

March

2026

**Executive Summary for Conducting Public Hearing
FOR**

**“Tmt. T. Jayapraba Ordinary Earth Quarry over a
total extent of 1.76.0 Ha”**

At

**S.F.No.101/2 of Kondalankuppam Village, Vanur Taluk,
Villupuram District, Tamilnadu State**

Project Proponent:

**Tmt. T. Jayapraba,
D/o. Thirunavukarasu,
No.4, Subramaniyar Koil Street,
Sellaperumalpet,
Pondicherry 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 – 600100.**

EXECUTIVE SUMMARY

1. Project Background:

The Proposed project total extent area is 1.76.0 Ha, it is Patta land (Consent registered) S.F.No.101/2 (1.76.0) of Kondalankuppam Village, Vanur Taluk and Viluppuram District, Tamilnadu State for a period of 1 year. The category of project is B1 Cluster, it is an Ordinary Earth quarry. The lease area exhibits plain terrain.

The quarry operation is proposed to carry out with conventional open cast semi mechanized mining. The proposed project is mining of Ordinary Earth Quarry which is hard and compact in nature. Since, it is mined at shallow depth of 2.0m (Below ground level) benching is not required. The Gravel is removed by a system of hydraulic Excavator and Tipper combination.

The quarry operation is proposed up to depth of 2.0 m (Below ground level). Geological Resources of earth is estimated at 88,000m³ /176,000Ts of depth 5.0m BGL. The Mineable Reserve of earth is estimated to 27,984m³/55,968Ts of depth 2.0m BGL. The proposed quarry area should maintain a safety distance of 10.0m for adjoining patta land and 7.5m for Government Poramboke land from the lease applied quarry area as indicated in precise area communication letter and relevant mining laws in force.

The precise area communication letter was received from Assistant Director, Department of Geology and Mining, Viluppuram District has passed an order vide R.c.No. A/G&M/51/2025, dated 04.08.2025 for lease period of 03 years and The Mining Plan was approved by the Assistant Director, Geology & Mining, , Viluppuram vide letter Rc.No. A/G&M/84/2025 dated 16.07.2025 for the period of 01 years.

The project area does not fall in Hill Area Conservation Authority region. There is no interstate boundary, CRZ zone, Western Ghats, notified Bird sanctuaries as per Wildlife Protection Act 1972, within the radius of 15Km.

The project does not require huge amount of water for quarry operation and total water requirement is 2.0 KLD. Drinking water is available from the nearby source through tanker supply.

The project cost is about Rs. Rs. 24,81,360/- (Rupees Twenty-Four lakhs eighty-one thousand three hundred sixty Rupees Only).

2. Nature & Size of the Project

The proposed Ordinary Earth quarry located over an extent of 1.76.0 Hectares land Kondalankuppam Village, Vanur Taluk, Viluppuram District. The lease area is in plain terrain

Mineral intends to quarry	:	Ordinary Earth
District	:	Villuppuram
Taluk	:	Vanur
Village	:	Kondalankuppam
S. F. Nos.	:	101/2
Extent	:	1.76.0 Hectares

Table 1: Brief Description of the Project

S. No	Particulars	Details
1	Latitude	12°02'04.95"N to 12°02'09.61"N
2	Longitude	78°41'03.58"E to 78°41'08.94"E
3	Site Elevation above MSL	The altitude of the lease area is 75.0m above MSL.
4	Mining plan period	01 Years
5	Topography	Plain Terrain with gentle slope
6	Land use of the site	Patta Land (Consent registered)
7	Extent of lease area	1.76.0 Ha
8	Nearest highway	NH-32 Chidambaram — Nagapattinam road – 8.5 Km, NE SH-136 Vandavasi— Pondicheery road – 2.5 Km, N
9	Nearest railway station	Vikravandi Railway Station – 16 km, W.
10	Nearest airport	Pondicheery Airport – 17 Km, SE
11	Nearest town / city	Town - Viluppuram – 24 Km, SW Village – Sandhai Pudukuppam – 1.2 Km, SE District - Viluppuram - 24 Km, SW
12	Rivers / Canal / Dam	❖ Sankarabarani River – 4.0 Km, S ❖ Pambai River – 9.6 Km, S ❖ Gingee River – 9.9 Km, SW ❖ Chettipattu Small Dam – 4.29 kms, SW ❖ Sankarabarani Reservoir – 3.18 kms, S

13	Lake/Pond	❖ Katterikuppam Lake – 3.3 kms, SE ❖ Ambuzkukai Lake – 4.07 Kms, NW ❖ Pudukuppam Lake – 4.5 Kms, SE ❖ Eraiyur Lake – 4.8 Kms, NW ❖ Korakkeni Lake – 5.5 Kms, W ❖ Kunnam Lake – 5.54 kms, NW ❖ Nemili Lake – 5.6 Kms, W ❖ Vanur Lake – 5.8 Kms, E ❖ Perumbakkam Lake – 7.3 Kms, NW ❖ Ponnampundi Lake – 7.3 Kms, NW ❖ Murukkam Lake – 7.59 Kms, N ❖ Agaram Lake – 7.6 Kms, NE ❖ Thoravi Lake – 7.74 kms, E ❖ Mannadipet Pond – 7.8 kms, SW ❖ Konamangalam Lake – 7.9 kms, NW ❖ Pulichapallam Lake – 8.04 kms, E ❖ Parikakalpattu Lake – 8.3 Kms, NW ❖ Kanniyam Lake – 8.5 Kms, NW ❖ Thaludhali Lake – 8.5 kms, NW ❖ Thaludhali Kulam – 8.6 kms, NW ❖ Veedur Lake – 8.7 Kms, NW ❖ Terkunam Lake – 9.5 Kms, N ❖ Purana Singa Lake – 9.64 Kms, SW ❖ Sompet Lake – 9.6 kms, SW ❖ Kumalam Lake – 9.9 kms, SW ❖ Oussudu Lake – 9.9 Kms, SE ❖ Kilyanur Lake – 10.02 Kms, NE
14	Hills / valleys	❖ Nil in 15 km radius
15	Archaeologically places	❖ National Petrified/Fossil Wood Park, Thiruvakkarai – 3.5 km, SW
16	National parks / Wildlife Sanctuaries	❖ Oussudu Lake Bird Sanctuary, 12.5 Km, SE
17	Reserved / Protected Forests	Nil

18	Seismicity	Proposed Lease area come under Seismic zone-III (Moderate risk area)
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3. Need for the Project

- Ordinary Earth mined will be mainly used for country & Chamber bricks manufacturing and also for filling building construction sites and construction of Road work.
- After quarrying the excavated area shall be levelled and used for cultivation purpose/ agricultural field in future.
- No damage to the land is caused, no reclamation or back filling is required.

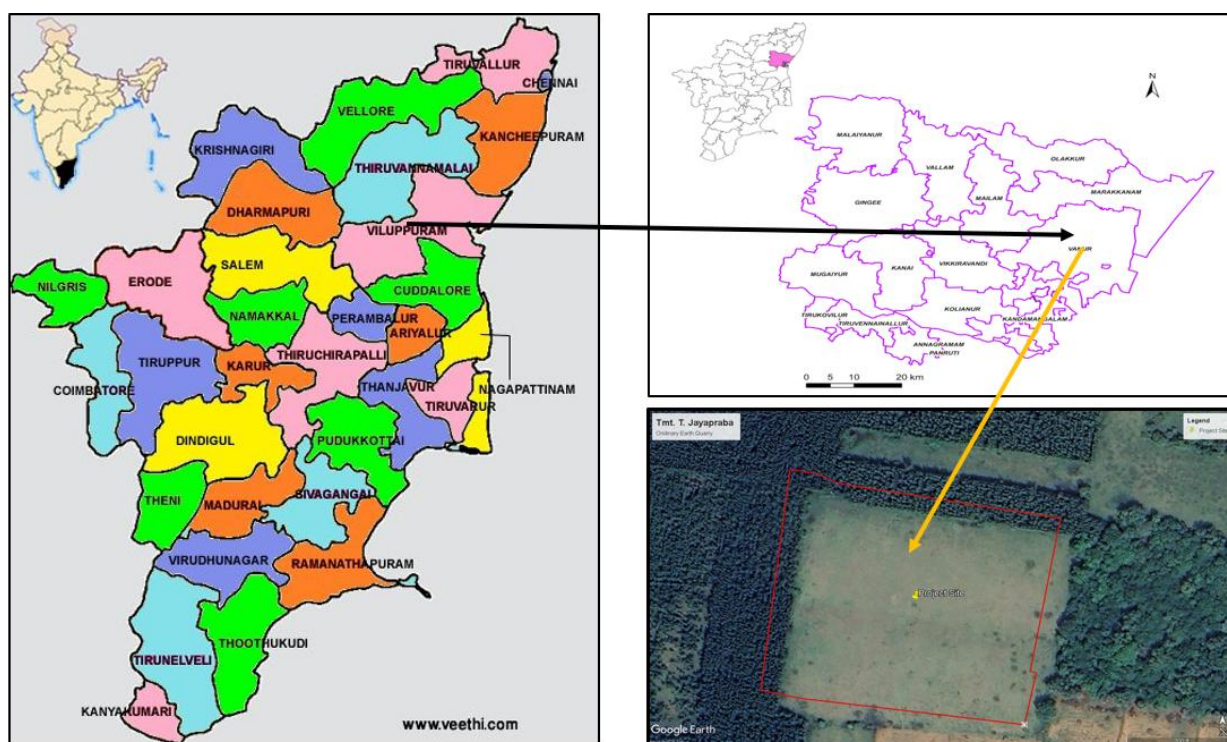


Figure 1: Location Map of the Project Site



Figure 2: Google Image of the Project Site

4. The General Geological succession of the area is given as under

Age		Formation
Recent to Sub recent	-	Alluvium, Ordinary Earth
	-----	Unconformity -----
Archaean	-	Charnockite Peninsular Gneiss complex

5. Geological Resources

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

Table 2. Geological resources

Geological Resources					
Hectares	Area in Sq.m	Depth in (m)	Ordinary Earth m ³	Bulk density	Ordinary Earth in (Ts)
1.76.0	10,000	5.0	88,000	2	1,76,000

Table 2(a) Mineable resources

Mineable Reserves						
Section	Length	Width in (m)	Depth in (m)	Ordinary Earth m ³	Bulk Density	Ordinary Earth in (Ts)
XY - AB	132	106	2.0	27,984	2	55,968
Total				27,984		55,968

Table 3. Year wise Production Plan

Production Schedule is proposed an average production of 27,984m³/55,968Ts (4,664 Lorry Loads) of Ordinary Earth up to a depth of 2.0m below ground level for the lease period of (One) 1 Year only.

(Total Period :1 Year, Mining Plan proposed Period: (One) 1 Year) only

Production quantity per day (1Load=6m³approx) (1Year=260 Working days)

Ordinary Earth quantity = 27,984m³ / 4,664 Loads

= 27,984 m³ / 260 days (1 Year)

= 108m³ or 18 Lorry Loads per day

6. Mining

Opencast Mining

It is semi mechanized being a loose sedimentary topsoil and soft in nature, the Ordinary Earth is removed by a system of hydraulic Excavator and Tipper combination. After removal, the material is being loaded in the tippers and transported to the used for filling and leveling purpose.

Process Description

- The reserves and resources have arrived based upon the Geological investigation
- Removal of Ordinary Earth by Excavators and directly Loaded into Tippers.
- Removal of Ordinary Earth by Excavators
- Loading of Ordinary Earth 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 Kondalankuppam Village and other water will be sourced from nearby road tankers supply.

Table 4. Water Balance

Purpose	Quantity	Sources
Drinking Water	1.0 KLD	Packaged Drinking water vendors are available in Kondalankuppam village which is about 0.62 km SW from project site.
Afforestation & Green belt	0.5 KLD	Other domestic activities through road tankers supply
Dust suppression Sprinkling	0.5 KLD	From road tankers supply
Total	2.0 KLD	

8. Manpower

Total manpower required for the project is approximately 22 persons. Workers will be from nearby villages.

Table 5. Man Power Requirement

S.No.	Levels & Details		Persons
1.	Skilled	Operators- Excavator & Jackhammer	2 Nos
2.	Semi – skilled	Drivers	6 Nos
3.	Unskilled	Musdoor/Labours, Cleaners & Watch man	12 Nos
4.	Management & Supervisory staff	Mines Manager (with valid statutory qualification)	1 No
		Mines Mate (with valid statutory qualification)	1 No
Total			22 Nos

No child less than 18 years will be entertained during quarrying operations.

9. Solid Waste Management

Table 6 Solid Waste Management

S. No	Type	Quantity	Disposal Method
1	Organic	3.96 kg/day	Municipal bin including food waste
2	Inorganic	5.94 kg/day	TNPCB authorized recyclers

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

Table 7. 500m Radius Cluster Mine

1. Existing quarries:							
S. No.	Name of the Lessee/Permit Holder	Name of the Mineral	Taluk & Village	S.F. Nos.	Extent in Hect.	Lease Period	Remarks

1.	Thiru.S.Devamani S/o.Subramani, Mariyamman Kovil Street, Kadagampattu Village, Vanur Taluk, Viluppuram District"	Red Earth	Vanur Taluk Kondalankuppam village	6/12 70/58 70/6 70/7B 70/8 88/2	0.95.0 0.28.5 0.55.0 0.23.0 0.65.0 0.39.0 Total 3.05.5	06.10.2022 to 05.10.2025	-
2	Thiru B. Venkatakrishnan, S/o.Balaraman, No.25, 2nd Cross Street, Kurumbapet, Housing Board, Puducherry - 605009	Ordinary Earth	Vanur Taluk Kondalankuppam Village	70/2 70/3 70/4 70/5A 71/3	0.11.0 0.10.0 0.64.0 0.30.5 0.38.0 1.53.50	23.02.2024 to 22.02.2026	-
3.	Thiru S. Vasantharaj, S/o.Selvaraj, No.477, MG Road, Ramakrishna Nagar, Muthiyalpet, Puduchery.	Ordinary Earth	Vanur Taluk Kondalankuppam Village	71/2 86 8/1	0.93.5 1.00.0 1.93.5 3.87.0	06.02.2025 to 05.02.2027	-
Proposed Area:							
1.	Tmt.T. Jayapraba, D/o.Thirunavukarasu, No.4, Subramaniyar Koil Street, Sellaperumalpet,	Ordinary Earth	Vanur Taluk Kondalankuppam Village	101/2	1.76.0	-	

	Pondicherry - 605 008.					
Abandoned quarries:						
-----NIL-----						

The Total extent of the Existing / Lease expired / Proposed quarries is 10.22.00 Ha

10. Land Requirement

The total extent area of the project is 1.76.0 Ha, Patta land in Kondalankuppam Village, Vanur Taluk, Viluppuram District

Table 8 Land Use Breakup

S. No.	Land Use	Present Area (Hect)	Area in use during the quarrying period (Hect)
1.	Quarrying Pit	Nil	1.39.92
2.	Unutilized	1.76.0	0.36.08
	Total	1.76.0 Ha	1.76.0 Ha

11. Human Settlement

There are no habitations within 500m radius. There are villages located in this area within 5 km radius of the quarry.

Table 9 Habitation

S. No	Name of the Village	Approximate distance	Direction from lease applied area	Approximate population
1.	Ramanathapuram	2.0Km	North – East	390
2.	Sandhai Pudukuppam	1.2Km	South – East	440
3.	Kadagampattu	1.3Km	South – West	200
4.	Thollamur	2.0Km	North – West	450

12. Power Requirement

The proposed ordinary earth quarrying does not require any power supply for the quarrying operation.

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 to 26° C
- ii) Average Maximum Temperature: 30° C to 40° C
- iii) Average Annual Rainfall of the area: 600 to 800 mm

13.2 Air Environment

Ambient air monitoring was carried out on 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 surveys have 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 (65-36 µg/m³), PM_{2.5} (33-13 µg/m³), SO₂ (20-4 µg/m³), NO₂ (51-11 µg/m³), all the parameters are well within the standards prescribed by National Ambient Air Quality during the study period from December 2025 to February 2026.

13.3 Noise Environment

The maximum Day noise and Night noise were found to be 54 dB(A) and 43 dB(A) respectively in Project site. The minimum Day Noise and Night noise were 54 dB (A) and 44 dB(A) respectively,

which was observed in Veeran Temple, Avadaiyarpattu. The observed values are all well within the Standards prescribed by CPCB.

13.4 Water Environment

- The average pH ranges from 7.04 – 7.85.
- TDS value varied from 225 mg/l to 1082 mg/l
- Hardness varied from 109 to 712 mg/l
- Chloride varied from 41.3 to 210 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 7.52 to 8.31 with organic matter 0.17 to 1.05 %. 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 Patta 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. Green belt has been recommended as one of the major components of Environmental Management Plan, which will improve ecology, environment and quality of the surrounding area.
3. Local trees like Neem, Vilvam, Panai, etc will be planted along the lease boundary and avenues as well as over non-active dumps at a rate of 215 trees per annum with interval 5m.

4. The rate of survival expected to be 80% in this area

Table.10 Plantation/ Afforestation Program

Name of species proposed	Survival	No of species
Neem, Vilvam, Vaagai, Eachai, Naval, Mantharai, Magizha Maram, Vila Maram, Poo Marudhu, Panai, Marudha maram, Thandri, Sengondrai, Poovarasu, Pungam, Sandhana Vembu, Uva, Uzha, Illuppai, Sarakondrai, Puthranjivi, etc.,	80%	900
Total		900

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. 24,81,360/-** 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 .11 Project Cost details

S. No.	Description	Cost (Rs.)
1	Fixed Asset Cost	21,77,360/-
2	Expenditure	3,04,000/-
	Total	24,81,360`/-

The project cost is about **Rs. 24,81,360/-** (Twenty-four Lakhs and Eighty-one Thousand Three hundred sixty Rupees Only).

The EMP (Environmental Management Plan) Cost is about **Rs. 23,02,620/-** (Twenty-three Lakhs and Two Thousand six hundred Twenty Rupees Only).

20. Corporate Environmental Responsibility

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

Table 12 CER Cost

S.No.	CER Activity	CER value (Rs)
1.	Government Middle School, Ranganathapuram Village, Vanur Tk, Villupuram Dt 2.85 Km, NE (Total strength 90 students) Providing facilities are: ➤ Basic amenities such as Environmental awareness books (Tamil) in Library for students, Green Belt development, RO water purifiers, Hygienic Toilet and maintenance of toilet up to lease period.	1,00,000/-
Total		1,00,000/-

21. Benefits of the Project

- There is positive impact on socio-economics 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 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.