

June 2026

**Executive Summary for Conducting Public Hearing
FOR**

**“Thiru. N. Sankar Rough Stone Quarry over a total
extent of 1.15.0 Ha”**

At

**S.F.No. 305/4 (Part) of Berigai Village, Shoolagiri
Taluk, Krishnagiri District, Tamilnadu State**

Project Proponent:

**Thiru. N. Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District,**

Project termed under schedule 1(a) Category B₁

Prepared By:

Ecotech Labs Pvt. Ltd.



NABET Accredited EIA Consultant

**48, 2nd Main Road, Ram Nagar South Extension,
Pallikaranai, Chennai – 600 100**

EXECUTIVE SUMMARY

1. Project Background:

Proposed Quarry is a Fresh quarry in Government Poramboke Land having total extent area of 1.15.0 Ha, located at S.F.No. 305/4 (Part) of Berigai Village of Shoolagiri Taluk, Krishnagiri District and Tamil Nadu State. The category of project is B1, it is a Fresh rough stone quarry in Berigai village. The area is situated on Elevated terrain sloping towards the Southeast side covered with Rough Stone which does not sustain any type of vegetation.

The quarry operation is proposed to carry out with conventional open cast mechanized mining with a 5.0-meter vertical bench with a bench width of 5.0 meter. The Quarry operation involves shallow jack hammer drilling, slurry blasting, loading and transportation.

The quarry operation is proposed up to depth for 41.0 m - 1.0 m Topsoil + 2.0 m Weathered Rock + 38.0 m Rough Stone, Surface Ground Level above is 16.0 m and Surface Ground Level below is 25.0 m. Total Geological resources are about 12,01,750 Tonnes of Rough Stone, 23,000 Tonnes of Topsoil & 46,000 Tonnes of Weathered Rock. The Mineable Reserves are about 2,25,277.25 Tonnes of Rough Stone, 15,540 Tonnes of Topsoil & 31,080 Tonnes of Weathered Rock. The year wise production reserves of rough stone for 10 years are about 2,25,277.25 Tonnes of Rough Stone, 15,540 Tonnes of Topsoil & 31,080 Tonnes of Weathered Rock and the total proposed period of mining is Ten years.

The Mining Plan was approved by the Regional Joint Director, Deputy Director (FAC), Dept. of Geology and Mining, Krishnagiri District vide letter Roc. No. 14/2025/Mines Dated: 01.09.2025. We have Revised Mining Plan as recommended by SEAC/SEIAA, TN and the Revised Mining plan was approved by the Assistant Director, Dept. of Geology and Mining, Krishnagiri District vide Roc.No.14/2025/Mines Dated : 15.05.2026.

The project area does not fall in Hill Area Conservation Authority region. There are no Coastal Regulation Zone, Western Ghats, notified Bird sanctuaries as per Wildlife protection Act 1972, within the radius of 15 km Radius. Eco Sensitive Zone of Cauvery North Wildlife Sanctuary is located at a distance of 27.27 km, S & Cauvery North Wildlife Sanctuary is located at a distance of 28.27 Km, S and Cauvery South Wildlife Sanctuary is located at distance of 51.22 km, S from the project site.

2. Nature & Size of the Project

The Rough Stone Quarry over an extent of 1.15.0 Hectares land is located at Berigai Village of Shoolagiri Taluk, Krishnagiri District.

Mineral intends to quarry : Rough stone.
District : Krishnagiri
Taluk : Shoolagiri
Village : Berigai
S. F. Nos. : 305/4 (Part)
Extent : 1.15.0 Hectares

Table 1: Brief Description of the Project

S. No	Particulars	Details
1	Latitude	12° 47' 44.4512" N to 12° 47' 36.8734" N
2	Longitude	77° 57' 37.7112" E to 77° 57' 34.8443" E
3	Site Elevation above MSL	Maximum - 892 m and Minimum – 876 m.
4	Topography	Elevated terrain
5	Land use of the site	Government Poramboke land
6	Extent of lease area	1.15.0 Ha
7	Nearest highway	- SH 17 C – Bagalur to Berigai Road – 1.44 Km, N - NH 648 – Devanahalli to Bagalur Road – 11.13 Km, W
8	Nearest railway station	Hosur Railway Station – 17.04 Km, SW
9	Nearest airport	Kempagowda International Airport – 49.70 Km, NW
10	Nearest town / city	- Town - Bagalur – 10.23 Km, NW - City - Bagalur – 10.23 Km, NW - District - Krishnagiri – 38.35 Km, SE
11	Rivers / Canal / Dam	- Ponnaiyar River – 8.62 Km, SW - Kelavarapalli Dam – 9.54 km, SW - Kelavarapalli Reservoir – 8.90 Km, SW
12	Lake	- Berikai Lake - 1.68 Km, NNE - Amudagondapalli lake - 1.85 Km, N - Karnapalli lake - 2.17 Km, NW - Muthali Lake - 6.53 Km, SW - Seasonal Lake - 7.93 Km, SW - Bukkasagaram Lake - 7.94 Km, S - Peddakullu Lake - 8.17 Km, SW - Doripalli Lake - 9.33 Km, S - Thummanapalli Lake - 10.13 Km, SW - Kamandoddi Lake - 11.75 Km, S - Kumudapalli Lake - 12.35 Km, SW
13	Hills / valleys	Nil in 15 km radius
14	Archaeologically places	Nil in 15 km radius

15	National parks / Wildlife Sanctuaries	• Cauvery North Wildlife Sanctuary – 28.27 km, S • Cauvery South Wildlife Sanctuary – 51.22 km, S
16	Reserved / Protected Forests	• Berigai R.F - 0.304 Km, E • Miditepalli RF - 1.38 Km, SW • Berigai Extension RF - 1.45 Km, SE • Reserve Forest 1 - 3.84 Km, NW • Reserve Forest 2 - 4.61 Km, S • Reserve Forest 3 - 7.85 Km, SSW • Sanamavu RF - 9.00 Km, SSW • Settupalli RF - 9.52 Km, SSE
17	Seismicity	Proposed Lease area come under Seismic zone - II (low risk area)
18	Defense Installations	Nil in 15 Km radius

3. Need for the Project

- ❖ The mining activities as proposed are the backbone of all construction and infrastructure projects as the raw material for construction is available only from such mining. The Rough stone extracted will be transported to be Stone crusher of district Krishnagiri.
- ❖ The raw Rough stone as well as the crushed material of stone is in high demand in real estate, construction projects as well as in building construction projects.
- ❖ Rough stone is quarried for producing crusher aggregates to the nearby building contractors, road contractors and nearby villagers.
- ❖ After quarrying the entire reserves mined out, the area will be used as water reservoir to have artificial recharge to the nearby wells.
- ❖ No damage to the land is caused, no reclamation or back filling is required.

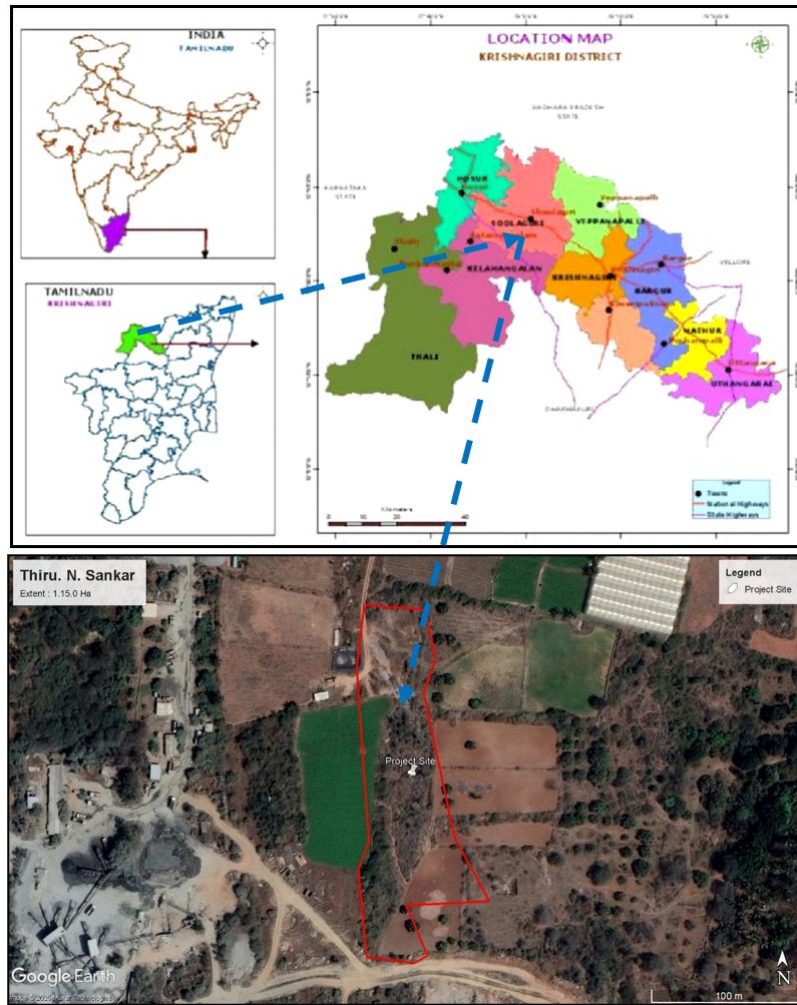


Figure 1: Location Map of the Project Site



Figure 2: Google Image of the Project Site

4. Charnockite

Charnockite and granitic gneisses are extensively quarried as rough stone which is used as aggregates for construction of building, laying of roads and for preparation of value added products like hollow blocks, pillar stones, M-sand etc. Charnockite occurs as massive bodies, greyish colour, medium to coarse grained, composed quartz, feldspar and orthopyroxene. At places, metamorphic gneissic banding (alternate dark and black colour) in charnockite is noticed. Top portion, it gives gneissic appearance but 1-5m depth below it is typical charnockite of grey colour.

5. Geological resources

The geological resources have been calculated based on the cross-section method.

Table 2. Geological resources

Area (Sq.m)	Depth (m)	Geological Reserves of Rough Stone (m ³)	Topsoil (m ³)	Weathered Rock (m ³)	Bulk Density	Geological Reserves of Rough Stone (Ts)	Topsoil (Ts)	Weathered Rock (Ts)
11,500	1	-	11,500	-	2	-	23,000	-
11,500	2	-	-	23,000	2	-	-	46,000
11,500	38	4,37,000	-	-	2.75	12,01,750	-	-
Total	41	4,37,000	11,500	23,000	-	12,01,750	23,000	46,000

Table 3. Mineable Reserves

Section	Bench	Length (m)	Width (m)	Depth (m)	Volume (m ³)	Rough Stone @100% Recovery (Ts)	Topsoil (Ts)	Weathered Rock (Ts)
XY-AB	I	96	32	1	3,072	-	6,144	-
	II	96	32	2	6,144	-	-	12,288
	III	34	32	3	3,264	8,976.00	-	-
	IV	91	22	5	10,010	27,527.50	-	-
	V	86	12	5	5,160	14,190.00	-	-
XY-AB Total					27,650	50,693.50	6,144	12,288
XY-CD	I	81	58	1	4,698	-	9,396	-
	II	81	58	2	9,396	-	-	18,792
	V	82	21	5	8,610	23,677.50	-	-
	VI	77	55	5	21,175	58,231.25	-	-
	VII	67	45	5	15,075	41,456.25	-	-
	VIII	57	35	5	9,975	27,431.25	-	-
	IX	47	25	5	5,875	16,156.25	-	-

	X	37	15	5	2,775	7,631.25	-	-
XY-CD Total					77,579	1,74,583.75	9,396	18,792
GRAND TOTAL					1,05,229	2,25,277.25	15,540	31,080

Table 4. Year wise Production Plan

Year	Section	Bench	Length (m)	Width (m)	Depth (m)	Volume (m³)	Rough Stone @ 100% Recovery (Ts)	Top Soil (Ts)	Weathered Rock (Ts)
I-Year	XY-AB	I	96	32	1	3,072	-	6,144	-
	XY-AB	II	96	32	2	6,144	-	-	12,288
	XY-AB	III	34	32	3	3,264	8,976.00	-	-
	XY-AB	IV	91	22	5	10,010	27,527.50	-	-
I-Year Total						22,490	36,503.50	6,144	12,288
II-Year	XY-AB	V	86	12	5	5,160	14,190.00	-	-
	XY-CD	I	81	58	1	4,698	-	9,396	-
	XY-CD	II	81	58	2	9,396	-	-	18,792
	XY-CD	V	82	21	5	8,610	23,677.50	-	-
II-Year Total						27,864	37,867.50	9,396	18,792
III-Year	XY-CD	VI	38	55	5	10,450	28,737.50	-	-
III-Year Total						10,450	28,737.50	-	-
IV-Year	XY-CD	VI	39	55	5	10,725	29,493.75	-	-
IV-Year Total						10,725	29,493.75	-	-
V-Year	XY-CD	VII	67	45	5	15,075	41,456.25	-	-
V-Year Total						15,075	41,456.25	-	-
Total for First Five years						86,604	1,74,059	15,540	31,080
VI-Year	XY-CD	VIII	29	35	5	5,075	13,956.25	-	-
VI-Year Total						5,075	13,956.25	-	-
VII-Year	XY-CD	VIII	28	35	5	4,900	13,475.00	-	-
VII-Year Total						4,900	13,475.00	-	-
VIII-Year	XY-CD	IX	29	25	5	3,625	9,968.75	-	-

VIII-Year Total						3,625	9,968.75	-	-
IX-Year	XY-CD	IX	18	25	5	2,250	6,187.50	-	-
IX-Year	XY-CD	X	8	15	5	600	1,650.00	-	-
IX-Year Total						2,850	7,837.50	-	-
X-Year	XY-CD	X	29	15	5	2,175	5,981.25	-	-
X-Year Total						2,175	5,981.25	-	-
Total for Second Five years						18625	51219	-	-
GRAND TOTAL						1,05,229	2,25,277.25	15,540	31,080

6. Mining

Opencast mining

The quarry operation is proposed to carry out with conventional open cast mechanized mining with 5.0-meter vertical bench with a bench width of 5.0 meter. The Quarry operation involves shallow jack hammer drilling, blasting, loading and transportation.

Process Description

- The reserves and resource are arrived based upon the Geological investigation.
- Removal of Topsoil by Excavators and directly Loaded into Tippers.
- Removal of Rough Stone by Excavators by Drilling and Blasting.
- Shallow Drilling With Jackhammer of 25.5mm Dia.
- Minimum Blasting With Class 3 Explosives.
- Loading of Rough Stone By Excavators Into Tippers.

7. Water Requirement

Total water requirement for the mining project is 2.0 KLD. Domestic water will be sourced from nearby Athimugam Village and other water will be source from nearby road tankers supply.

Table 5. Water Balance

Purpose	Quantity	Source
Drinking Water	1.0 KLD	Packaged Drinking water vendors are available in Midithepalli Village which is about 1.50 km, S from the project site.
Green belt	0.5 KLD	Other domestic activities through road tankers supply
Dust suppression	0.5 KLD	From road tankers supply

Total	2.0 KLD	
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8. Manpower

Total manpower required for the project is approximately 18 persons. Workers will be from nearby villages.

Table 6. Man Power

1.	Skilled	Operator	2 No.
		Mechanic	1 No.
		Blaster/Mat	1 No.
2.	Semi – skilled	Driver	2 Nos
3.	Unskilled	Musdoor / Labors	5 Nos
		Cleaners	3 Nos
		Office Boy	1No
4.	Management & Supervisory staff		3 Nos
	Total		18 Nos

9. Solid Waste Management

Table 7 Solid Waste Management

S. No	Type	Quantity	Disposal Method
1	Organic	3.24 kg/day	Municipal bin including food waste
2	Inorganic	4.86 kg/day	TNPCB authorized recyclers

As per CPCB guidelines: MSW per capita/day =0.45 kg/day

Table 8. 500m Radius Cluster Mine

1) Details of Existing quarries:

S. No.	Name of the Lessee	Village & Taluk	S.F. No	Extent in Ha	GO No. & Date	Lease Period
1.	Thiru. G. Murugesh	Berigai & Shoolagiri	315	2.18.0	Rc.no.546/2017/Mines, Dated 05.05.2021	05.05.2021 to 04.05.2031
2.	Thiru. K. Narayanan	Berigai & Shoolagiri	313/2	2.44.0	Roc.86/2016(Mines) Dt. 30.11.2016	02.12.2016 to 01.12.2026

2) Details of abandoned/Old Quarries:

S. No.	Name of the lessee	Village	S.F. No	Extent in Ha	GO No. & Date	Lease period
1.	Nil.....					

3) Details of Proposed Quarries

S. No.	Name of the lessee	Village & Taluk	S.F. No	Extent	GO No. & Date	Lease period
1.	Thiru. N. Sankar	Berigai & Shoolagiri	305/4 (Part)	1.15.0	Roc.14/2025/ Mines, Dt. 20.08.2025	Precise Area given Instant Proposal

The Total extent of the Existing / Lease expired / Proposed quarries is 5.77.0 Ha.

10. Land Requirement

The total extent area of the project is 1.15.0 Ha, Government Poramboke land in Berigai Village of Shoolagiri Taluk, Krishnagiri District.

Table 9 Land Use Breakup

S. No.	Land Use	Present Area (Hect)	Area in use during the quarrying period (Hect)
1.	Area under quarrying	Nil	0.66.0
2.	Infrastructure	Nil	0.01.0
3.	Roads	Nil	0.01.0
4.	Green Belt & Dump	Nil	0.47.0
5.	Unutilized Area	1.15.0	Nil
	Total	1.15.0	1.15.0

11. Human Settlement

There are no habitations within 300m radius. There are villages located in this area within a 5km radius of the quarry.

Table 10 Habitation

Direction	Village	Distance in Kms	Population
North	Vanamangalam	3.3Kms	300
East	Madivalam	2.27Kms	150
South	Midithepalli	1.7Kms	350
West	Nariganapuram	2.0Kms	280

12. Power Requirement

The Rough Stone Quarry project does not require huge water and electricity for the project. **16 Litres** diesel per hour for excavator for mining and loading for Rough stone needed.

13. Scope of the Baseline Study

This chapter contains information on existing environmental scenarios on the following parameters.

1. Micro – Meteorology
2. Water Environment
3. Air Environment
4. Noise Environment
5. Soil / Land Environment
6. Biological Environment
7. Socio-economic Environment

13.1 Micro – Meteorology

Meteorology plays a vital role in affecting the dispersion of pollutants, once discharged into the atmosphere. Since meteorological factors show wide fluctuations with time, meaningful interpretation can be drawn only from long-term reliable data.

- i) Average Minimum Temperature : 18°C
- ii) Average Maximum Temperature : 38°C
- iii) Average Annual Rainfall of the area : 968 mm

13.2 Air Environment

Ambient air monitoring was carried out on a monthly basis in the surrounding areas of the Mine Lease area to assess the ambient air quality at the source. To know the ambient air quality at a larger distance i.e., in the study area of 10 km. radius, air quality survey has been conducted at 7 locations. Major air pollutants like Particulate Matter (PM₁₀), Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) were monitored, and the results are summarized below.

The baseline levels of PM₁₀ (36-57 µg/m³), PM_{2.5} (13-28 µg/m³), SO₂ (4-18 µg/m³), NO₂ (11-30 µg/m³), all the parameters are well within the standards prescribed by National Ambient Air Quality during the study period from November 2025 to January 2026.

13.3 Noise Environment

The maximum Day noise and Night noise were found to be 59 dB(A) and 47 dB(A) respectively in Taladha muneeshwara Temple and Panchayat Union Primary School Devichettipalli. The minimum Day Noise and Night noise were 41 dB(A) and 35 dB(A) respectively which was observed in G.H.S Venkatesapuram and Panchayat Raj Office, Palavanapalli & G.H.S Berigai. The observed values are all well within the Standards prescribed by CPCB.

13.4 Water Environment

- The average pH ranges from 7.01 – 7.71
- TDS value varied from 468 mg/l to 1027 mg/l
- Hardness varied from 224 to 547 mg/l
- Chloride varied from 56.7 to 223 mg/l

13.5 Land Environment

The analysis results show that the majority of soil in the project and surrounding area is slightly alkaline in nature and pH value ranges from 6.45 to 8.51 with organic matter 1.41 to 4.60 %. The concentration of Nitrogen, Phosphorus & Potassium has been found to be in good amount in the soil samples.

13.6 Biological Environment

The proposed Mining lease area is mostly dry barren ground with small shrubs and bushes. No specific endangered flora & fauna exist within the mining lease area.

14. Rehabilitation/ Resettlement

- The overall land of mine is Government Poramboke land. There is no displacement of the population within the project area and adjacent nearby area. Social development of nearby villages will be considered in this project.
- The mine area does not cover any habitation. Hence the mining activity does not involve any displacement of human settlement.

15. Greenbelt Development

1. The development of greenbelt in the peripheral buffer zone of the mine area.
2. The Green belt has been recommended as one of the major components of the Environmental Management Plan, which will improve ecology, environment and quality of the surrounding area.
3. Local trees like Neem, Pungam, Naval etc., will be planted along the lease boundary and avenues as well as over non-active dumps at a rate of 58 trees per annum with interval 5m.
4. The rate of survival expected to be 80% in this area

Table.11 Plantation/ Afforestation Program

Name of species proposed	Survival	No of species
Neem, Pungam, Poovarasu, Naval, Mantharai, Arasa Maram, Magizham, Vilvam, vaagai, Marudha maram, Thandri,	80%	575

Poovarasu, Manjadi, Usil, Aathi, Panai, Uzha, Illuppai, Eachai, Vanni Maram, Sengondrai, Sarakondrai, Aacha. Aayili		
Total		575

16. Anticipated Environmental Impacts

16.1 Air Environment and Mitigation Measures

1. Water sprinkling will be done on the roads & unpaved roads.
2. Proper mitigation measures like water sprinkling will be adopted to control dust emissions.
3. Plantation will be carried out on approach roads, solid waste site & nearby mine premises.
4. To control the emissions regular preventive maintenance of equipments will be carried out.

16.2 Noise Environment and Mitigation Measures

1. Periodical monitoring of ambient noise will be done as per CPCB guidelines.
2. No other equipment except the transportation vehicles and excavator for loading will be allowed.
3. Noise generated by these equipments shall be intermittent and does not cause much adverse impact

17. Responsibilities for Environmental Management Cell (EMC)

The responsibilities of the EMC include the following:

- i. Environmental Monitoring of the surrounding area
- ii. Developing the green belt/Plantation
- iii. Ensuring minimal use of water
- iv. Proper implementation of pollution control measures

18. Environmental Monitoring Program

A monitoring schedule with respect to Ambient Air Quality, Water & Wastewater Quality, Noise Quality as per Tamil Nadu State Pollution Control Board (TNPCB), shall be maintained.

19. Project Cost

The total project cost is **Rs. 1,71,74,608/-** for deployment of machinery and creation of infrastructural facilities like approach road, mine office / Workers Shed, First Aid Room etc., including electrifications and water supply.

Table 12 Project Cost details

S. No.	Description	Cost
1	Fixed Asset Cost	Rs. 1,31,74,608/-
2	Operational Cost	Rs. 40,00,000/-
	Total	Rs. 1,71,74,608/-

Environmental Management Plan Cost is about **Rs.2,72,81,893/-** for 10 years.

20. Corporate Environmental Responsibility

The Corporate Environment Responsibility (CER) fund will be provided to the below activity.

Table 13 CER Cost

S.No.	CER Activity	CER value (Rs)
1.	Govt Hr. Sec School. Berigai Village, Shoolagiri Taluk, Krishnagiri District. Providing facilities are: ➤ Funds for Library Development within the School Premises. ➤ Computer with Internet Connection for Education purpose. ➤ Basic amenities such as Environmental awareness books (Tamil) in Library for students, Green Belt development, RO water purifiers, Hygienic Toilet and maintenance of toilet upto lease period	5,00,000/-
	Total	5,00,000/-

21. Benefits of the Project

- There is a positive impact on socioeconomics of people living in the villages. Mining operations in the subject area has positive impact by providing direct and indirect jobs opportunities.
- The project is environmentally compatible, financially viable and would be in the interest of the construction industry thereby indirectly benefiting the masses.
- Quarrying in this area is not going to have any negative impact on the social or cultural life of the villagers in the near vicinity.