R.கோவிந்தன் 5.GU. என் 302, ராஜா அகரகாரம். குறுக்கு தெரு, புந்தமல்லி, 3வது திருவள் ளுர் மாவட்டம் என்பவரின் விண்ணப்ப льт 6 т 19 12 20 22

தடையின்மைச் சான்று பெற்று சமர்ப்பிக்க அறிவுறுத்துதல்

இவ்வலுவலக குறிப்பாணை ந.க.எண் 11/கனிமம்/2022 நாள் 20122022

அருணாச்சலம் புந்தமல்லி, திரு A.R.கோவிந்தன் க.பெ. விண்ணப்ப என்பவரின் திருவள் ளூர் மாவட்டம் நாள்.03.01.2023

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பார்வை 1-ல் காணும் திருவண்ணாமலை மாவட்ட அரசிதழ் சிறப்பு 02122022 வெளியீடு நாள் மூலம் திருவண் ணாமலை எண்.43, மாவட்டத்திற்குட்பட்ட, அரசு புறம்போக்கு நிலங்களில் அமைந்துள்ள 9 கற்குவாரிகளுக்கு பொது ஏலமுறையில் குத்தகை உரிமம் வழங்க ஏல / டெண்டர் விண்ணப்பங்கள் வரவேற்கப்பட்டது. அதன்படி வரிசை எண் 9-ல் கண்ட சேத்துபட்டு வட்டம், தெள்ளாரம்பட்டு கிராமம், அரசு புறம்போக்கு புல எண் 214/1(பகுதி 3 மற்றும் பகுதி 4) பரப்பு 3935 பரப்பிலுள்ள புதிய கற்குவாரிக்கு குறிப்பிட்ட காலக்கெடுவான 19.12.2022 அன்று மாலை 5 மணி வரை ஒரு டெண்டர் விண்ணப்பம் மட்டும் வரபெற்றது. அதனை தொடர்ந்து 2012.2022 அன்று நடைபெற்ற பொது ஏலத்தில் டெண்டர்தாரர் உட்பட 9 நபர்கள் கலந்து கொண்டனர். டெண்டர் மற்றும் பொது ஏலத்தில் கலந்து கொண்டவர்கள் மற்றும் அவர்கள் கோரிய MAR/Sto/ ஏல தொகை விவரம் பின்வருமாறு:

டெண்டர் :

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வ. என்		டெண்டரில் கோரப்பட்ட தொகை
1.	திரு.A.R.கோவிந்தன் த.பெ. அருணாச்சலம் பூந்தமல்லி	es 1,00,50,000/-
- 1	கிருவள்ளர் மாவட்டம்	m51,0020,0001-

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ஏலம் :

வ. என்	ஏலதாரர் பெயர் மற்றும் முகவரி	ஏலத்தில் கோரப்பட்ட தொகை
1.	திரு.A.R.கோவிந்தன் த.பெ.அருணாச்சலம் பூந்தமல்லி, திருவள்ளுர் மாவட்டம்.	西 2,04,20,000/-
2.	திரு.பேழ்த் துகுமார் , த.பெ. கணேசன் , சென்னை .	#2,00,00,000/-
3	திரு.R.ராமு, த.பெ. ராமசிங்காரம், சென்னை.	सु 2,03,20,000/-
đ	திரு.S.கோகுல்ராஜ் த.பெ. சரவணராஜ் காமராஜ் தெரு. பம்மல், சென்னை	T133,00,000/ -
5	திரு.S.நிர்மல், த.பெ. சரவணராஜ் காமராஜ் தெரு, பம்மல். சென்னை	<i>जु.130,00,000/-</i>
6	திரு.PRSசரவணராஜ், காமராஜ் தெரு. பம்மல். சென்னை	贺2,04,10,000/-
7	திரு.K.அருள்குமார், தபெ. கன்னியப்பன், நீர்குன்றம் கிராமம், காஞ்சிபுரம் மாவட்டம்.	G12950.000/ -
8	திரு.Nசக்திவேல் த.பெ. நாராயணசாமி தேதூர், திருவண்ணாமலை.	G120,00,000/-
9	திரு.Kபிரபாகரன் த.பெ. கன்னியப்பன் நீர்குன்றம் கிராமம், காஞ்சிபுரம் மாவட்டம்.	CF 2,03,50,000/-

aus Gair Allang

திருவண்ணாமலை

மற்றும் கா

பொது ஏலத்தில் திரு.A.R.கோவிந்தன் த.பெ. அருணாச்சலம் என்பவரால் அதிகபட்சமாக மேற்படி குவாரிக்கு ரூ2,04,20,000/- (ரூபாய் இரண்டு கோடியே நான்கு லட்சத்து இருபதாயிரம் மட்டும்) ஏலம் கோரப்பட்டது. அதனை விண்ணப்பங்கள் திறக்கப்பட்டு பரிசீலிக்கப்பட்டதில் தொடர்ந்து டெண்டர் டெண்டர் த.பெ. அருணாச்சலம் என்பவர் திரு.A.R.கோவிந்தன் ஒரு கோடியே ஐம்பதாயிரம் மட்டும்) டெண்டர் ரூ1,00,50,000/- (ரூபாய் திரு.A.R.கோவிந்தன் ஏலத்தில் கோரியிருந்தார். எனவே. மேற்படி பொது என்பவரால் கோரப்பட்ட தொகையானது டெண்டரில் கோரப்பட்ட தொகை செய்யப்பட்ட நிர்ணயம் குவாரிக்கு மற்றும் அரசால் மேற்படி இருந்ததினால் மேற்படி குறுமத் தொகையைக் காட்டிலும் கூடுதலாக தொகையாக अक्रीक விதிகளின் படி 10% விட ஏலத்தொகையில் வரைவோலைகளாக **ரூ.20,70,000/-ஐ** உயர்ந்தபட்ச ஏலதாரர் திரு.A.Rகோவிந்தன் என்பவர் செலுத்தியதையடுத்து மேற்படியாருக்கு ஏலம் உறுதி செய்யப்பட்டது.

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அறிசிற்கு நர் அல்லில் குறிப்பானையில் பார்வை காணும் 3-00 whole ஏலத்தொகையில் செலுத்தப்பட்ட ரூ20,70,000/-பிணைன ஏற்கனவே வைப்புத்தொகையான ரூ.25,000/-ஐ நீக்கி மீதமுள்ள தொகையான ரூ.25,000/-க்கு ஏலதாரர் வங்கி வரைவோலைகள் பெற்று குறிப்பிட்ட காலக்கெடுவிற்கு இருயிர்வை சமர் ப்பித்ததையடுத்து காணும் கடி தம் cupavio espavio வரைவோலைகளை பாரத ஸ்டேட் வங்கி, திருவண்ணாமலை 02.01.2023 தேதியில் உரிய அரசு கணக்கில் வரவு வைக்கப்பட்டுள்ளது.

4. மேலும். ஏலதாரர் மேற்கண்ட ஏலத்தொகைக்கு 2% வருமானவரி (TCS) கணக்கிட்டு M5.4,08,400/-18 03.01.2023 மின்னஞ்சல் அன் று செலுத்தப்பட்டதற்கான ஆவணங்களை இவ்வலுவலகத்தில் சமர்ப்பித்துள்ளார்.

திரு.A.R.கோவிந்தன் த.பெ. எனவே. ஏலதாரர் என்பவருக்கு திருவண்ணாமலை மாவட்டம், சேத்துபட்டு வட்டம், தெள்ளாரம்பட்டு கிராமம், அரசு புறம்போக்கு புல எண் 214/1(பகுதி 3 மற்றும் பகுதி 4) பரப்பு 3935 ஹெக்டேர் பரப்பினை 10 ஆண்டுகளுக்கு கற்குவாரி செய்ய உகந்த புலம் (Precise Area) என தீர்மானித்து கீழ்கண்ட நிபந்தனைகளுக்கு உட்பட்டு அறிவிப்பு செய்யப்படுகிறது.

நிபந்தனைகள்

 அருகில் உள்ள பட்டா மற்றும் புறம்போக்கு நிலங்களுக்கு முறையே 75மீ மற்றும் 10மீ பாதுகாப்பு இடைவெளி விடவேண்டும்.

2. நிலையான அமைப்புகளுக்கு (நீர் நிலைகள், நெடுஞ்சாலைகள், மின் சாகனங்கள், இரயில் பாதைகள்) 50மீ பாதுகாப்பு விடவேண்டும்.

3. அருகில் உள்ள நிலங்களுக்கும் மற்றும் பொதுமக்களுக்கும் எவ்வித

பாதிப்புமின்றி குவாரிப்பணி மேற்கொள்ள வேண்டும்.

ஆரம்பிப்பதற்கு முன்பாக குத்தகை 4. குவாரிப்பணி வழங்கப்பட்ட புலத்தினைச் சுற்றி முள்கம்பி வேலி அமைத்து குத்தகை காலம் முழுவதும் பராமரித்து வரவேண்டும்.

5. பாறைகளைத் தகர்க்க கைத்துளைப்பான்களை கொண்டு பாறைகளை துளையிட்டு குறைவான வெடிபொருட்கள் பயன்படுத்த வேண்டும்.

6. குவாரிப்பணியினை விஞ்ஞானப்புர்வமாகவும். மேற்கொள்ள வேண்டும்.

6. தமிழ்நாடு சிறுகனிம் சலுகை விதிகள் 1959 விதிகள் 41 மற்றும் 42-ன்படி கல் மற்றும் இதர சிறு கனிமங்களுக்கு குவாரி குத்தகை உரிமம் வழங்கும் முன்பு ஒப்புதல் பெறப்பட்ட சுரங்கத்திட்ட அறிக்கை மற்றும் சுற்றுத்துழல் மதிப்பீட்டு ஆணைய தடையின்மை சான்று பெறப்பட வேண்டும் 61601 வரையறுக்கப்பட்டுள்ளது.

7. எனவே, ஏலதாரர் திரு.A.Rகோவிந்தன் த.பெ. அருணாச்சலம் என்பவர் ஒப்புதல் பெறப்பட்ட சுரங்கத்திட்ட அறிக்கை மற்றும் சுற்றுச்சூழல் மதிப்பீட்டு ஆணைய தடையின்மைச் சான்றினை பெற்று சமர்ப்பிக்கும் பட்சத்தில் திருவண்ணாமலை மாவட்டம். சேத்துபட்டு வட்டம், தெள்ளாரம்பட்டு கிராமம், அரசு புறம்போக்கு புல எண் 214/1(பகுதி 3 மற்றும் பகுதி 4) பரப்பு 3935 ஹெக்டேர் பரப்பில் கற்குவாரி செய்ய 1959-ஆம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகளின், விதி 8(6)(a)-ன்படி 10 ஆண்டுகளுக்கு குத்தகை உரிமம் வழங்க உரிய நடவடிக்கை மேற்கொள்ளப்படும் என்ற விவரம் தெரிவிக்கப்படுகிறது. \

நாட்கள்கள் சரங்கத்திறை சமர்ப்பிக்குமாறு

8 மேலும், ஏலதாரர் இவ்வறிவிப்பு கிடைக்கபெற்ற 90 நாட்கள்குள் மேற்சொன்ன நிபந்தனைகளை குறிக்கும் வகையில் வரைவு சுரங்கத்தி அறிக்கை தயார் செய்து துணை இயக்குநர், புலியியல் மற்றும் சுரங்கத்துறை திருவண்ணாமலை அவர்களிடம் ஒப்புதல் பெற சமர்ப்பிக்குமாறு

அறிவுறுத்தப்படுகிறார்.

துனை இயத்துர். புவியியல் மற்றும் சுரங்கத்துறை. திருவண்ணாமலை.

பெறுநர்: திரு A R கோவிந்தன் தபெ அருணாச்சலம் எண் 303, ராஜா அகரகாரம். வேது குறுக்கு தெரு. பூந்தமல்லி, திருவள்ளுர் - 600056 all X0183

MARSLOV

ANNEXURE - 2 Mining Plan Approval Letter

Thiru.A.Perumal, M.Sc., M.Phil., Deputy Director, Geology and Mining, Tiruvannamalai - 4.

Thiru.A.R.Govindan, S/o. Arunachalam, No.302, Raja Agraharam, 3rd Cross Street, Poonamallee, Tiruvallur.

Rc.No. 07/Kanimam/2023, dated:14.02.2023

Sir,

Sub: Quarries and Minerals – Minor Mineral - Rough stone Tiruvannamalai District – Chetpet Taluk –
Thellarampattu village - Govt. Poramboke Land in
SF.No.214/1 (Part-3 & Part-4) over an extent of 3.93.5
Hectare - preferred by Thiru.A.R.Govindan - Highest
Bidder - Precise area communicated – Submission of
Mining Plan for approval - Approved- Regarding.

Ref: 1. Application from Thiru.A.R.Govindan S/o. Arunachalam dated.19.12.2022.

 Precise Area Communication Notice Rc.No.07/Kanimam/2023, dated.10.01.2023.

Mining Plan submitted by Thiru.A.R.Govindan dated.01.02.2023.

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In the reference (2)nd cited, it has been communicated the SF.No. 214/1 (Part-3 & Part-4) over an extent of 3.93.5 hect., of Thellarampattu Village, Chetpet Taluk as precise area for grant of quarry lease for quarrying Rough Stone for a period of 10 years to **Thiru.A.R.Govindan S/o. Arunachalam** with a direction to produce an approved mining plan and Environment Clearances in respect of the precise area as per Rule 41 and 42 of Tamil Nadu Minor Mineral Concession Rules, 1959.

- As of the applicant has prepared the draft Mining Plan through the Recognized Qualified Person and submitted for approval vide reference 3rd cited, for the first 5 years though the precise area been granted for 10 years.
- 3. The draft mining plan submitted in respect of the precise area has been examined with reference to the provisions of Rule 41 of Tamil Nadu Minor Mineral Concession Rules, 1959 and the followings are observed.

- i) The boundary Co-ordinates (GPS readings) for the entire boundary pillars (4 nos) of the area have been incorporated and shown in the mining plan.
- ii) All the conditions stipulated in the Deputy Director, Geology and Mining Rc.No.07/Kanimam/2023 dated:10.01.2023 been incorporated in the mining plan.
- iii) The available geological and mineable resources in the precise area restricted to a depth of 35.5m below ground level for 10 years is as follows.

Depth in Mts.	Geological reserves Mineable Reserves in Cu.m					
35.5m (35m Rough Stone	Rough Stone	:	13,76,305	Rough St	one:	5,28,215
+ 0.5m Topsoil)	Topsoil	:		Topsoil	(6)	15,670

The recoverable reserves estimated for the first 5 years in the mining iv) plan for quarrying Rough Stone to a depth of 20.5 below the ground level is as follows.

Depth in Mts.	Mineable Reserves in Cu.m				
20.5m (20m Rough Stone +	Rough Stone	: 4,06,225			
0.5m Topsoil)	Topsoil	: 15,670			

- 4. In the light of the above, in exercise of the powers conferred under Rule 41 (7) of Tamil Nadu Minor Mineral Concession Rules, 1959 the mining plan in respect of Rough Stone quarry of Thiru.A.R.Govindan is approved subject to the following conditions.
- i) The mining plan is approved without prejudice to any other Law applicable to the quarry lease from time to time whether such Laws are made by the Central Government, State Government or any other authority.
- ii) The approval of the mining plan does not in any way imply the approval of the Government it terms of any other provisions of the Mines and Minerals (Development and Regulation) Act 1957, or any other connected laws including Forest (Conservation) Act, 1980, Forest Conservation Rules 1981, Protection Act, 1980, Forest Conservation Rules, 1981, Environment Protection Act, MARSan 1980, Indian Explosives Act, 1884 (Central Act IV of 1884) and the rules made there under and the Tamil Nadu Minor Mineral Concession Rule s, 1959.

- iii) The mining Plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.
- iv) Quarrying operations and production shall be carried out as per the approved Mining Plan and the applicant shall be liable to pay the cost of mineral if there is any deviation in the quantum indicated in the approved year wise quantum of production and any such cases as on date are to be dealt with as per Court direction.

Encl: 2 Copies of Approved Mining Plan.

Deputy Director, Geology and Mining, Tiruvannamalai.

Copy submitted to:

- The Chairman, SEIAA, Tamil Nadu, 3rd Floor, Panagal Maaligai, No.1, Jeenis Road, Saidapet, Chennai-15.
- 2. The Commissioner of Geology and Mining, Chennai-32.
- 3. The District Collector, Tiruvannamalai.



ANNEXURE - 3 500m radius cluster letter

From

Thiru.A.Perumal, M.Sc., M.Phil., Deputy Director, Geology and Mining, Tiruvannamalai - 4. To

Thiru.A.R.Govindan, S/o. Arunachalam, No.302, Raja Agraharam, 3rd Cross Street, Poonamallee, Tiruvallur.

Rc.No.07/Kanimam/2023, dated:14.02.2023

Sir,

Sub: Quarries and Minerals – Minor Mineral - Rough stone
- Tiruvannamalai District – Chetpet Taluk –
Thellarampattu village - Govt. Poramboke Land in
SF.No.214/1 (Part-3 & Part-4) over an extent of
3.93.5 Hectare - preferred by Thiru.A.R.Govindan –
Particulars called for – furnished – regarding.

Ref: 1. Tender/Auction application preferred by Thiru.A.R.Govindan S/o. Arunachalam dated.19.12.2022.

 Thiru.A.R.Govindan S/o. Arunachalam, Tiruvallur Letter, dated.01.02.2023.

In the reference cited, the bidder of proposed stone quarry in SF.No.214/1 (Part-3 & Part-4) over an extent of 3.93.5 hect., of Thellarampattu Village, Chetpet Taluk, **Thiru.A.R.Govindan S/o. Arunachalam**, has requested to furnish the details of Proposed / Existing / lease expired quarries located within 500 mts radius from his proposed quarry, so as to submit the same to the Environment Impact Assessment Authority for obtaining Environment Clearance.

As requested, the following details are furnished.

i). Existing quarries

	S.F. Nos.	Hect.	Period	Remarks
Mubeena, 1. No.14 Savadi str Perana mallur, Vandavasi Taluk, Tiruvannamalai.	212/1C	1.25.5	24.01.2020 to 23.01.2025	Existing Quarry

ii). Abandoned quarries

SI. No	Name of the Owner (Tvl)	Village & S.F. Nos.	Extent in Hect.	Lease Period	Remarks
		Nil			

iii). Present Proposed quarries

SI.	Name of the Owner	Village &	Extent in Hect.	Lease
No	(TvI)	S.F. Nos.		Period
1.	Thiru.A.R.Govindan, S/o. Arunachalam, No.302, Raja Agraharam, 3 rd Cross Street, Poonamallee, Tiruvallur.	Thellarampattu 214/1 (Part-3 & Part-4)	3.93.5	(191 8

iv). Future Proposed quarries

SI.	Name of the Owner	Village & S.F. Nos.	in	Lease
No	(TvI)		Hect.	Period
		Nil		

Deputy Director, Geology and Mining, Tiruvannamalai.

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