

BRIEF SUMMARY OF THE PROJECT

The applicant, The Executive Engineer, Water Resources Department, Mining and Monitoring Division, Villupuram District has applied for sand Quarrying in Vellar River, over an extent of 16.00.0 Hectares in S.F. No. 8(P), Vellar river in Koodalaiyathur Village, Srimushnam Taluk, Cuddalore District, Tamil Nadu.

The District Collector, Cuddalore has directed the applicant vide his precise area communication letter Rc.No.111/Mines/2020; dated 12.01.2022 to get approved Mining plan and Environmental Clearance from the state Environmental Impact Assessment Authority (SEIAA) for grant of Sand Quarry in S.F. No.8 (P), Vellar river in Koodalaiyathur II Village, Srimushnam Taluk, Cuddalore District, Tamil Nadu for a period of One Year.

The mining plan is prepared as per the District Collector's proceedings letter. Rc.No.111/Mines/2020; dated 12.01.2022 under Rule 41& 42 of Tamil Nadu Minor Minerals Concession Rules, 1959 for quarrying Sand with due consideration of environmental parameters so as to obtain Environmental clearance (EC) from EIA Authority (SEIAA/DEIAA), as per the EIA Notification, 2006 and its amendments. The mining plan is approved by Assistant Director, Department of Geology and Mining, Cuddalore vide letter Rc.No.111/Mines/2020; dated 28.04.2022. The project cost is about Rs 115.0 lakhs and EMP cost is Rs 6.0 lakhs.

As per the Environmental Impact Assessment (EIA) Notification dated 14th September 2006 and its amendments, the project falls under 1(a) Mining of minerals, Category – B1 in view of lease area >5 and <100 Ha. Hence, it is necessary to obtain Terms of Reference from State Environmental Impact Assessment Authority (SEIAA) to carry out EIA studies for the proposed project. The EIA report will be prepared by conducting all the studies mentioned by SEAC/SEIAA in TOR with effective appropriate EMP for conducting Public Hearing by TNPCB, Cuddalore and obtaining EC from SEIAA, TN.

Open cast mechanized mining will be adopted to extract Sands size from the area for which lease applied for. Before opening a mine, several aspects should be considered like construction of semi-permanent structures.

The geological resource is estimated as 6,93,2200 m³ up to a depth of 3m below River bed level including Shoal (Avg. height 1.332m) and mineable reserve is estimated as 373220 m³ up to 1m below the theoretical level including Shoal with an Average thickness of 1.332m. The average production is about **3,73,220 m³** for period of one years.

Table No: 1.1. Salient features of the proposed project

FEATURE	DETAILS
Project and Proponent details	
Name of the Proponent and address	THE EXECUTIVE ENGINEER Water Resource Department, Mining and Monitoring Division, Villupuram, Tamil Nadu.
Existing/New Quarry	New
Classification of the area (Ryotwari/Poramboke/Others)	The proposed site is located in River basin of a Poramboke land.
Ownership /occupancy of the Applied area (Surface Rights)	THE EXECUTIVE ENGINEER
Category	B ₁
Type of Project	Sand Quarry
Site Location	Koodalaiyathur Village, Srimushnam Taluk, Cuddalore District, Tamil Nadu
Period of Lease	One year
Mining Details	
Method of Mining	Open cast and mechanized,
Mining lease area	16.00.0 Ha
Geological Resources	6,93,220 m ³ which includes shoal of 213220m ³ (Avg Height 1.332m)
Mineable Reserves	3,73,220 m ³ which includes shoal of 213220m ³ (Avg Height 1.332m)
Production	3,73,220 m ³ per annum which includes shoal of 213220m ³ (Avg Height 1.332m)
Depth of Mining	1m below the theoretical bed level
Water Table	Water table in this area is 6m in the boreholes.
Existing Pit Dimension	Nil
Proposed bench height & Width	Nil
Machineries	
Types of Machineries used in the quarry	Hydraulic Excavator (0.9 m ³ capacity) – 2 Nos Tipper (15M.T capacity) – 20 Nos



Blasting Pattern and Explosive	
No blast is proposed	
Approvals	
Mining plan approval	Rc.No.111/Mines/2020; dated 28.04.2022
AD Letter for 500m radius cluster certificate.	Rc.No.111/Mines/2020; dated 28.04.2022
Precise area Communication Letter	Rc.No.111/Mines/2020; dated 12.01.2022
General conditions	
Does it attract any general conditions specified in the EIA notification, 2006?	<p>1. Forest (Conservation) Act 1980: The area does not attract the Forest (Conservation) Act 1980.</p> <p>2. Wild Life (Protection) Act, 1972: There is no wild animal sanctuary within 10 km radius from the project site under the Wildlife (Protection) Act, 1972.</p> <p>3. Coastal Zone: The proposed quarry is located 38Kms away from sea coast on towards eastern side. Hence, the project doesn't attract the C.R.Z. Notification, 2011.</p>
Defence installations	Nil within 10 km
Archaeological features	Nil within 10 km
Ecological sensitive zones	Nil within 10 km
Interstate Boundary	Tamil Nadu – Andhra Pradesh Interstate boundary is located at 174 kms on the Northern direction from the project site.
Nearest streams/ rivers/ water bodies	The site itself is a river bed.
Seismic zone	Zone-II, Low damage risk zone as per BMTPC, Vulnerability atlas Seismic zone of India IS: 1893-2002.
Requirement (Water and Man power)	
Man Power	30 Persons
Water requirement	Total water requirement – 5 KLD Drinking and Utilities 2 KLD, Dust suppression & Green Belt 3 KLD. Source: Mineral water suppliers and Open well under WRO
EMP Cost	Rs. 6.0 Lakhs

Project Cost	Rs. 115.0 Lakhs																												
Infrastructure facilities																													
Nearest village	Kanur – 1.5 km - South																												
PMHC	Srimushnam – 6.6km - SW																												
Nearest Town	Srimushnam– 5km - SW																												
Nearest Railway station	Neyveli Railway Station – 13 km- Northern																												
Nearest Airport	Trichy International airport - 109km-Southeast																												
Climatic Conditions																													
Climatic condition	Hottest month – May (32oC avg) Coldest Month - January (26oC avg) Wettest month - November (363.2mm Avg) Windiest Month - May (4km/hr avg) Annual Precipitation – 1204.1 mm (per year)																												
Survey details																													
Survey number	8(P)																												
Geographical features	The area applied for mining lease is a River Bed, with elevation vary from 14.25m (Minimum) to 18m (Maximum) above MSL. It is represented in the Geological Survey of India 58M/8. The applied Lease area lies between latitude of N11°24'44.1958" to N11°25'04.7901" and Longitude of E79°27'27.2587" to E79°28'02.5353".																												
Land use pattern	<table border="1"> <thead> <tr> <th rowspan="2">S. No</th> <th rowspan="2">Description</th> <th colspan="2">Area of Land Use (In Hec.)</th> </tr> <tr> <th>As at Present</th> <th>At the end of One Year</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Mining</td> <td>0.0</td> <td>16.00.0</td> </tr> <tr> <td>2.</td> <td>Waste Dump</td> <td>0.0</td> <td>0.00.0</td> </tr> <tr> <td>3</td> <td>Safety zone & Plantation</td> <td>Nil</td> <td>Nil</td> </tr> <tr> <td>4</td> <td>Undisturbed area</td> <td>16.00.0</td> <td>0.00</td> </tr> <tr> <td colspan="2" style="text-align: center;">Total</td> <td>16.00.0</td> <td>16.00.0</td> </tr> </tbody> </table>	S. No	Description	Area of Land Use (In Hec.)		As at Present	At the end of One Year	1.	Mining	0.0	16.00.0	2.	Waste Dump	0.0	0.00.0	3	Safety zone & Plantation	Nil	Nil	4	Undisturbed area	16.00.0	0.00	Total		16.00.0	16.00.0		
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