

EXECUTIVE SUMMARY

Project Details:

- ❖ Name of the Project: Mangammalpuram Sand Quarry Project
- ❖ Project Proponent: The Executive Engineer, Water Resources Department, Tiruchirappalli
- ❖ Location of the area: S.F.No. 217(Part) of Mangammalpuram Village, Lalgudi Taluk, Tiruchirappalli District, Tamil Nadu.
- ❖ Area of the Project: 20.00.0Ha
- ❖ Ownership: It is a Government land (River Poramboke).

Government Order/Letter Details:

- ❖ The precise area communication letter was received from the District Collector, Tiruchirappalli District vide ***Rc.No. 700/2021/Mines, Dated: 22.02.2022.*** To submit approved mining plan and to obtain Environmental Clearance from the State Level Environmental Impact Assessment Authority, Tamil Nadu (Refer Annexure No. I).
- ❖ As per the precise area communication letter the Mining plan was approved by the Assistant Director, Department of Geology and Mining, Tiruchirappalli vide ***Rc.No. 700/2021/Mines Dated: 12.05.2022. (Enclosed Annexure No. VIII).***

Operation Details:

- It is a fresh lease application of Mangammalpuram Sand quarry project for **“Restoring the Functional efficiency of the Coleroon River”**

Production Details:

- ❖ Geological Resources: **10,00,000m³** of Sand
- ❖ Mineable Reserves: **5,00,000m³** of Sand
- ❖ Recoverable Reserves: **5,00,000m³** of Sand
- ❖ Proposed Depth: **2.5m (1.5m Above Bed Level + 1m Below Bed Level)**
- ❖ Lease Period: Two years

EIA Notification & Norms:

- ❖ EIA notification 2006 requires Submission of Form – 1, Form 1M and Pre-Feasibility report for obtaining Environmental Clearance since the Pre-feasibility report is prepared as per the Guidelines issued by the Ministry of Environment and Forest dated 30th December 2010.
- ❖ As per the Notification S.O. 3977 (E) Dated 14th August, 2018: The Mining project is falls under Schedule 1 (a), **Categorized as B1**, Form – 1, Form 1M, **Pre- Feasibility**



Report (PFR) and Approved Mining plan is required to Obtain Environmental Clearance from State Environmental Impact Assessment Authority (SEIAA), Chennai.

SALIENT FEATURES OF THE PROJECT

S.No	PARTICULAR	DETAILS															
1.	Name of the Proponent	The Executive Engineer, Water Resources Department, Tiruchirappalli.															
2.	Type of Project	Removing of Sand quarry for Restoring the Functional efficiency of the Coleroon River” in Mangammalpuram Village.															
3.	Location	S.F.No. 217 (Part) of Mangammalpuram Village, Lalgudi Taluk and Tiruchirappalli District, Tamil Nadu.															
4.	Mining lease area	Area: 20.00.0Ha															
5.	Type of land Patta/forest/PWD	It is a Government land - Non-Forest															
6.	Geographical co-ordinates	Latitude between:10°51'02.8306"N to 10°51'17.1354"N Longitudebetween:78°52'16.3469"Eto 78°52' 43.8956"E Boundary Co-Ordinates (Plate No. II) <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">S.No</th> <th style="text-align: center;">Latitude</th> <th style="text-align: center;">Longitude</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">10°51'12.2899"N</td> <td style="text-align: center;">78°52'16.3469"E</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">10°51'17.1354"N</td> <td style="text-align: center;">78°52'42.2716"E</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">10°51'10.8291"N</td> <td style="text-align: center;">78°52'43.8956"E</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">10°51'02.8306"N</td> <td style="text-align: center;">78°52'18.7831"E</td> </tr> </tbody> </table> Datum: UTM-WGS84, Zone 44 North	S.No	Latitude	Longitude	1	10°51'12.2899"N	78°52'16.3469"E	2	10°51'17.1354"N	78°52'42.2716"E	3	10°51'10.8291"N	78°52'43.8956"E	4	10°51'02.8306"N	78°52'18.7831"E
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7	Topo Sheet No.	Topo sheet No: 58-J/ 13															
8	Name of the mineral mined	Sand quarry project															
9	<u>Production (quantity in m³)</u> <ul style="list-style-type: none"> ➤ Sand - 5,00,000m³ ie., 83,333Lorry Loads ➤ Proposed depth - 2.5m (1.5m Above Bed Level + 1m Below Bed Level) ➤ Lease Period - Two years <table border="1" style="margin-left: auto; margin-right: auto; width: 60%;"> <thead> <tr> <th style="text-align: center;">Description</th> <th style="text-align: center;">Sand (m³)</th> </tr> </thead> <tbody> <tr> <td>Geological Resources</td> <td style="text-align: center;">10,00,000</td> </tr> <tr> <td>Available Mineable reserves</td> <td style="text-align: center;">5,00,000</td> </tr> <tr> <td>Proposed Quantity as in the approved mining plan</td> <td style="text-align: center;">5,00,000</td> </tr> </tbody> </table>	Description	Sand (m ³)	Geological Resources	10,00,000	Available Mineable reserves	5,00,000	Proposed Quantity as in the approved mining plan	5,00,000								
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10	Overburden /Waste	There is no over burden/Waste within the applied area															
11	Rate of Production (in tons)	5,00,000Ts															
12	Life of mine	Available Mineable reserves = 5,00,000m ³ Average production = 2,50,000m ³															



		life of mine = 5,00,000m ³ / 2,50,000m ³ = 2 years														
13	Method of Mining	It is an Opencast method of conventional mechanized quarrying operation without drilling and blasting.														
14	Drilling/Blasting	It is an Opencast method of conventional mechanized quarrying operation without drilling and blasting.														
15	Ultimate depth of Mining	The ultimate depth of mining is about 2.5m (1.5m Above Bed Level + 1m Below Bed Level)														
16	Break-up of land utilization pattern	<table border="1"> <thead> <tr> <th><i>Description</i></th> <th><i>Present area in (Ha)</i></th> </tr> </thead> <tbody> <tr> <td>Quarrying pit</td> <td>Nil</td> </tr> <tr> <td>Infrastructure</td> <td>Nil</td> </tr> <tr> <td>Roads</td> <td>Nil</td> </tr> <tr> <td>Green Belt</td> <td>Nil</td> </tr> <tr> <td>Unutilized Area</td> <td>20.00.0</td> </tr> <tr> <td>Grand Total</td> <td>20.00.0</td> </tr> </tbody> </table>	<i>Description</i>	<i>Present area in (Ha)</i>	Quarrying pit	Nil	Infrastructure	Nil	Roads	Nil	Green Belt	Nil	Unutilized Area	20.00.0	Grand Total	20.00.0
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17	Topography of the area	Lease area – Exhibits flat topography Altitude – 50.99m to 53.87m above from MSL and the River bed level is 51.195m on the Upstream side and 50.779m on the downstream side above from MSL. Slope – towards Eastern side														
18	Land use classification	The applied area is located in Coleroon River and it was tributary of Coleroon River.														
19	Name of River/ Nallahs /Tanks /Spring/ Lakes etc.	<u>Water bodies:</u> <ul style="list-style-type: none"> ➤ The applied area is located in Coleroon River ➤ Odai – 530m- N ➤ Kaveri River – 1.40km-S ➤ Vennar River – 2.5km-S ➤ Grand Anaicut Canal – 2.8km-S ➤ Kulaiyar River – 3.0km-N ➤ Pond – 4.4km-SW ➤ Alangudimahajanam lake -6.0Km-NE ➤ Kallanai Dam – 6.3km-SW ➤ Channel -6.50km- S ➤ Nandiyar River – 6.6km-NE ➤ CRZ – 80.0km-SEp 														
20	Name of Reserve Forest, Wildlife Sanctuary/National Park	Nangavalli R.F – 7.7km - SW Tachankurichi R.F – 12.0km - NW Karaivetti Bird Sanctuary – 21.5km – NE Kodaikanal wild life Sanctuary – 144.0km – SW														
21	Ground water level	Ground water is about 11m depth below ground level.														
22	Climatic condition	Rainfall - 818mm/annum Temperature - 42°C - 21°C (Source from Approved Mining plan)														

23	Land use pattern	Land use pattern (Plate No.II) Road/Trees – 10% Stream/River – 60% Agricultural land – 25% Habitation – 5%
24	Nearest habitation	Nearest Habitation – 400m-NE
25	Nearest Town	Lalgudi – 6.5km – NW
26	Nearest Railway station	Lalgudi Railway station – 6.5Km – NW
27	Nearest Airport	Tiruchirappalli Airport – 20.0Km – SW
28	Nearest National Highways & State Highways	NH-81-Tiruchirappalli –Chidambaram–6.5km – NW SH-22-Tiruchirappalli – Kumbakonam –1.5km-S
29	Nearest Hospital	Lalgudi – 6.5km – NW
30	Aerial distance to the nearest Eco sensitive areas, CRZ, forest, wild life sanctuary, Interstate boundary, critically polluted area if the quarry site is within 500m of these areas.	There are no Eco sensitive areas, CRZ, forest, wild life sanctuary, Interstate boundary, Reserve Forest, Western Ghats, critically polluted area within the radius of 500m
31	Details of other quarries for a radius of 500m around the quarry site	There are few quarry located within the radius of 500m from the proposed project site. Details – Abandoned quarries – Nil Existing quarries – 1No (24.00.0Ha) Proposed quarries – 1No (20.00.0Ha) Future proposed quarries – Nil The total extent of the Existing and proposed quarry within the radius of 500m is 44.00.0Ha. The quarry details letter issued by Assistant Director, Department of Geology and Mining, Tiruchirappalli vide <i>Rc.No. 700/2021/Mines Dated: 12.05.2022</i> (Enclosed Annexure No. IX).
32	Man power	Total Employees proposed for the quarry operation is 38Nos.
33	Water requirement & source	Requirement –2.4KLD Source - From Approved water vendors and nearby open well
34	Cost of the project	The Project cost: A. Project cost = Rs. 88,43,000/- B. EMP cost = Rs. 1,50,000/- Total Project Cost (A+B) = Rs.89,93,000/-