

EXECUTIVE SUMMARY FOR
PROPOSED ORDINARY EARTH QUARRY
CATEGORY – B1 (CLUSTER)

(Public Hearing Upgraded after Terms of Reference (ToR) as per the provisions of
EIA Notification 2006 & amendments thereof)

TOR IDENTIFICATION NO. TO24B0108TN5934875N, DATED: 09.10.2024

PROPOSED QUARRY LEASE DETAILS	
SURVEY NO	4/1
VILLAGE	KADAGAMPATTU
TALUK	VANUR
DISTRICT	VILUPPURAM
EXTENT	1.22.0 Ha
CLUSTER EXTENT	6.50.45 Ha
PROPOSED PRODUCTION QUANTITY FOR TWO YEARS	ODINARY EARTH : 17,034 m ³
LAND	PATTA LAND

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

Category of the Project: B1 Cluster Mining, Total Cluster Area – 6.50.45 Ha
Baseline Monitoring Period – October 2024 to December 2024

APPLICANT

Thiru.E.Amuthaganesamoorthy
No.352, East Street,
Uthangal Village,
Virudhachalam Taluk,
Cuddalore District,
Pin code-607 804

ORGANIZATION

M/s. GLOBAL MINING SOLUTIONS
(NABET ACCREDITED & ISO 9001 CERTIFIED CONSULTANT)
PLOT NO.6, SF NO. 13/2, A2, VS CITY, RC CHETTYPATY,
KOTTAMETTUPATTY, OMALUR, SALEM, TAMIL NADU – 636 455
NABET ACCREDITATION NO – NABET/EIA/2326/IA 0110
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April - 2024



EXECUTIVE SUMMARY

1.1 OVER ALL JUSTIFICATION FOR IMPLEMENTATION OF THE PROJECT

INTRODUCTION

Thiru.E.Amuthaganesamoorthy S/o.Eagambaram, has obtained Precise Area communication letter from the Assistant Director, Geology and Mining, Viluppuram letter vide Rc.No.A/G&M/149/2018, dated 07.05.2024 to quarry out 17,034 m³ of Ordinary Earth over an extent of 1.22.0 Ha., S.F. No. 4/1 of Kadagampattu Village, Vanur Taluk, Viluppuram District, Tamil Nadu State.

As per EIA notification, 2006 and its subsequent amendments the proposed "Ordinary Earth Quarry of Thiru.E.Amuthaganesamoorthy S/o.Eagambaram mines cluster falls under Schedule 1(a) of EIA Notification and its subsequent amendments the project comes under Category B1. The ToR for preparation of EIA/EMP report of the project was approved vide ToR TO24B0108TN5934875N, DATED: 09.10.2024. This report has been prepared in line with the approved TOR for production of maximum excavation of 17,034 m³ of Ordinary Earth

Sl. No.	Description	Status/Remarks
1.	Sector	Non-coal mining
2.	Category of the project	B1
3.	Proposed mineral	Ordinary Earth
4.	Type of Lease	Fresh quarry
5.	Extent of the lease	1.22.0 Ha
6.	Proposed depth of mining	2m below ground level
7.	Method of mining	Opencast method of mechanized.
8.	Proposed lease period	2 Years
9.	Proposed Environmental Clearance	2 Years
10.	Proposed production quantity for two years	17,034m ³ of ordinary earth

The proposed lessee Thiru.E.Amuthaganesamoorthy S/o. Eagambaram is an individual with sound experience in the identification of quarry, operation and marketing in the field of Ordinary Earth quarry. The proposed land is patta land.

1.2 LOCATION

Kadagampattu Village, Vanur Taluk, Viluppuram District, Tamil Nadu State and its Latitude: 12°01'48.05"N to 12°01'53.31"N and Longitude: 79°39'58.00"E to 79°40'03.96"E with Survey of India Topo Sheet No. 57- P/12. To conduct the study, the proposed mine lease area (core zone) and an impact zone of 10 km radius (called buffer zone) around the proposed mine site were considered. The EIA report is based on three months baseline data (i.e. October 2024 to December 2024)

1.3 GEOLOGY

The area is underlain by a wide range of ordinary earth. The geological formations found in the district are Archaean rocks like Gneisses, Granites, Charnockites basic granulites and calc-gneisses. The younger formations are Quartz veins and pegmatite.

1.4 PROJECT DESCRIPTION

This is a proposed Ordinary Earth quarry by Opencast Shallow mining method. The quarrying is restricted up to a depth 2m below ground level. The geological reserves are estimated to be 24,000 m³ of Ordinary earth. The mineable reserve calculated by deducting 7.5m safety distance and bench loss. The mineable reserves are 17,034 m³ of Ordinary Earth which will be recovered at the rate of 100% recovery upto a depth of 2m below ground level for the period of two years.

- There is no overburden anticipated during entire Ordinary Earth quarrying operation.

EXECUTIVE SUMMARY FOR THE PROPOSED ORDINARY EARTH QUARRY OF THIRU.E.AMUTHAGANESAMOORTHY OVER AN EXTENT OF 1.22.0 HA LOCATED AT S.F.NO. 4/1 OF KADAGAMPATTU VILLAGE, VANUR TALUK, VILUPPURAM DISTRICT, TAMIL NADU STATE.

S.No.	Type of Detail	Description
1	Sector	1(a) Non coal mining
2	Fresh/Existing project	Fresh quarry
3	Category	B1
4	Nature of mineral	Minor mineral
5	Life of the mine	2 years
6	Production Quantity for two years	Ordinary earth: 17,034 m ³
7	Waste generation and management	Nil
8	Bench height and width	2m below ground level for the proposed mining plan.
9	Ultimate pit depth	2m below ground level for the proposed mining plan.
10	End use	The excavated ordinary earth will be used for construction industries for Government and Public sector projects besides catering domestic housing and infrastructure projects in and around the district.

1.5 PROJECT REQUIREMENTS

The requirements of the project is given below.

S.No.	Nature of requirement	Description
1	Water requirement	The water requirement for drinking, dust suppression and green belt is about 3 KLD of water is required. The required water will be procured from outside agencies.
2	Power requirement	No electricity is needed for mining operations.
3	Manpower requirement	Total:7 Permanent: 4, Temporary: 3
4	Financial requirement	Rs. 37.97 lakh (Including operational + Fixed Asset + EMP cost).
5	Funds for Socio economic development	As per the MOEF & CC Notification, the CER cost has been calculated to be Rs. 21,440/-, which is equivalent to 2% of the project cost. However, the project proponent has revised the CER cost to Rs. 2.0 Lakhs.

1.6 DESCRIPTION OF LEASE AREA

The features in the study area is given below.

Table 3.1 Description of the lease area																			
S.No.	Areas	Distance from project site																	
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	Nil within 15km radius																	
2	Areas which are important or sensitive for ecological reasons																		
A	Wetlands, water courses or other water bodies,	<table><tr><td>Water bodies</td><td>Distance</td><td>Direction</td></tr><tr><td>Odai</td><td>0.87 Km</td><td>E</td></tr><tr><td>Gingee River</td><td>2.06 Km</td><td>SW</td></tr><tr><td>Katterikupam Lake</td><td>4.06km</td><td>SE</td></tr><tr><td>Thirukannur Lake</td><td>5.53 km</td><td>SW</td></tr></table>			Water bodies	Distance	Direction	Odai	0.87 Km	E	Gingee River	2.06 Km	SW	Katterikupam Lake	4.06km	SE	Thirukannur Lake	5.53 km	SW
Water bodies	Distance	Direction																	
Odai	0.87 Km	E																	
Gingee River	2.06 Km	SW																	
Katterikupam Lake	4.06km	SE																	
Thirukannur Lake	5.53 km	SW																	
B	Coastal zone, biospheres,	Nil within 10km radius																	
C	Mountains, forests	Nil within 10km radius																	
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	Ousuddu Lake Birds Sanctuary -9.85 Km (SE)																	
4	Inland, coastal, marine or underground waters	Nil within 15km radius																	
5	State, National boundaries	Nil within 15km radius																	
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	Nil within 15km radius																	
7	Defense installations	Nil within 15km radius																	
8	Densely populated or built-up area	Vanur- 7.0 Km - E																	
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Vanur- 7.0 Km - E																	

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10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	Nil
11	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	Nil
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earth quakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions) similar effects	No. The area is not prone to earthquakes, floods, etc.

The baseline data collection for meteorology, air, water, noise and soil environments have been carried out during October to December 2024.

Air, water, noise and soil samples are collected and analyzed through NABL accredited lab.

1.7 EXPLANATION OF HOW ADVERSE EFFECTS HAVE BEEN MITIGATED

1.7.1 AIR ENVIRONMENT

The air monitoring have been carried out in 6 locations and the results are given below.

S. No.	Station Code	Locations	Distance & Direction	Coordinates
1	AAQ 1	Proposed Mine Site	Core Zone	12° 1'47.29"N 79°40'25.46"E
2	AAQ 2	Tiruvaikkarai Village	1.09 km, W	12° 1'45.87"N 79°39'17.92"E
3	AAQ 3	Pudukuppam Village	2.44 km, SE	12° 1'20.41"N 79°41'19.10"E
4	AAQ 4	Kondalamkuppam Village	2.33 km, E	12° 2'27.43"N 79°40'54.01"E
5	AAQ 5	Kudukkur Village	2.76 Km, S	12° 0'39.03"N 79°39'7.93"E
6	AAQ6	Nemili Village	3.08 Km, NW	12° 3'19.48"N 79°39'13.85"E

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All the values of pollutant concentrations were found to be within the NAAQs Standards.

Station ID	Min	Max	Avg.
Particulate matter PM₁₀ (µg/m³)			
AAQ-1	40.7	52.8	46.75
AAQ-2	38.2	51.5	44.85
AAQ-3	48.3	58.3	53.3
AAQ-4	48.3	57.5	52.9
AAQ-5	46.5	55.3	50.9
AAQ-6	45.9	57.3	51.6
CPCB NAAQS 2009 for PM₁₀ - 100 µg/m³			
Particulate matter PM_{2.5} (µg/m³)			
AAQ-1	18.9	23.9	21.4
AAQ-2	17.4	23.9	20.65
AAQ-3	21.5	26.6	24.05
AAQ-4	22.3	30.7	26.5
AAQ-5	22.1	26.4	24.25
AAQ-6	20.1	26.5	23.3
CPCB NAAQS 2009 for PM_{2.5} - 60 µg/m³			
Sulphur Di-oxide as SO₂ (µg/m³)			
AAQ-1	4.5	6.7	5.6
AAQ-2	4.1	6.1	5.1
AAQ-3	3.7	5.4	4.55
AAQ-4	5.6	9.2	7.4
AAQ-5	3.9	5.7	4.8
AAQ-6	4.1	5.9	5
CPCB NAAQS 2009 for SO₂ - 80 µg/m³			
Oxide of Nitrogen as NO₂ (µg/m³)			
AAQ-1	8.6	10.9	9.75
AAQ-2	7.4	9.7	8.55
AAQ-3	7.9	9.8	8.85
AAQ-4	9.3	13.7	11.5
AAQ-5	8.7	11.4	10.05
AAQ-6	8.1	10.0	9.05
CPCB NAAQS 2009 for NO₂ - 80 µg/m³			

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1.7.2 WATER ENVIRONMENT

Results of Ground Water sampling Analysis in 6 locations							Specification/ Limit As per IS:10500: 2012	
	W1	W2	W3	W4	W5	W6	Desir able	Permi ssible
Odour	AGREEA BLE	AGREEA BLE	Agreeabl e	AGREEA BLE	AGREEA BLE	AGREE ABLE	Agree able	Agree able
Turbidity	<1	<1	<1.0	<1	<1	<1.0	Agree able	Agree able
pH at 25 °C	7.05	6.89	7.32	7.25	7.69	7.36	6.5 - 8.5	No Relaxa tion
Electrical Conductivity	1612	1738	1441	1349	1410	1961	1	5
Total Dissolved Solids	970	1050	865	812	850	1192	500	2000
Total hardness as CaCO ₃	456	552	505	476	290	348	1	15
Calcium as Ca	103	128	94.4	98.0	80.8	94.4	200	600
Magnesium as Mg	47.5	55.4	64.6	55.4	21.1	26.9	200	600
Calcium as CaCO ₃	258	321	236	245	202	236	75	200
Magnesium as CaCO ₃	198	231	269	231	88	112		
Total alkalinity as CaCO ₃	432	310	342	362	365	468		
Chloride as Cl ⁻	246	272	264	255	256	510	250	1000
Free Residual chlorine as Cl ⁻	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)	BDL(DL -0.2)	30	100
Sulphates as SO ₄ ²⁻	196	254	202	224	219	190	45	No Relaxa tion
Iron as Fe	0.05	0.08	0.09	0.07	0.05	BDL(DL -0.01)	200	400
Nitrate as NO ₃	3.22	4.32	2.59	3.32	5.6	6.5	1	No Relaxa tion
Fluoride as F	0.32	0.56	0.44	0.42	0.53	0.58	0.1	0.3
Manganese as Mn	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)	BDL(DL -0.05)	Not Specif ied	Not Specifi ed

All the values were found to be within permissible limits

1.7.3 NOISE ENVIRONMENT

Noise levels were measured in 6 locations and the results are given below.

S. No	Location	Day equivalent	Night equivalent	Day equivalent limits by CPCB	Night equivalent limits by CPCB
1	Proposed Mine Site	45.4	38.4	75	70
2	Tiruvaikkarai Village	44.6	40.4		
3	Pudukuppam Village	43.3	38.9		
4	Kodalamkuppam Village	46.4	38.0		
5	Kudukkur Village	46.8	41.7		
6	Nemili Village	43.5	39.1		

1.7.4 SOIL ENVIRONMENT

Soil samples are collected from 6 locations and the results are given below.

Results of Soil Sample Analysis								
S. No	Parameter	Unit	S1	S2	S3	S4	S5	S6
1	pH at 25 °C	-	7.94	6.44	7.86	6.96	7.43	7.68
2	Electrical Conductivity	µmhos/cm	75.12	67.54	89.23	91.85	58.33	99.76
3	Dry matter content	%	93.49	95.03	95.39	92.26	94.26	91.90
4	Water Content	%	6.51	4.97	4.61	7.74	5.74	8.10
5	Organic Matter	%	1.07	1.22	0.76	0.53	1.01	1.60
6	Soil texture	-	SILT LOAM	SILT LOAM	LOAM	LOAM	SILT LOAM	LOAM
7	Grain Size Distribution	%	30.68	26.89	44.15	40.25	23.98	45.86
	i. Sand							
	ii. Silt							
8	iii. Clay	%	51.62	62.14	45.87	48.69	58.22	44.36
9	Phosphorous as P	mg/kg	1.10	1.84	1.79	2.60	1.74	2.13
10	Sodium as Na	mg/kg	715	689	814	579	846	417
11	Potassium as K	mg/kg	797	765	929	652	994	575
12	Nitrogen and Nitrogenous Compounds	mg/kg	236	344	180	178	264	460
13	Total Soluble Sulphate	%	BDL(D.L. 0.02)	BDL(D.L. 0.02)	BDL(D.L. 0.02)	BDL(D.L. 0.02)	BDL(D.L. 0.02)	BDL(D.L. 0.02)
14	Porosity	%	24.1	25.9	27.6	21.7	30.4	22.1
15	Water Holding Capacity	Inches/foot	3.5	3.6	3.9	3.7	4.1	3.8

1.7.5 BIOLOGICAL ENVIRONMENT

FLORA

For measuring the extent of flora present in the study area, the area is divided in to 4 quadrants. The flora population in each quadrant is summed up for the total population in the study area. Field survey is done. Erukku, Aavarai and Nayuruvi are found in lease area. In the buffer zone, common trees like Neem, papaya, mango, teak, etc and shrubs like Avarai, Aloe vera, etc, climbers like Kovai, jasmine etc are found.

FAUNA

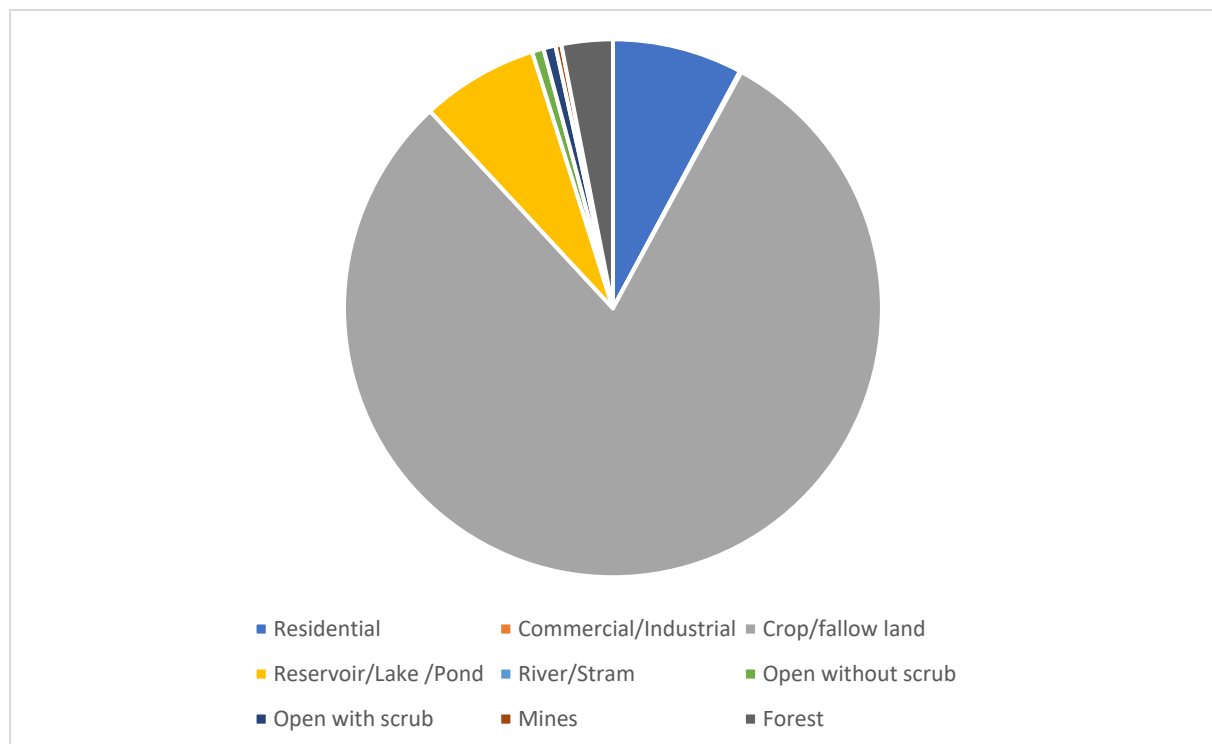
In the study area, commonly found animals like dogs, cats, bush rat, cows, birds like crow, Myna, Sparrow, etc were found.

1.7.6 LAND USE

The land use land cover data is found using the LANDSAT – 9 satellite imagery. The number of bands used are 11. The land use pattern is given below:

Major Land Use Units of the Study Area in Percentage

S. No	1st Level Classification	Area in (sq.km)	Percentage (%)	2nd Level Classification	Area in (sq.km)	Percentage (%)
1	Built-up or habitation	17.23	5.35	Residential	16.94	5.26
				Commercial/Industrial	0.29	0.09
2	Agriculture	247.3	76.80	Crop/fallow land	247.3	76.80
3	Water bodies	35.96	11.17	Reservoir/Lake /Pond	35.45	11.01
				River/Stram	0.51	0.16
4	Waste Land	13.39	4.16	Open without scrub	2.37	0.74
				Open with scrub	11.02	3.42
5	Mines	7.28	2.26	Mines	7.28	2.26
6	Forest	0.85	0.26	Forest	0.85	0.26
Total		322	322	100	322	100



1.7.7 SOCIO ECONOMIC ENVIRONMENT

The socio-economic environment of the study area is studied by conducting primary sites through site visits and conducting sample surveys. The secondary data obtained from Census 2011 is also used. The following data area collected from secondary data:

- Demographic pattern.
- Health pattern
- Occupational structure

1.7.8 HYDROGEOLOGY OF THE LEASE AREA

To assess the hydrogeological condition of the surrounding proposed mine lease area. The study area is located in Kadagampattu Village, Vanur Taluk, Viluppuram District is considered to understand the nature of the general hydrogeological conditions of the surrounding proposed mine lease area.

1.7.9 GROUND WATER STUDY

For Ground water study, satellite imagery is used. Water levels from monitoring levels are collected through imaging. The pre-monsoon and post-monsoon data are collected and the results are analyzed.

During field visit, it is observed that water is available in wells only after monsoon. The yield is obtained at deep levels only.

As far as the mining lease area is considered, the area is rocky and no major seepage is envisaged. The production quantity is very less and the depth proposed is 2m below ground level. Hence, there will not be any major impact due to mining on water levels or ground water levels in the area.

ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Environmental impacts on the following environments are identified.

- Land environment
- Water environment
- Vegetation
- Fauna
- Air environment
- Noise environment
- Socio-economic impacts

1.8 LAND ENVIRONMENT: IMPACT 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 upto 2m below ground level. 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. For this, plants like Neem/Pungan are selected. A total of 610 trees are planned to be planted. Spacing will be 3m x 3m.

1.9 WATER ENVIRONMENT: IMPACT AND MITIGATION MEASURES

There is no water body present inside the lease area. The entire water requirement for the project is 3.0 KLD which will be sourced from outside agencies. Negligible sewage will be generated, for which a septic tank with soak pit will be set up.

During monsoon season, the excess rain water, if any, will be led through garland drain of 0.6m width and 0.3 m depth to the collection pond with silt traps.

Since the mining operation will be limited upto depth of 2m below ground level there will not be any seepage. However, the rain water percolation and collection of water from seepage shall be less than 300lpm and it shall be pumped out periodically by a stand by diesel powered Centrifugal pump motivated with 7.5 HP Motor. The quality of water is expected to be potable. Hence, water stored in the quarry pit will be pumped into the adjacent agricultural fields. Further the water can also be used for plantation purposes

The major water bodies found in the buffer zone are.

Water bodies	Distance	Direction
Odai	0.87 Km	E
Gingee River	2.06 Km	SW
Katterikuppam Lake	4.06km	SE
Thirukannur Lake	5.53 km	SW

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 in to these water bodies, there is no major impact. For the canal, adequate safety distance is left. The proponent will restrict the mining operation only within the lease and no other work will be carried out near the canal or any area outside the lease.

It is planned to carryout appropriate rainwater harvesting schemes and artificial recharge schemes in the area.

- Rain water falling in the quarry will be collected efficiently through garland drains.
- Water thus collected will be passed through collection tank with silt traps. This water can be used by the proponent for water sprinkling and for green belt purposes.
- Excess water after desiltation will be provided to downstream users, if any

1.10 BIOLOGICAL ENVIRONMENT: IMPACT AND MITIGATION MEASURES

Impacts

- Fauna is affected due to noise and vibration.
- Dust generation due to mining activities
- Change in land use of the lease area
- Accidental falling of animals

Mitigation measures

- To reduce dust generation, mist sprayers will be used. During transportation, the material will be covered with tarpaulin. Water sprinkling will be done to reduce generation of pollutants
- After the mine closure stage, the mine pit will be leveled and used for agriculture purpose.
- To prevent entry of animals, the mining area will be properly fenced.

1.11 AIR ENVIRONMENT: IMPACT AND MITIGATION MEASURES

The major air pollutants due to mining operations are fugitive emissions like PM₁₀, PM_{2.5}. Other than these pollutants, gaseous emissions of sulfur dioxide (SO₂) 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.

The major impacts are Dust emission due transportation.

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

1.12 NOISE ENVIRONMENT: IMPACT AND MITIGATION MEASURES

Impacts

- ✚ As per DGMS (Directorate General of Mines Safety) and OSHA (Occupational Safety and Health Administration) limits, the acceptable noise level is 90 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 also decreases. Hence, there will be a natural attenuation
- ✚ The proposed has planned to develop green belt in the periphery of the lease area, which diminishes sound volume by dampening them.
- ✚ All the equipment/machinery/trucks 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

By adopting these measures, the noise levels will be maintained well within MoEF & CC limits since the baseline value is low.

1.13 VIBRATION: IMPACT AND MITIGATION MEASURES

- ✚ There is no drilling and blasting activity in the proposed site

1.14 SOCIO ECONOMIC ENVIRONMENT

The lease area is patta land. The proponent has planned to spend INR 2,00,000 for CER activities.

1.15 OCCUPATIONAL HEALTH

Impacts on humans due to various mining activities

Occupational health and safety hazards occur during the operational phase of mining and primarily include the following:

- Respiratory hazards
- Noise
- Physical hazards

1.16 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. To evaluate the effectiveness of environmental management programme, regular monitoring of the important environmental parameters will be taken up. Air monitoring will be carried out once in 3 months, water sample will be collected once in a season, noise will be monitored once in 3 months, soil samples will be analyzed once per season. For EMP, a budget of INR 27.87 Lakhs is allocated.

1.17 PROJECT BENEFITS

Financial benefits

- This project will contribute financially through payment of taxes like royalty, GST, etc.,
- The project will also contribute via CSR.
- The demands of people during public hearing will also be considered by the project proponent

Social benefits

- This project provides employment to 7 people directly. Local people will be hired for unskilled labour.
- Through CSR, nearby schools, hospitals will be benefitted.
- For CSR, INR 2,00,000 is allocated.

- Based on the demand of the people during public hearing, further funds will be allocated, if necessary.

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 27.87 lakhs for the two years has been allocated as EMP cost. 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.



ANNEXURE-1

ந.க.எண். அ/புவி (ம) சுர/149/2018
நாள்: 07.05.2024

உதவி இயக்குநர் அலுவலகம்,
புவியியல் மற்றும் சுரங்கத்துறை
விழுப்புரம்.

குறிப்பாணை

பொருள்: கனிமங்களும் குவாரிகளும் - விழுப்புரம் மாவட்டம் -
வானூர் வட்டம் - கடகம்பட்டு கிராமம் - புல
எண்.4/1 -1.22.0 ஹெக்டேர் பட்டா நிலம் -
சாதாரண மண் குவாரி குத்தகை உரிமம் வேண்டி
திரு.உ.அமுதகணேசமூர்த்தி, த/பெ.ஏகாம்பரம்
என்பவர் விண்ணப்பம் செய்தது - உரிமம் வழங்க
பரிந்துரை செய்து அறிக்கை வரப்பெற்றுள்ளது -
தகுதியான நிலப்பரப்பாக கருதி ஏற்பளிக்கப்பட்ட
சுரங்க திட்டம் மற்றும் சுற்றுச்சூழல் தாக்க
மதிப்பீட்டு ஆணைய இசைவினை பெற்று
சமர்ப்பிக்கக் கோருதல் - தொடர்பாக - தொடர்பாக.

- பார்வை:**
1. திரு.உ.அமுதகணேசமூர்த்தி, த/பெ.ஏகாம்பரம்,
352, கிழக்கு தெரு, ஊத்தங்கால் கிராமம்,
விருத்தாச்சலம் வட்டம், கடலூர் மாவட்டம்
என்பவரின் விண்ணப்ப நாள்: 16.04.2018.
 2. இவ்வலுவலக கடிதம் ந.க.அ/புவி(ம)சுர/149/
2018, நாள்:09.05.2018.
 3. விழுப்புரம் வருவாய் கோட்டாட்சியர், கடித எண்.
ந.க.எண். அ4/2179/2018 நாள்: 30.07.2018.
 4. இவ்வலுவலக கடிதம் ந.க.அ/புவி(ம)சுர/149/
2018 நாள்:22.09.2022.
 5. The Principal, Government College of
Engineering, Dharmapuri - 636 704
letter No.: GCE /DP1/ CIVIL /SOIL
/2023/C-124 dated 07.10.2022.
 6. விழுப்புரம், புவியியல் மற்றும் சுரங்கத்துறை
உதவி இயக்குநர் அவர்களின் புலத்தணிக்கை
அறிக்கை நாள்: 17.04.2024.

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கடலூர் மாவட்டம், விருத்தாச்சலம் வட்டம், ஊத்தங்கால் கிராமம், 352, கிழக்கு
தெரு என்ற முகவரியைச் சேர்ந்த திரு.உ.அமுதகணேசமூர்த்தி, த/பெ.ஏகாம்பரம்
என்பவர் விழுப்புரம் மாவட்டம், வானூர் வட்டம், கடகம்பட்டு கிராமம், பட்டா புல
எண்.4/1-ன் மொத்த பரப்பு 1.22.0 ஹெக்டேர் பரப்பளவில் செம்மண் வெட்டியெடுப்பது
தொடர்பாக 1959-ஆம் ஆண்டு தமிழ்நாடு சிறுவகை கனிமச்சலுகை விதிகள், விதி



எண். 19-ன் கீழ் ஐந்து ஆண்டுகளுக்கு குவாரி குத்தகை வழங்கக் கோரி பார்வை 1-ல் கண்டவாறு விண்ணப்பம் செய்துள்ளார்.

மேற்படி விண்ணப்பம் தொடர்பாக, விழுப்புரம் வருவாய் கோட்டாட்சியர், உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, விழுப்புரம் ஆகியோர் புலத்தணிக்கை மேற்கொண்டு விழுப்புரம் மாவட்டம், வானூர் வட்டம், கடகம்பட்டு கிராமம், பட்டா புல எண்.4/1-ன் மொத்த பரப்பு 1.22.0 ஹெக்டேர் பரப்பளவில் உள்ள பட்டா நிலத்தில் திரு. E. அமுதகணேசமூர்த்தி, த/பெ. ஏகாம்பரம் என்பவருக்கு சாதாரண மண் குவாரி உரிமம் வழங்க கீழ்க்கண்ட நிபந்தனைகளுக்குட்பட்டு அனுமதி வழங்கலாம் என பரிந்துரை செய்துள்ளனர்.

- i. விண்ணப்ப புலங்களின் அருகிலுள்ள பட்டா நிலங்களுக்கு 7.5 மீட்டர் பாதுகாப்பு இடைவெளியும், அருகிலுள்ள அரசு புறம்போக்கு நிலங்களுக்கு 10 மீட்டர் பாதுகாப்பு இடைவெளியும் விட்டு குவாரி பணி செய்ய வேண்டும்.
- ii. விண்ணப்ப புலத்தில் செல்லும் மின்கம்பி பாதையினை குவாரி குத்தகை வழங்குவதற்கு முன்பாக குவாரிப்பணி மேற்கொள்ளப்படும் இடத்திலிருந்து 50 மீட்டர் தொலைவிற்கு அப்பால் மாற்றியமைக்கப்படவேண்டும்.
- iii. குவாரிப்பணி மேற்கொள்ளும் போது அருகிலுள்ள பட்டா நிலங்கள் மற்றும் அரசு புறம்போக்கு நிலங்களுக்கு எவ்வித இடையூறும் இல்லாமல் குவாரிப்பணி செய்ய வேண்டும்.
- iv. குவாரி குத்தகை வழங்கும் முன்பு விண்ணப்பித்துள்ள இடத்தினை சுற்றி கம்பி வேலி அமைத்து DGPS சர்வே பணி மேற்கொண்டு அதன் அறிக்கையை சமர்ப்பிக்க வேண்டும்.
- v. தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959 விதி-41ன்படி தகுதிவாய்ந்த நபரால் சுரங்க திட்டம் தயார் செய்து உதவி இயக்குநர் அவர்களின் ஒப்புதல் பெறவேண்டும்.
- vi. தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959 விதி-42ன்படி மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்திடமிருந்து சுற்றுச்சூழல் சான்று பெற்று சமர்ப்பிக்கப்படவேண்டும்.

எனவே, விழுப்புரம் வருவாய் கோட்டாட்சியர் மற்றும் விழுப்புரம் மாவட்ட புவியியல் மற்றும் சுரங்கத்துறை, உதவி இயக்குநர் ஆகியோரின் பரிந்துரை அறிக்கையின் அடிப்படையிலும், மண் பரிசோதனை அறிக்கையின் அடிப்படையிலும், விழுப்புரம் மாவட்டம், வானூர் வட்டம், கடகம்பட்டு கிராமம், எண்.4/1-ன் மொத்த பரப்பு 1.22.0 ஹெக்டேர் பரப்பில் 1959-ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19-ன்படி மேற்கண்ட நிபந்தனைகளுக்குட்பட்டு 2 (இரண்டு) வருட காலத்திற்கு திரு. E. அமுதகணேசமூர்த்தி, த/பெ. ஏகாம்பரம் என்பவருக்கு சாதாரண மண் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

அதனடிப்படையில், தமிழ்நாடு சிறு கனிம சலுகை விதிகள்-1959 விதி எண். 41-ன்படி குவாரிப்பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை தகுதிவாய்ந்த நபர் (QP) மூலமாக கீழ்க்கண்ட

E. R. S. S.

நிபந்தனைகளுக்குட்பட்டு தயாரித்து அதனை 90 தினங்களுக்குள் துணை இயக்குநர் (புவியியல் மற்றும் சுரங்கத்துறை) அவர்களின் பரிசீலனைக்கு சமர்ப்பிக்குமாறு விண்ணப்பதாரரை கேட்டுக்கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன் படி சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

- i. விண்ணப்ப புலங்களின் அருகிலுள்ள பட்டா நிலங்களுக்கு 7.5 மீட்டர் பாதுகாப்பு இடைவெளியும், அருகிலுள்ள அரசு புறம்போக்கு நிலங்களுக்கு 10 மீட்டர் பாதுகாப்பு இடைவெளியும் விட்டு குவாரி பணி செய்ய வேண்டும்.
- ii. விண்ணப்ப புலத்தில் செல்லும் மின்கம்பி பாதையினை குவாரி குத்தகை வழங்குவதற்கு முன்பாக குவாரிப்பணி மேற்கொள்ளப்படும் இடத்திலிருந்து 50 மீட்டர் தொலைவிற்கு அப்பால் மாற்றியமைக்கப்படவேண்டும்.
- iii. குவாரிப்பணி மேற்கொள்ளும் போது அருகிலுள்ள பட்டா நிலங்கள் மற்றும் அரசு புறம்போக்கு நிலங்களுக்கு எவ்வித இடையூறும் இல்லாமல் குவாரிப்பணி செய்ய வேண்டும்.
- iv. குவாரி குத்தகை வழங்கும் முன்பு விண்ணப்பித்துள்ள இடத்தினை சுற்றி கம்பி வேலி அமைத்து DGPS சர்வே பணி மேற்கொண்டு அதன் அறிக்கையை சமர்ப்பிக்க வேண்டும்.

உதவி இயக்குநர்,
புவியியல் மற்றும் சுரங்கத்துறை,
விழுப்புரம்.

67.05.24

பெறுநர்

திரு. E. அமுதகணேசமூர்த்தி,
த/பெ.ஏகாம்பரம்,
352, கிழக்கு தெரு,
ஊத்துங்கால் கிராமம்,
விருத்தாச்சலம் வட்டம்,
கடலூர் மாவட்டம்.

நகல்:-

1. மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையம், சென்னை.
2. ஆணையர், புவியியல் மற்றும் சுரங்கத்துறை, கிண்டி, சென்னை.

E. R. S. S.



ANNEXURE-2

From

Tmt.S. Safiya, M.Sc.,
Assistant Director,
Dept. of Geology and Mining,
Viluppuram District,
Viluppuram.

To

Thiru.E. Amuthaganesamoorthy,
S/o. Eagambaram,
No. 352, East Street,
Uthangal Village,
Virudhachalam Taluk,
Cuddalore District - 607 804.

Rc.No.B/G&M/149/2018, Dated: 22.05.2024

Sub: Mines & Minerals – Minor Mineral – Red Earth –
Viluppuram District – Vanur Taluk - Kadagampattu
Village – S.F.No. 4/1 – 1.22.0 Hectare of patta land –
Application seeking quarry lease preferred by
Thiru.E. Amuthaganesamoorthy S/o. Eagambaram –
Precise area communicated - Submission of mining
plan for approval – Mining plan Approved –
Regarding.

- Ref: 1. Quarry lease application preferred by
Thiru.E. Amuthaganesamoorthy S/o.
Eagambaram, No. 352, East Street, Uthangal
Village, Virudhachalam Taluk, Cuddalore District
Dated: 16.04.2018
2. Assistant Director, Geology and Mining,
Viluppuram Letter Rc.No.A/G&M/149/2018
Dated: 07.05.2024
3. Mining Plan submitted by
Thiru.E. Amuthaganesamoorthy S/o.
Eagambaram, No. 352, East Street, Uthangal
Village, Virudhachalam Taluk, Cuddalore
District Dated: 17.05.2024
4. G.O.Ms.No.79, Industries (MMC-1) Department
dated 06.04.2015.
5. G.O.(Ms).No.169, Ind. (MMC.1) Dept. dated
04.08.2020.

In response to the precise area communicated vide the
reference 2nd cited, in continuously the applicant viz.,
Thiru.E. Amuthaganesa moorthy S/o. Eagambaram, vide reference
3rd cited has submitted Three copies of mining plan for the area
applied seeking grant of quarry lease for Ordinary Earth (Red Earth)
for a period of Two Years in over an extent of 1.22.0 hectares of patta
lands in S.F.No. 4/1 of Kadagampattu Village, Vanur Taluk,
Viluppuram District with a request to approve the same.

2. The mining plan so submitted has been verified in detail.

3. As per the guidelines / instructions issued by the Commissioner of Geology and Mining, Chennai vide letter Rc.No.3868/LC/2012, dated 19.11.2012, the mining plan is hereby 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) This approval of the mining plan does not in any way imply the approval of the Government in terms or any other provisions of the Mines and Minerals (Development and Regulation) Amended Act, 2015, or any other connected laws including Forest (Conservation) Act, 1980, Forest Conservation Rules, 1981, Environment Protection Act, 1980, Explosives Act, 1884 (Central Act IV of 1884) and the Rules made there under and the Tamil Nadu Minor Mineral Concession Rules, 1959.
- (iii) The mining plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.
- (iv) As per the Assistant Director, Geology and Mining, Viluppuram letter Rc.No. B/G&M/149/2018 Dated: 07.05.2024, the following conditions have been incorporated in the Mining Plan.
 - a. A safety distance of 7.5 meters should be provided for the adjacent patta lands and a safety distance of 10 meters should be provided for the adjacent Government land.
- (v) Quarrying shall be strictly done as per the approved Mining Plan.

Encl: Two copies of Approved Mining Plan.

22/05/2024
Assistant Director,
Dept. of Geology and Mining,
Viluppuram.

Copy to:

The Commissioner of Geology and Mining, Chennai-32.



ANNEXURE-3

From

Tmt.S. Safiya, M.Sc.,
Assistant Director,
Dept. of Geology and Mining,
Viluppuram District,
Viluppuram.

To

Thiru.E. Amuthaganesamoorthy,
S/o. Eagambaram,
No. 352, East Street,
Uthangal Village,
Virudhachalam Taluk,
Cuddalore District - 607 804.

- 2 -

Rc.No.A/G&M/149/2018 Dated: 22.05.2024

Sir,

Sub: Mines & Minerals – Minor Mineral – Red Earth – Viluppuram District – Vanur Taluk – Kadagampattu Village – S.F.No. 4/1 – 1.22.0 Hectare of patta land – Application seeking quarry lease preferred by Thiru.E. Amuthaganesamoorthy S/o. Eagambaram – Precise area communicated – Details of quarries situated within 500 meter radial distance – furnished – reg.

Ref: 1. Assistant Director, Geology and Mining, Viluppuram
Letter Rc.No.A/G&M/149/2018 Dated: 07.05.2024

2. Representation by Thiru.E. Amuthaganesamoorthy S/o. Eagambaram, No. 352, East Street, Uthangal Village, Virudhachalam Taluk, Cuddalore District
Dated: 17.05.2024

With reference to your letter in the reference 2nd cited, the details of existing, proposed and abandoned quarries located within 500 meter radius from the proposed Ordinary Earth instead of Red Earth quarry, over an extent of 1.22.0 hectares of patta lands in S.F.No. 4/1 – 1.22.0 Hectare of Kadagampattu Village, Vanur Taluk, Viluppuram District are as follows.

Existing quarries:

Sl. No.	Name of the lessee / permit holder	Name of the Mineral	Taluk & Village	S.F. Nos.	Extent (in hecets)	Lease period	Remarks
1.	Thiru.K.Vijayan, S/o.Kannaiyan, Kadagampattu Village, Vanur Taluk, Viluppuram District.	Lateritic Soil	Vanur Taluk, Kadagampattu Village	51/7A1 51/7B 51/8A 51/8B1	0.36.45 0.08.0 0.94.0 <u>0.08.0</u> <u>1.46.45</u>	23.02.2024 to 22.02.2026	

II. Proposed quarries :

Sl. No.	Name of the lessee / permit holder	Name of the Mineral	Taluk & Village	S.F. Nos.	Extent (in hecets)	Remarks
1.	Thiru.T.Anbazhagan, S/o. Thangavel, Mettu Street, Kadagampattu Village, Vanur Taluk, Viluppuram District.	Ordinary Earth	Vanur Taluk, Kadagampattu Village	30/2A	0.81.0	-
2.	Thiru.K.Rajesh, S/o.Kuppan, No. 66, Mariamman Kovil Street, Kadagampattu Village, Vanur Taluk, Viluppuram District.	Ordinary Earth	Vanur Taluk, Kadagampattu Village	6/7 27/1 27/2A2	0.48.0 0.46.0 0.40.0 1.34.0	-
3.	Thiru.P. Loganathan S/o. Perumal, No.118, Mettu Street, Kadagampattu Village, Vanur Taluk, Viluppuram District	Ordinary Earth	Vanur Taluk, Kadagampattu Village	30/2B1, 30/2B2, 30/5C, 30/5D, 30/5E	0.30.0 0.12.0 0.20.0 0.82.0 0.23.0 ----- 1.67.0	-
4.	Thiru.E. Amuthaganesa moorthy, S/o. Eagambaram, No. 352, East Street, Uthangal Village, Virudhachalam Taluk, Cuddalore District - 607 804.	Ordinary Earth	Vanur Taluk, Kadagampattu Village	4/1	1.22.0	-

III. Abandoned quarries :

Sl. No.	Name of the lessee / permit holder	Name of the Mineral	Taluk & Village	S.F. Nos.	Extent (in hecets)	Lease period
1.	Thiru. S. Rajavelu S/o. Subramanian, No.47/1, Mariyamman Kovil Street, Kadagampattu Village, Suthukeni Post, Vanur Taluk, Viluppuram District.	Red Earth	Vanur Taluk. Kadagampattu Village.	6/3(p) 6/4 6/5 6/6	0.20.0 0.13.0 0.12.0 0.62.0 ----- 1.07.0	08.03.2019 to 07.03.2021
2.	Thiru. Loganathan S/o. Perumal, No.118, Mettu Street, Kadagampattu Village, Vanur Taluk, Viluppuram District	Red Earth	Vanur Taluk. Kadagampattu Village.	30/1 31/1 31/2A 31/2B 31/3	0.59.0 1.29.0 0.20.5 0.20.5 0.41.0 ----- 2.70.0	17.06.2022 to 16.06.2023


 Assistant Director,
 Dept. of Geology and Mining,
 Viluppuram