

EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY CATEGORY – B1

(Submitted for Public Hearing as per the provisions of EIA Notification 2006 & its amendments thereof)

APPROVED TOR vide T025B0108TN5771345N (F.No. 12577), dated 25.09.2025

PROPOSED QUARRY LEASE DETAILS	
SURVEY NO	381/1 (P)
VILLAGE	MELKARAIPATTI
TALUK	PALANI
DISTRICT	DINDIGUL
EXTENT	5.57.0 HECTARES
PROPOSED PRODUCTION QUANTITY FOR FIVE YEARS	13,10,240M ³ OF ROUGH STONE & 92,026M ³ OF GRAVEL
LAND	PATTA LAND

(Sector No. 1(a) (Sector no.1 as per NABET)
Category of (Sector No. 1(a) Sector No.1 as per NABET)
Category of the Project: B1 Cluster Mining, Total Cluster Area – 24.39.00 ha
Baseline Monitoring Period – March 2025 to May 2025.

APPLICANT

**M/S.SHRI RAJRUDHRA MINERALS PRIVATE LIMITED,
NO.99/2B1B, 1ST FLOOR, VELLORE MAIN ROAD,
ARCOT TALUK, RANIPET DISTRICT**

ENVIRONMENTAL CONSULTANT	LABORATORY
M/s. GLOBAL MINING SOLUTIONS (NABET Accredited & ISO 9001 Certified Consultant) Plot No. 6, S.F.No. 13/2, A2, VS City, RC Chettypatty, Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455. NABET Accreditation No: NABET/EIA/23-26/SA 0241, Valid Until - January 4, 2026 Contact: 97502 23535 & 94446 54520 Email: infoglobalmining@gmail.com, globalminingsolutionssalem@gmail.com	M/s. SHRIENT ANALYTICAL & RESEARCH LABS PRIVATE LIMITED (NABL Accredited Testing Laboratory) Valid Until -30.11.2025 #416/15, Dhargas Road, Perungalathur, West Tambaram, Chennai, Tamil Nadu, India.

EXECUTIVE SUMMARY

1.1 INTRODUCTION

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 and Gravel Quarry located at survey nos. S.F.No. 381/1 (P) of Melkaraipatti Village, Palani Taluk, Dindigul District, Tamil Nadu State., for production capacity of 13,10,240 m³ of Rough Stone and 92,026 m³ of Gravel for the period of first 5 years with ultimate depth up to 67 m BGL. The mining plan has prepared and same was approved by Assistant Director, Department of Geology and Mining, Dindigul, vide Rc.No.589/2025 (Kanimam) dated 28.07.2025.

As per EIA notification, 2006 and its subsequent amendments the proposed "Rough Stone and Gravel Quarry of M/s. Shri Rajrudhra Minerals Private Limited" 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 24.39.00Ha which is >5 Ha. The ToR for the preparation of EIA/EMP was approved vide ToR identification number TO25B0108TN5771345N, Dated 25.09.2025. This report has been prepared in line with the approved TOR for maximum excavation of 13,10,240 m³ of Rough Stone and 92,026 m³ of Gravel for the period of first 5 years with ultimate depth up to 67 m BGL.

S.No.	Description	Status/Remarks
1.	Sector	1(a), non-coal mining
2.	Category of the project	B1
3.	Proposed mineral	Rough Stone and Gravel
4.	Type of Lease	The applied lease area is fresh lease .

PROPOSED ROUGH STONE & GRAVEL QUARRY OF M/S.SHRI RAJRUDHRA MINERALS PRIVATE LIMITED, OVER AN EXTENT OF 5.57.00 HA LOCATED AT THE S.F.NO. 381/1 (P) OF MELKARAIPATTI VILLAGE, PALANI TALUK, DINDIGUL DISTRICT, TAMIL NADU STATE

5.	Extent of the lease	5.57.0Ha.
6.	Proposed depth of Mining	67m (below ground level) for the proposed mining plan
7.	Method of mining	Opencast, Semi-mechanized Mining
8.	Proposed lease period	5 Years
9.	Proposed Environmental Clearance	5 Years
10.	Proposed production quantity for Five years	Rough Stone – 13,10,240 m ³ Gravel – 92,026 m ³

The lessee, M/s. Shri Rajrudhra Minerals Private Limited, is a company experienced in the identification, quarrying, and marketing of Rough Stone and Gravel. The proposed land is patta land, and the document is attached as **Annexure 6**.

1.2 LOCATION

The proposed Quarry lease area is situated at S.F.No. 381/1 (P) of Melkaraipatti Village, Palani Taluk, Dindigul District, Tamil Nadu State. The area lies in the north latitude of **10°36'48.85"N to 10°37'01.96"N** and eastern longitude of **77°28'05.89"E to 77°28'17.36"E** with Survey of India Topo Sheet No. 58-F/06. 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. March 2025 to May 2025)

1.3 GEOLOGY

The rock type noticed in the area for lease is Charnockite which contains mostly Quartz and Feldspar with some ferromagnesian minerals. The Charnockite is part of peninsular Gneisses, a high-grade metamorphic rock. The strike of the Charnockite formation is N500W –S500E with dipping towards SE60°.

1.4 PROJECT DESCRIPTION

This is a proposed Rough Stone and Gravel quarry by Opencast Mechanized mining method with drilling and blasting. The quarrying is restricted up to a depth of 47 m below ground level. The geological reserves are estimated to be Rough Stone – This is a proposed Rough Stone and Gravel quarry by Opencast Mechanized mining

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method with drilling and blasting. The quarrying is restricted up to a depth of 67 m below ground level. The geological reserves are estimated to be 35,80,590 m³ of Rough Stone & 1,10,172 m³ of Gravel. The mineable reserve calculated by deducting 7.5 m safety distance and bench loss. The mineable reserves are 13,10,240 m³ of Rough Stone & 92,026 m³ Gravel which will be recovered at the rate of 100% recovery upto a depth of 67 m Below ground level for the period of five years.

- It is proposed to quarry out rough stone with 5m bench height, 5m width with 45° slope using conventional Open cast Mechanized method. The quarry operation involves shallow jack hammer drilling, slurry blasting, excavation, Loading and transportation of Rough Stone.
- There is no overburden anticipated during entire rough stone quarrying operation.

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	Production	13,10,240 m ³ of Rough Stone and 92,026 m ³ Gravel for the period of 5 years.
6	Life	5 years
7	Waste generation and management	There is no overburden anticipated during the quarrying operation. Hence, no waste generation.
8	Bench height and width	Height and Width – 5m
9	Ultimate pit depth	67 m (BGL)
10	End use	Rough Stone will be loaded into tippers to needy buyers for producing aggregates, M-sand.

1.5 PROJECT REQUIREMENTS

The requirements of the project are given below.

S.No.	Nature of requirement	Description
1	Water requirement	Total water requirement of 5.0 KLD which will be procured from the outside agencies. Out of 1.5 KLD drinking water requirements, Green belt development is 1.5 KLD and dust suppression is 2.0 KLD.
2	Power requirement	No electricity is needed for mining operations, for office demands, it will be met from the state grid. Total Fuel requirement is 10,63,530 L (Entire Project Life) for entire life of the project.
3	Manpower requirement	38 Nos
4	Financial requirement	Rs. 159.35 Lakhs (Including operational + Fixed Asset + EMP cost + CER cost).
5	Funds for Socio economic development	INR 5.0 Lakhs is allocated. In addition, any demand raised by people during public hearing will also be met.

1.6 DESCRIPTION OF LEASE AREA

The features in the study area is given below.

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 10 km radius		
2	Areas which are important or sensitive for ecological reasons			
A	Wetlands, water courses or other water bodies,	Water bodies	Distance	Direction
		Odai	52 m	E
		Tank	160 m	NE
		Tank	1.4 m	S

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		Alangulam Tank	3.8 km	SE	
		Tank	4.5 km	NE	
		Amaravathi River	2.8 km	NW	
		Shanmukha River	2.6 km	E	
B	Coastal zone, biospheres,	Nil within 10km radius			
C	Mountains, forests	Dalavaipattinam R.F. – 6.6 km(N)			
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	Nil within 10km radius			
4	Inland, coastal, marine or underground waters	Nil within 10 km radius			
5	State, National boundaries	Nil within 10 km radius			
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	Nil within 10 km radius			
7	Defense installations	Nil within 10 km radius			
8	Nearest Village	Palani – 17.00 km - SE			
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Palani – 17.00 km - SE			
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.			

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The baseline data collection for meteorology, air, water, noise and soil environments have been carried out during March to May 2025.

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

1.7 AIR ENVIRONMENT

The air monitoring have been carried out in 7 locations and the results are given below.

S.NO	Location Code	Monitoring Locations		Latitude and longitude
1	AAQ 1	Project site	Core Zone	10°36'55.79"N 77°28'11.63"E
2	AAQ 2	Panampatty	1.90 km (SW)	10°35'38.89"N 7°27'19.75"E
3	AAQ 3	Kottathurai	1.21 km (NE)	10°37'11.27"N 77°28'26.86"E
4	AAQ 4	Melkaraipatty	1.74 km (SE)	10°35'52.90"N 77°28'24.56"E
5	AAQ 5	Keeranur	3.98 km (SE)	10°35'49.56"N 77°29'53.13"E
6	AAQ6	Rajampatti	1.52 km (W)	10°37'10.21"N 77°26'52.67"E
7	AAQ7	Bommanallur	6.18 km (E)	10°36'43.79"N 7°31'22.60"E

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Station ID	Min	Max	Avg.
Particulate matter PM_{2.5} (µg/m³)			
AAQ-1	25.5	37.1	31.8
AAQ-2	24.8	32.6	27.9
AAQ-3	22.4	27.6	24.4
AAQ-4	19.7	29.2	24.1
AAQ-5	23.3	31.4	26.8
AAQ-6	24.3	29.5	26.3
AAQ-7	20.5	25.7	22.5
CPCB NAAQS 2009 for PM_{2.5} - 60 µg/m³			
Particulate matter PM₁₀ (µg/m³)			
AAQ-1	55.6	80.4	69.0
AAQ-2	52.8	69.4	59.4
AAQ-3	48.6	59.9	53.1
AAQ-4	42.8	59.4	51.8
AAQ-5	50.8	68.4	58.3
AAQ-6	52.8	64.1	57.3
AAQ-7	44.4	55.7	48.9
CPCB NAAQS 2009 for PM₁₀ - 100 µg/m³			
Sulphur Di-oxide as SO₂ (µg/m³)			
AAQ-1	6.4	9.3	7.5
AAQ-2	4.9	7.2	6.0
AAQ-3	4.6	6.6	5.7
AAQ-4	4.4	6.7	5.5
AAQ-5	5.7	7.7	6.7
AAQ-6	5.5	7.5	6.6
AAQ-7	4.8	6.8	5.9
CPCB NAAQS 2009 for SO₂ - 80 µg/m³			

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Oxide of Nitrogen as NO₂ (µg/m³)			
AAQ-1	10.4	15.1	12.4
AAQ-2	7.1	10.2	8.8
AAQ-3	6.7	9.9	8.3
AAQ-4	6.0	8.3	7.2
AAQ-5	9.4	11.4	10.5
AAQ-6	9.7	12.9	11.3
AAQ-7	7.7	10.9	9.3
CPCB NAAQS 2009 for NO₂ – 80 µg/m³			

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

1.8 WATER ENVIRONMENT

Surface Water Analysis Results

Sr.No	Parameter	Unit	SW1	SW2	Surface water standards (IS 2296 Class-A)
1	Odour	-	Agreeable	Agreeable	-
2	Turbidity	NTU	<1.0	<1.0	1
3	pH at 25 °C	-	7.90	7.82	6.5-8.5
4	Electrical Conductivity	µs/cm	228	194	-
5	Total Dissolved Solids	mg/l	138	116	500
6	Total hardness as CaCO ₃	mg/l	80.2	75	-
7	Calcium as Ca	mg/l	16.1	15.4	300

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8	Magnesium as Mg	mg/l	9.6	8.8	-
9	Calcium as CaCO ₃	mg/l	40.3	38.4	-
10	Magnesium as CaCO ₃	mg/l	39.9	36.8	-
11	Total alkalinity as CaCO ₃	mg/l	42.8	36.7	-
12	Chloride as Cl ⁻	mg/l	30.6	35.2	250
13	Free Residual chlorine as Cl ⁻	mg/l	BDL (D.L - 0.2)	BDL (D.L - 0.2)	-
14	Sulphates as SO ₄ ²⁻	mg/l	14.9	15.2	400
15	Iron as Fe	mg/l	BDL(D.L - 0.01)	BDL(D.L - 0.01)	0.3
16	Nitrate as NO ₃	mg/l	BDL(DL-1.0)	1.65	20
17	Fluoride as F	mg/l	0.26	0.21	1.5
18	Manganese as Mn	mg/l	BDL (D.L - 0.05)	BDL(D.L-0.05)	0.5
19	COD	mg/l	BDL (D.L - 4.0)	BDL (D.L - 4.0)	-
20	BOD	mg/l	BDL (D.L - 2.0)	BDL (D.L - 2.0)	-
21	TSS	mg/l	BDL(DL-2.0)	BDL(DL-2.0)	-
22	DO	Mg/l	6.3	6.2	6.0

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Ground Water Quality Data

parameter	GW1	GW2	GW3	GW4	GW5	GW6	GW7	Specification/Limit (As per IS:10500: 2012)	
								Acceptable	Permissible Limits
Odour	agreeable	agreeable	agreeable	agreeable	agreeable	agreeable	agreeable	Agreeable	Agreeable
Turbidity	<1	<1	<1	<1	<1	<1	<1	1	5
pH at 25 °C	7.29	7.75	7.26	7.39	7.25	7.99	7.42	6.5- 8.5	No relaxation
Electrical Conductivity	1096	1020	1334	1422	920.2	735.8	846.9	-	-
Total Dissolved Solids	658	612	800	854	552	442	510	500	2000
Total hardness as CaCO ₃	338	172	575	482	387	214	282	200	600
Calcium as Ca	82.4	43.2	132	108	106	48.4	72.0	75.0	200
Magnesium as Mg	31.7	15.4	58.8	50.9	29.0	22.3	24.5	30.0	100
Calcium as CaCO ₃	206	108	330	270	266	121	180	-	-
Magnesium as CaCO ₃	132	64.0	245	212	121	93.0	102	-	-
Total alkalinity as CaCO ₃	449	176	382	438	284	201	234	200	600
Chloride as Cl ⁻	125	374	255	211	146	138	155	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 (D.L - 0.2)	BDL (D.L - 0.2)	0.2	1
Sulphates as SO ₄ ²⁻	149	76.5	104	155	33.2	53.6	57.9	200	400
Iron as Fe	BDL(D.L - 0.01)	BDL(D.L - 0.01)	BDL(D.L - 0.01)	BDL(D.L - 0.01)	BDL(D.L - 0.01)	0.06	0.07	0.30	0.3
Nitrate as NO ₃	3.59	1.66	3.05	2.57	2.96	1.45	2.77	45	45
Fluoride as F	0.36	0.32	0.48	0.39	0.34	0.49	0.44	1	1.5
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 (D.L - 0.05)	BDL (D.L - 0.05)	1	0.3

All the values were found to be within permissible limits

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1.9 NOISE ENVIRONMENT

Noise levels were measured in 7 locations and the results are given below.

Noise monitoring results					
S. No	Location	Day equivalent	Night equivalent	Day equivalent limits by CPCB	Night equivalent limits by CPCB
1	Project site	47.3	40.5	75	70
2	Panampatty	45.7	39.8	55	45
3	Kottathurai	43.6	40.5		
4	Melkaraipatty	46.5	41.0		
5	Keeranur	51.3	42.2		
6	Rajampatti	47.7	42.5		
7	Bommanallur	50.0	42.0		

1.10 SOIL ENVIRONMENT

Soil samples are collected from 7 locations and the results are given below.

S. No	Parameter	Unit	S1	S2	S3	S4	S5	S6	S7
1	pH at 25 °C	-	7.89	6.52	6.97	7.05	7.12	6.78	6.99
2	Electrical Conductivity	µmhos/cm	110	75.62	152	90.47	165	89.74	95.47
3	Dry matter content	%	90.33	94.65	94.72	95.74	94.21	95.66	94.23
4	Water Content	%	9.67	5.35	5.28	4.26	5.79	4.34	5.77
5	Organic Matter	%	0.66	1.33	1.21	0.94	1.24	1.05	1.33
6	Soil texture	-	SILT LOAM	silty clay	silty clay loam	silt loam	silty clay loam	silt loam	loam
7	Grain Size Distribution	%							
	i. Sand		26.59	8.92	13.55	24.74	13.69	29.21	34.52
	ii. Silt		58.69	47.46	47.52	68.72	48.21	53.64	50.33
9	iii. Clay	%	14.72	43.62	38.93	6.54	38.10	17.15	15.15
10	Phosphorous as P	mg/kg	0.95	1.72	2.31	1.74	1.89	1.77	1.34
11	Sodium as Na	mg/kg	772	432	725	597	705	375	402
12	Potassium as K	mg/kg	524	662	895	794	870	712	616
13	Nitrogen and Nitrogenous Compounds	mg/kg	348	269	288	642	321	230	450
14	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)	BDL(D.L. 0.02)
15	Porosity	%	19.6	18.5	19.4	18.3	19.2	19.6	19.8

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16	Water Holding Capacity	Inches/foot	42	40	42	40	42	40	42
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1.11 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.

1.12 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

Sl.No.	LAND USE / LAND COVER	Area in Sq.Km	Area in Percentage
Sl.No.	LAND USE / LAND COVER	Area in Sq.Km	Area in Percentage
1	Built-up land	5.37	1.66
3	Crop land	154.59	47.72
4	Existing mining area	1.48	0.46
5	Fallow land	4.62	1.43
6	Land with scrub	3.12	0.96
7	Land without scrub	95.4	29.45
	Plantation	52.05	16.07
8	Water bodies	7.33	2.26
	Total Area	332.16	100.00

1.13 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.
- Amenities available.

The expert visited 4 villages in the study area namely Kalakudi Village, Kanarpatti, South Sezhilanallur and Alagiapandiapuram Village. Discussions were held with the people from nearby locality to study the social and economic conditions prevailing in the area. The expert also visited nearby hospitals, primary health centres and Tharuvai. The following observations were made.

The following observations were made.

Primary and higher secondary schools are available in many villages. For hospital facilities, people in the locality have to go to hospital within 5 km from the project site.

1.14 HYDROGEOLOGY OF THE LEASE AREA

In Dindugul District, during the pre monsoon, the water level generally in declining trend ranges from G.L. to 15m. The depth of well below Ground Level 12.0m are become dry during hot season like May, June, July. In the post monsoon, the water level generally in upward trend due to rainfall and it may reach the Ground Level also. Dindugul district is almost made up of hard rock covered by thin soil.

There are many tanks located in the study area, which are mostly dry throughout the year. These tanks get water only during monsoons. The factors may be monsoon failure, insufficient rainfall, poor rain water management and water consuming patterns.

1.15 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 depth proposed is 67 m BGL. 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

1.16 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 67 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, 4.72.50 Ha of lease area will be left as rain water harvesting pond. 0.81.50 Ha will be developed with green belt. For this, plants like Pongamia pinnata, Syzigium cumini, Albizia lebbeck, Thespesia populnea, Bauhinia racemose, Cassia siamea, Azadirachta

indica are selected. A total of 820 trees are planned to be planted. Spacing will be 3m x 3m.

1.17 WATER ENVIRONMENT: IMPACT AND MITIGATION MEASURES

There is no water body present inside the lease area. The entire water requirement for the project is 5.0 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 a drainage drain of 0.6m width and 0.3 m depth to the collection pond with silt traps.

Since the mining operation will be limited up to depth of 67 m (BGL), 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 7.5H.P. 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
Odoi	52 m	E
Tank	160 m	NE
Tank	1.4 m	S
Alangulam Tank	3.8 km	SE
Tank	4.5 km	NE
Amaravathi River	2.8 km	NW
Shanmukha River	2.6 km	E

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. The proponent will restrict the mining operation

only within the lease and no other work will be carried out near the tank 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

1.18 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

- Sirens will be blown before blasting in the mines. To reduce noise levels, plantation will be done. Blasting will be carried out only in the allotted time.
- 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 left as rain water collecting tank, which can attract bird population in the nearby areas.
- To prevent entry of animals, the mining area will be properly fenced.

1.19 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 to drilling, blasting and transportation. The major mitigation measures include Using Wet drilling methods, Allowing drilling only with PPE, Carrying out blasting only during specified times, Avoiding blasting during unfavourable weather conditions, Using explosives of good quality, Using mist sprayers Regular wetting of transport, 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 7.5m barriers in the lease area.

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

1.20 NOISE ENVIRONMENT: IMPACT AND MITIGATION MEASURES

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) 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.

VIBRATION: IMPACT AND MITIGATION MEASURES

Impacts

- ✚ Though vibration will be only felt by the people working inside the lease area, it is usually undesired.
- ✚ Vibration may also cause flyrocks
- ✚ It may frighten the birds and small insects in the lease area. However, it will be felt only for a short period

Mitigation measures

- ✚ Carrying out blasting on limited scale, only from 12:00 PM to 2:00 PM
- ✚ Control of fly rock and vibration by maintaining peak particle velocity with in standard as prescribed by the DGMS and MOEF & CC.
- ✚ Shallow depths jackhammer drilling and blasting is proposed to be carried out with minimum use of explosive
- ✚ Supervising blasting by competent and statutory foreman/ mines manager

1.21 SOCIO ECONOMIC ENVIRONMENT

Impact and Mitigation measures

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.

1.22 OCCUPATIONAL HEALTH

Impacts

Dust generation due to drilling and blasting, Noise generation due to drilling and blasting, unexpected accidents. Continuous exposure to dust causes Pneumonia, Tuberculosis, Rheumatic arthritis and Segmental Vibration, Short term impact will be lack of sleep, high blood pressure and heart ailments. Long term exposure may lead to partial or permanent deafness, Risks include fly rocks, cracks or fissures due to improper mining methods

Mitigation measures

- Using dust suppression measures like water spraying on roads to reduce rise of air pollutants
- Providing green belt for air pollutant and noise attenuation
- Ensuring slope stability
- Employing only trained professionals for blasting
- Conducting Pre-Medical Examination for employees before inducting
- Conducting periodical Medical Examination once in 6 months.
- 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.

1.23 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 34.93 lakhs is allocated.

1.24 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 38 people. Local people will be hired for unskilled labour.
- Through CSR, nearby schools, hospitals will be benefitted.
- For CSR, INR 5,00,000 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 34.93 lakhs for the five 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

புவியியல் மற்றும் சுரங்கத்துறை

ந.க.எண்: 589/2025 (கனிமம்)

உதவி இயக்குநர் அலுவலகம்,
மாவட்ட ஆட்சியர் அலுவலக வளாகம்,
திண்டுக்கல்.

நாள்: 28.07.2025



குறிப்பாணை

பொருள்: கனிமங்களும் சுரங்கங்களும் - திண்டுக்கல் மாவட்டம் - பழனி வட்டம், மேல்கரைப்பட்டி கிராமம், புல எண் 381/1 (பகுதி) 5.57.0 ஹெக்டேர் பரப்பில் - ஐந்து வருடங்களுக்கு உடைகல் மற்றும் கிராவல் குவாரி குத்தகை உரிமம் வழங்கல் - உகந்த பரப்பு (Precise Area) தேர்வு செய்யப்பட்டது - சுரங்கத்திட்டம் மற்றும் மாநில அளவிலான சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்ப்பிக்க கோருவது - தொடர்பாக.

- பார்வை:**
1. தி/ள்.ஸ்ரீ ராஜ்ருத்ரா மினரல்ஸ் பிரைவேட் லிமிடெட், மேல்கரைப்பட்டி, பழனி வட்டம், திண்டுக்கல் என்பவரது மின்னனு விண்ணப்பம் எண் 25DGL0403342 நாள்: 05.06.2025
 2. இவ்வலுவலக கடிதம் ந.க. எண்: 589/2025 (கனிமம்), நாள்: 09.06.2025 பழனி வருவாய் கோட்டாட்சியருக்கு முகவரியிட்டது.
 3. பழனி, வருவாய் கோட்டாட்சியர் கடிதம் எண்: 4781/2025/அ7, நாள்: 30.06.2025
 4. உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை அவர்களின் புலத்தணிக்கை அறிக்கை நாள்: 03.07.2025
 5. 1959-ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 41 மற்றும் 42.
 6. அரசாணை எண்.169 தொழில் (எம்.எம்.சி.1) துறை, நாள்: 04.08.2020.
 7. அரசாணை எண்.208, தொழில் (எம்.எம்.சி.1) துறை, நாள்: 21.09.2020.
 8. தொடர்புடைய ஆவணங்கள்.



500 மீட்டர் சுற்றளவில் அருங்காட்சியக துறையின் மூலம் பாதுகாக்கப்பட்ட பகுதிகளாக அறிவிக்கப்பட்ட இடங்கள் மற்றும் வரலாற்று சின்னங்கள் எதும் இல்லை எனவும், சாதாரண கற்கள் மற்றும் கிராவல் குவாரி குத்தகை உரிமம் வழங்கல் தொடர்பாக மேல்கரைப்பட்டி கிராமத்தில் அ1 அறிவிக்கை பிரகரம் செய்யப்பட்டதில் பொதுமக்களிடமிருந்து ஆட்சேபணை ஏதும் வரப்பெறவில்லை எனவும், புலங்களில் முதல் முறையாக குவாரி உரிமம் கோரப்பட்டுள்ளது என தெரிவித்து கீழ்க்காணும் நிபந்தனைகளுக்குட்பட்டு மேற்கண்ட புலங்களில் உடைகல் குவாரி குத்தகை உரிமம் ஐந்து (5) ஆண்டுகளுக்கு வழங்க பரிந்துரை செய்துள்ளனர்.

- 1) அருகிலுள்ள மனுதாரர் நிறுவனத்திற்கு சொந்தமான பட்டா நிலங்களுக்கு 7.5 மீ பாதுகாப்பு இடைவெளி விடுத்து குவாரி செய்தல் வேண்டும்.
- 2) பொதுமக்கள் / விவசாய நிலங்களுக்கு பாதிப்பு ஏற்படாத வகையில் தகுதி வாய்ந்த அங்கீகரிக்கப்பட்ட நபர்கள் மூலம் வெடிமருந்துகள் சேமிக்கப்பட்டு குவாரியில் வெடித்தல் வேண்டும். குவாரியில் குறைந்த சக்தி கொண்ட வெடி மருந்துகளை பயன்படுத்தல் வேண்டும்.
- 3) சுரங்கத்திட்டம் மற்றும் சுற்றுச்சூழல் தடையில்லாச் சான்று குத்தகை உரிமம் வழங்குவதற்கு முன் சமர்ப்பிக்க வேண்டும்.
- 4) குவாரியில் வேலை செய்யும் தொழிலாளர்கள் தொழிலாளர் நலவாரியம் மற்றும் காப்பீடு திட்டத்தில் பதிவு செய்து தொழிலாளர் நலன் பேண்பட வேண்டும்.
- 5) குழந்தை தொழிலாளர்களை குவாரி பணியில் அமர்த்தக் கூடாது.
- 6) கனிமங்களை வாகனங்களில் கொண்டு செல்லும் போது பாதசாரிகள், பொது மக்கள் மற்றும் பிற வாகனங்கள் பாதிக்காதவண்ணம் தார்பாய்கள் கொண்டு மூடி எடுத்துச் செல்ல வேண்டும்.

எனவே, துறை அலுவலர்களின் பரிந்துரையினை ஏற்றும் நிபந்தனைகளுக்கு உட்பட்டும், திண்டுக்கல் மாவட்டம், பழனி வட்டம், மேல்கரைப்பட்டி கிராமம், புல எண் 381/1 மொத்தப்பரப்பு 9.74.0 ஹெக்டேரில் பகுதி பரப்பான 5.57.0 ஹெக்டேர் மட்டும் உடைகல் மற்றும் கிராவல் குவாரி குத்தகை உரிமம் 1959-ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள் விதி எண்: 19 (1) மற்றும் 20 -ன் படி ஐந்து (5) வருட காலத்திற்கு உடைகல் மற்றும் கிராவல் குவாரி உரிமம் வழங்க தகுதி வாய்ந்த நிலப்பரப்பாக (Precise Area) கருதப்படுகிறது.



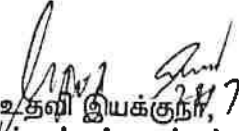
திண்டுக்கல் மாவட்டம், பழனி வட்டம், மேல்கரைப்பட்டி கிராமம், புல எண் 381/1 (பகுதி)-ன் மொத்தப்பரப்பு 9.74.0 ஹெக்டேரில் பகுதி பரப்பு 5.57.0 ஹெக்டேர் பரப்பில் மட்டும் உடைகல் மற்றும் கிராவல் குவாரி குத்தகை உரிமம் வழங்கக்கோரிய திண்டுக்கல் மாவட்டம், பழனி வட்டம், மேல்கரைப்பட்டி கிராமத்தில் உள்ள தி/ள்.ஸ்ரீ ராஜ்ருத்ரா மினரல்ஸ் பிரைவேட் லிமிடெட் நிறுவனத்தினர் பார்வை 1-ல் காணும் விண்ணப்பத்தினை சமர்பித்துள்ளார்கள்.

விண்ணப்பிக்கப்பட்டுள்ள புல எண்.381/1 பட்டா எண்.2059-ன்படி ஸ்ரீ ராஜ்ருத்ரா மினரல்ஸ் பிரைவேட் லிமிடெட் நிறுவனத்தின் நிர்வாக இயக்குநர்கள் திரு.A.V.சாரதி மற்றும் திரு.ப.ருத்ரசேகர் ஆகியோர் பெயரில் தாக்கலாகியுள்ளது. இவ்வாறாக மேற்கண்ட புலங்களுக்கு விண்ணப்பதாரர் முழு உரிமையுடையவராகிறார்.

பழனி, வருவாய் கோட்டாட்சியர் மற்றும் புவியியல் மற்றும் சுரங்கத்துறை, உதவி இயக்குநர் ஆகியோரின் அறிக்கையில் விண்ணப்பிக்கப்பட்ட புலங்கள் புஞ்சை வகைப்பாடுடைய தரிசு நிலங்களாகும். புலங்கள் சமதளமாகவும் விவசாயபணிகள் ஏதுமின்றி உள்ளது. புலங்களில் முதன் முறையாக குவாரி குத்தகை உரிமம் கேட்டு விண்ணப்பம் செய்யப்பட்டுள்ளது. புலங்களின் மேற்பரப்பில் மண்/கிராவல் கனிமங்களும் அதன் தொடர்ச்சியாக சிதைந்த பாறைகள் (Weathered Rock), சார்னகைட் (Charnockite) எனப்படும் கடினபாறைகள் (Hard Rock) உள்ளது அருகில் செயல்பட்டு வரும் மனுதாரர் நிறுவனத்திற்கு சொந்தமான குவாரிகளை ஆய்வு செய்ததில் தெரியவருகிறது. கடினபாறைகளில் காணப்படும் வேறுபட்ட நிறங்கள் (Different in colours), இணைப்புகள் (Joints), பிளவுகள், கீரல்கள் (Cracks) வெடிப்புகள் மற்றும் மாறுபட்ட அளவு கொண்ட கனிமங்கள் காரணமாக இப்பாறைகளில் மெருகேற்ற கூடிய வண்ணகற்களை (Polished Granite / Blocks) உற்பத்தி செய்ய இயலாது. இவ்வகை பாறைகளில் இருந்து கட்டிடப்பணிகளுக்கு பயன்படுத்தப்படும் உடைகற்களை உற்பத்தி செய்ய இயலும். கல் உடைக்கும் தொழிற்சாலைகளில் இக்கற்களிலிருந்து ஜல்லி, எம்-சாண்ட், பி-சாண்ட் ஆகியவற்றை உற்பத்தி செய்யலும் இயலும். புலங்களுக்கு சென்றுவர மனுதாரரின் பட்டா நிலங்களின் வழியே பாதைவசதி உள்ளது. 300 மீட்டர் சுற்றளவில் குடியிருப்புகள், 50 மீட்டர் சுற்றளவில் ஓடைகள், ஆறுகள், உயர் அழுத்த மின்கம்பங்கள், உயர் வகை மரங்கள் ஆகியவை இல்லை எனவும், வனத்துறையால் பாதுகாக்கப்பட்ட பகுதியாக அறிவிக்கப்பட்ட சுரணாலையங்கள், தேசிய பூங்காக்கள் சுற்றுச்சூழல் உணர் திறன் மிக்க பகுதிகள் (ECO-SENSITIVE ZONE) ஆகியவை 10 கி.மீ சுற்றளவிற்குள் இல்லை எனவும், 1 கி.மீட்டர் சுற்றளவில் காப்புக்காடுகள்,



தமிழ்நாடு சிறுகனிம சலுகை விதிகள்-1959 விதி எண்: 41 -ன்படி குவாரி
பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்கத் திட்டத்தினை (Mining Plan) 99
தினங்களுக்குள் சமர்ப்பிக்குமாறும், விதி எண்: 42-ன்படி மாநில அளவிலான
சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் (State Level Environmental
Impact Assessment Authority) இசைவினைப் பெற்று சமர்ப்பிக்குமாறும்
மனுதாரர் தி/எஸ்.ஸ்ரீ ராஜ்ருத்ரா மினரல்ஸ் பிரைவேட் லிமிடெட் நிறுவனத்தினர்
கேட்டுக்கொள்ளப்படுகிறனர்.


உதவி இயக்குநர், 7/6/25
புவியியல் மற்றும் சுரங்கத்துறை,
திண்டுக்கல்.

பெறுநர்
தி/எஸ்.ஸ்ரீ ராஜ்ருத்ரா மினரல்ஸ் பிரைவேட் லிமிடெட்,
எண்.99/2பி1பி, முதல் தளம்,
வேலூர் மெயின்ரோடு,
ஆற்காடு சாலை,
ராணிப்பேட்டை மாவட்டம் - 632 503

நகல்
உறுப்பினர் செயலர்,
மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையம் (SEIAA),
சென்னை.



ANNEXURE-2

From

Thiru.T.Selvasekar, M.Sc.,
Assistant Director,
Geology and Mining,
Dindigul.

To

M/s.Shri Rajrudhra Minerals Private
Limited,
No.99/2B1B, 1st Floor,
Vellore Main Road,
Arcot Taluk, Ranipet District

Roc.No:589/2025/Mines, Dated: 07.08.2025.

Sir,

Sub: Mines and Minerals - Minor Mineral - Dindigul District -Palani Taluk - Melkaraipatti Village - Patta Land - S.F.No.381/1(P) over an extent of 5.57.0 hecets- Quarry lease application preferred by M/s.Shri Rajrudhra Minerals Private Limited for quarrying Rough Stone and Gravel - Approval of Mining Plan - Regarding.

Ref: 1. Online Application from M/s.Shri Rajrudhra Minerals Private Limited, Melkaraipatti, Palani, Dindigul dated.05.06.2025
2. Precise Area Communication Notice Rc.No.589/2025 (Mines), dated 28.07.2025
3. Mining Plan submitted by M/s.Shri Rajrudhra Minerals Private Limited, Melkaraipatti, Palani, Dindigul dated.04.08.2025

M/s.Shri Rajrudhra Minerals Private Limited has preferred an application for the grant of quarrying lease to quarry Rough Stone and Gravel over an extent of 5.57.0 Hectares of Patta Land in S.F.No.381/1(P) of Melkaraipatti Village, Palani Taluk, Dindigul District for a period of 5(Five) Years Under Rule 19 of Tamil Nadu Minor Mineral Concession Rules 1959.

2) The application was examined and consented to grant lease to quarrying Rough Stone and Gravel over an extent of 5.57.0 Hectares of Patta Land in S.F.No.381/1(P) of Melkaraipatti Village, Palani Taluk, Dindigul District for a period of 5 (Five) years subject to produce Mining Plan for approval and to obtain Environment Clearance from SEIAA in the reference 2nd cited.

3) The applicant has submitted the Mining Plan, prepared as per guidelines issued by the Commissioner of Geology and Mining and as per Rules and Acts. The Geological and Mineable reserves are discussed in Part -A of the Mining Plan. The applicant can quarry the mineral in the following measurements:-

Geological Resources (As per Mining Plan)

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m ³	Geological Resources of rough stone in m ³	Bulk Density	Gravel in Ts	Geological Resources of Rough stone in Ts
XY-AB	I	217	168	2	72912	-	2	145824	-
	II	217	168	5	-	182280	2.75	-	501270.00
	III	217	168	5	-	182280	2.75	-	501270.00
	IV	217	168	5	-	182280	2.75	-	501270.00
	V	217	168	5	-	182280	2.75	-	501270.00
	VI	217	168	5	-	182280	2.75	-	501270.00
	VII	217	168	5	-	182280	2.75	-	501270.00
	VIII	217	168	5	-	182280	2.75	-	501270.00
	IX	217	168	5	-	182280	2.75	-	501270.00
	X	217	168	5	-	182280	2.75	-	501270.00
	XI	217	168	5	-	182280	2.75	-	501270.00
	XII	217	168	5	-	182280	2.75	-	501270.00
	XIII	217	168	5	-	182280	2.75	-	501270.00
	XIV	217	168	5	-	182280	2.75	-	501270.00
Total					72912	2369640	-	145824	6516510.00
XY-CD	I	207	90	2	37260	-	2	74520	-
	II	207	90	5	-	93150	2.75	-	256162.50
	III	207	90	5	-	93150	2.75	-	256162.50
	IV	207	90	5	-	93150	2.75	-	256162.50
	V	207	90	5	-	93150	2.75	-	256162.50
	VI	207	90	5	-	93150	2.75	-	256162.50
	VII	207	90	5	-	93150	2.75	-	256162.50
	VIII	207	90	5	-	93150	2.75	-	256162.50
	IX	207	90	5	-	93150	2.75	-	256162.50
	X	207	90	5	-	93150	2.75	-	256162.50
	XI	207	90	5	-	93150	2.75	-	256162.50
	XII	207	90	5	-	93150	2.75	-	256162.50
	XIII	207	90	5	-	93150	2.75	-	256162.50
	XIV	207	90	5	-	93150	2.75	-	256162.50
Total					37260	1210950	-	74520	3330112.50
Grand Total					110172	3580590	-	220344	9846622.50

Mineable Reserves (As per Mining Plan)

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m ³	Mineable Reserves of rough stone in m ³	Bulk Density	Gravel in (Ts)	Mineable Reserves of rough stone in (Ts)
XY-AB	I	209	151	2	63118	-	2	126236	-
	II	208	149	5	-	154960	2.75	-	426140.00
	III	203	139	5	-	141085	2.75	-	387983.75
	IV	198	129	5	-	127710	2.75	-	351202.50
	V	193	119	5	-	114835	2.75	-	315796.25
	VI	188	109	5	-	102460	2.75	-	281765.00
	VII	183	99	5	-	90585	2.75	-	249108.75
	VIII	178	89	5	-	79210	2.75	-	217827.50
	IX	168	79	5	-	66360	2.75	-	182490.00
	X	158	69	5	-	54510	2.75	-	149902.50
	XI	148	59	5	-	43660	2.75	-	120065.00
	XII	138	49	5	-	33810	2.75	-	92977.50
	XIII	128	39	5	-	24960	2.75	-	68640.00
	XIV	118	29	5	-	17110	2.75	-	47052.50
Total					63118	1051255	-	126236	2890951.25

XY-CD	I	198	73	2	28908	-	2	57816	-
	II	197	71	5	-	69935	2.75	-	192321.25
	III	192	61	5	-	58560	2.75	-	161040.00
	IV	187	51	5	-	47685	2.75	-	131133.75
	V	182	41	5	-	37310	2.75	-	102602.50
	VI	177	31	5	-	27435	2.75	-	75446.25
	VII	172	21	5	-	18060	2.75	-	49665.00
Total					28908	258985	-	57816	712208.75
Grand Total					92026	1310240	-	184052	3603160.00

Yearwise Development and Production (As per Mining Plan)

Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m ³	Mineable Reserves in of rough stone m ³	Bulk Density	Gravel in (Ts)	Mineable Reserves of rough stone in (Ts)
I	XY-AB	I	186	151	2	56172	-	2	112344	-
		II	185	149	5	-	137825	2.75	-	379018.75
		III	180	139	5	-	125100	2.75	-	344025.00
	Total					56172	262925	-	112344	723043.75
II	XY-AB	I	23	151	2	6946	-	2	13892	-
		II	23	149	5	-	17135	2.75	-	47121.25
		III	23	139	5	-	15985	2.75	-	43958.75
	XY-CD	I	198	73	2	28908	-	2	57816	-
		II	197	71	5	-	69935	2.75	-	192321.25
		III	192	61	5	-	58560	2.75	-	161040.00
		IV	187	51	5	-	47685	2.75	-	131133.75
	XY-AB	IV	82	129	5	-	52890	2.75	-	145447.50
	Total					35854	262190	-	71708	721022.50
III	XY-AB	IV	116	129	5	-	74820	2.75	-	205755.00
		V	193	119	5	-	114835	2.75	-	315796.25
	XY-CD	V	182	41	5	-	37310	2.75	-	102602.50
		VI	177	31	5	-	27435	2.75	-	75446.25
		VII	74	21	5	-	7770	2.75	-	21367.50
	Total					-	262170	-	-	720967.50
IV	XY-CD	VII	98	21	5	-	10290	2.75	-	28297.50
	XY-AB	VI	188	109	5	-	102460	2.75	-	281765.00
		VII	183	99	5	-	90585	2.75	-	249108.75
		VIII	132	89	5	-	58740	2.75	-	161535.00
Total					-	262075	-	-	720706.25	
V	XY-AB	VIII	46	89	5	-	20470	2.75	-	56292.50
		IX	168	79	5	-	66360	2.75	-	182490.00
		X	158	69	5	-	54510	2.75	-	149902.50
		XI	148	59	5	-	43660	2.75	-	120065.00
		XII	138	49	5	-	33810	2.75	-	92977.50
		XIII	128	39	5	-	24960	2.75	-	68640.00
		XIV	118	29	5	-	17110	2.75	-	47052.50
	Total					-	260880	-	-	717420.00
Grand Total						92026	1310240	-	184052	3603160.00

The available mineable reserves have been computed as **13,10,240 m³** (36,03,160 MTs) as Rough Stone, **92,026m³** (1,84,052 MTs) as Gravel up to the depth of **67m** from the ground level.

The Environmental Management Plan and Mine Closure plan are discussed in Part -11& 12 and all conditions have been incorporated in the Mining Plan as laid down by the authorities.

4) In view of the above, in exercise of the powers delegated under Rule 41 of Tamil Nadu Minor Mineral Concession Rules, 1959, I hereby approve the Mining Plan submitted by M/s.Shri Rajrudhra Minerals Private Limited for quarrying Rough Stone and Gravel over an extent of 5.57.0 Hectares of Patta Land in S.F.No.381/1(P) of Melkaraipatti Village, Palani Taluk, Dindigul District for a period of 5 (Five) to obtain Environment Clearance from SEIAA, Chennai subject to the following conditions:

1. The Mining Plan is approved without prejudice to any other law applicable to the quarry permission from time to time where such Laws are made by the State Government or any other authority.
2. This approval of the Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Tamil Nadu Minor Mineral Concession Rules, 1959.
3. The Mining Plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.
4. The approval of the Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Mines and Minerals (Development and Regulation) Amendment Act, 2015 or any other connected Laws including, Environment Protection Act, 1986, and the Rules made there under in Tamil Nadu Minor Mineral Concession Rules, 1959.

Encl: Two copies of Mining Plan.


Assistant Director,
Geology and Mining,
Dindigul.

Copy to:

The Member Secretary,
State Level Environmental Impact
Assessment Authority,
PanagalMaligai,
No. 1 Jeenis Road,
Saidapet, Chennai-15



ANNEXURE-3

From

Thiru.T.Selvasekar, M.Sc.,
Assistant Director,
Geology and Mining,
Dindigul

To

M/s.Shri Rajrudhra Minerals Private
Limited,
No.99/2B1B, 1st Floor,
Vellore Main Road,
Arcot Taluk, Ranipet District

Rc.No.589/2025(Mines) dated: 07.08.2025

Sir,

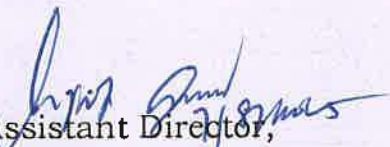
Sub: Mines and Minerals - Minor Mineral - Rough stone - Dindigul District - Palani Taluk - Melkaraipatti Village - Patta Land - S.F.No.381/1(P) over an extent of 5.57.0 hecets - preferred by M/s.Shri Rajrudhra Minerals Private Limited - Precise area communicated - Submission of Mining Plan for approval - Existing features within 500mts radius requested - reg.

- Ref:**
1. Online Application from M/s.Shri Rajrudhra Minerals Private Limited, Melkaraipatti, Palani, Dindigul dated.05.06.2025
 2. Precise Area Communication Notice Rc.No.589/2025 (Mines), dated 28.07.2025
 3. Mining Plan submitted by M/s.Shri Rajrudhra Minerals Private Limited, Melkaraipatti, Palani, Dindigul dated.04.08.2025

With reference to your letter 3rd cited, the details of existing and lease expired quarries located within 500m radius from the proposed Rough stone & gravel quarry, over an extent of 5.57.0 Hectares of Patta Land in S.F.No.381/1(P) of Melkaraipatti Village, Palani Taluk, Dindigul District are as follows:

Sl. No	Name of the quarry Owner	Name of the Village & Survey Number	Extent (in Hects)	Remarks
a. Existing Quarries				
1.	M/s.Shri Rajrudhra Minerals Private Limited, No.99/2B1B, 1 st Floor, Vellore Main Road, Arcot Taluk, Ranipet District	392/2(P), 393/2(P), 394/1, 395, 396/1, 397, 398/1A1(P)	4.42.0	06.03.2024 to 05.03.2029

b. Abandoned Quarries				
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c. Present proposed Quarries				
1.	M/s.Shri Rajrudhra Minerals Private Limited, No.99/2B1B, 1 st Floor, Vellore Main Road, Arcot Taluk, Ranipet District	381/1(P)	5.57.0	Applied area (Rough stone)
2.	M/s.Shri Rajrudhra Minerals Private Limited, No.99/2B1B, 1 st Floor, Vellore Main Road, Arcot Taluk, Ranipet District	394/2, 396/2, 402(P), 403(P), 407/1A1, 407/1A2, 407/1B, 407/2A, 407/2B, 408/1(P), 408/2(P), 408/4, 409(P), 698(P)	14.40.0	Applied area (Rough stone)


 Assistant Director,
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 Dindigul