

Pre-Feasibility Report

Summary

Project	Sand Mining
Name of Company/Mine	Tehsildar-Umarkhed Ditt Yavatmal, M.S. Quarry, Tiwadi Village
Location	Tiwadi Sand Quarry in the River bed of Penganga River, Kh. No. 11 to 14, 18
Village	Tiwadi
Tehsil	Umarkhed
District	Yavatmal
State	M.S.

1.	Mining area & Type of land	The sand removal area is 1.50 Ha. situated in river bed of Penganga river.		
2.	Geographical co-ordinates	Corner	Latitude	Longitude
		BP1	19°31'34.97"N	77°42'52.11"E
		BP2	19°31'34.18"N	77°42'52.20"E
		BP3	19°31'34.42"N	77°42'53.74"E
		BP4	19°31'38.10"N	77°43'5.16"E
		BP5	19°31'41.56"N	77°43'11.62"E
		BP6	19°31'42.22"N	77°43'11.09"E
		BP7	19°31'38.79"N	77°43'4.71"E
BP8	19°31'35.23"N	77°42'53.57"E		
3.	Name of rivers/nallas/tanks/spring/ lakes etc.	Penganga River is the important river of Yavatmal district. Canal is situated at a distance of 4.5 km in east direction from the sand ghat area. Another canal is situated in SW direction at a distance of 4.5km.		
4.	Name of Reserve Forest (s), Wild life Sanctuary/National parks etc.	None within 5km/10 km radius.		
5.	Topography of Mining area	The Sand Ghat area is flat while surrounding is gently undulating		
6.	Project proposal	Tehsildar- Umarkhed Distt Yavatmal, M.S.		
7.	Name of Mineral mined	Sand		
8.	Rate of production (in m ³)	3180 BRASS will be mined out in specified time period as per the agreement or 2018- 19whichever is earlier.		
9.	Mineral Reserve (in m ³)	About 9000 cubic meter/3180 BRASS		
10.	Life of mine	NA		
11.	Drilling/Blasting	No drilling/ blasting required		
12.	Mining Method	Opencast, just for the removal of the sand		
13.	Water table intersection	Maximum depth of water level is about 2 meter; removal of sand will be only 0.60 meter		

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		above water level, without disturbing the water level. Hence there is no question of water table intersection
14.	Drainage pattern/water courses	The Sand Ghat area fall under Penganga drainage system / or water regime. Being Sand area the water table is below 1-1.5 m depth from surface & surface Water due to any stream etc. The water problem may be due to Rain water during monsoon as river bed flooded in this season. The water will be drain along river flow of Penganga River i.e. from NW-S direction
15.	Break-up of land utilization pattern	Area of sand removal is 1.50 ha. The sand removal area is 20 meter away from the river bank, hence no area have been demarcated as restricted/blocked. For safe and systematic working it is proposed to remove only 9000 cubic meters sand. Sand only is removing 0.60 m above water level without disturbing the water flow; hence special land utilization pattern is not required.
16.	Water requirement and sources	Not required as it is a case of removal of sand only.
17.	Solid waste/tailing	No waste generated
18.	IBM approval: Date	Not applicable
19.	Cost of project (Rs. Lakhs)	About 0.75 Lakhs
20.	Any Other (specify)	In sand mining UNFC for reserve calculation cannot be adopted, only visual anticipation of measured reserves can be made. Similarly bench wise mining also not managed as benches in sand cannot sustain.

Name and address of the company	Tehsildar, Umardhed Distt Yavatmal, M.S
Registered Office	Tehsil Office, Umardhed Distt Yavatmal, M.S.
Mine office	Tehsildar, Collector Office, Yavatmal
Prospecting Agency	Anacon Laboratories Pvt. Ltd. Yavatmal, M.S.
Type of Activity	Removal of sand manually by local labors.
Power and water requirement	No requirement

INTRODUCTION OF THE PROJECT/BACKGROUND INFORMATION

(i) Identification of Project and Project Proponent

Name of the Project

Sand quarry at village Tiwadi, Tehsil Umardhed District Yavatmal, and State Maharashtra.

Project Proponent

Tehsildar, Umardhed notified the Tiwadi sand quarry for the removal of sand.

As per Environment Impact Assessment (EIA) Notification, 15th January 2016 as amended requires mining projects (new projects, expansion or modernization of existing projects as also at the stage of renewal of mine lease) with lease area of 5 ha and above, irrespective of the mineral (major or minor) to obtained prior environment clearance under the provisions thereof ...mining projects with lease area of 5 Ha and above and less than 50 Ha are categorized as category 'B'.

Category 'B' projects are considered by the respective State Level Environment Impact Assessment Authority, notified by MoEF under the EIA Notification, 2006.

Supreme Court of India in Special leave petition (C) dated 27th February 2012 directs that "Leases of minor mineral including their renewal for an area less than 25 Ha. Be granted by the states/UTs only after getting environment clearance from the MoEF.

Further Government of India, Ministry of Environment and Forest issued guidelines dated 24th December 2013 and amendments are made regarding categorization of 'B' category projects.

Accordingly, Environment Impact Assessment (EIA) Notification, 15th January 2016, sand mining project less than 25 hectare is categorized as 'B2'. Tehsildar of Umardhed has the legal Right to remove the sand as per State Govt. Notification and after notifying the area for sand mining by collector of the district concerned.

(ii) Brief Description of Nature of the Project

The area notified for sand removal falls in the bed of Penganga river. The slope is of 1m from 393 to 394 MRL. The slope of Sand Ghat area towards South side. The highest RL is 394 MRL & lowest 393 MRL. The flow of Penganga River from North West to South East.

(iii) Need for the Project and its importance to the country and or region

State Government of Maharashtra, as per their notification endowed mining rights of sand to concern Tehsildar and allows them to mine and market the sand and the income from royalty generated to be used for the social developmental work within the Tehsil.

Sand so extracted will be sold locally as building material. It is usually mixed with cement and other ingredients to create mortar for buildings. It is also used in bricks industry.

(iv) Demand Supply Gap

Sand has become a very important mineral for our society due to its many uses. It can be used for making concrete, filling roads, building sites, making glass,

sandpapers, reclamations and etc. Seeing its vital utilities the demand of sand is huge for mankind. As the sand is a main raw material to be used in construction, it is the material of a common man. To fill up the demand of sand, sand mining is required and will be supplied and marketed by successful bidder.

(v) Demand Supply Analysis

In order to meet with the great demand for sand and as the supply is limited to fulfill the demand of market this area may be taken up to removal of sand and its marketing.

(vi) Employment Generation (Direct and Indirect) due to Project

Unskilled 12 labors will be required for loading tractors and skilled 1 person required for supervision purpose.

1.0 PROJECT DESCRIPTION

(i) Type of Project (including interlinked and interdependent project, if any)

The project is exclusively for the removal of sand. No any interlinked project is included.

(ii) Size or Magnitude of operation

Proposal for the removal of 9000 cubic meter 3180 Brass sand will be mined out in specified time period as per the agreement or 2018-19 whichever is earlier.

(iii) Type of explosive used/to be used

Not required.

(iv) Storage of Explosive (Like capacity and type of explosive magazine)

Not applicable

(v) Raw material/consumable required along with estimated quantity, likely source, marketing area of final product, mode of transport of raw material and finished products

No any raw material/consumables are required for sand removal.

(vi) Quantity of wastes to be generated (liquid and Solid) and scheme for their management/disposal

No waste material will be generated hence waste disposal arrangements are not required.

(vii) Selection of Dumping Site

No dumping site required.

2.0 SITE CONNECTIVITY

(i) Connectivity

The Tiwadi Sand Quarry lease 1.50 Ha is located in Tiwadi village of Umardhed Tehsil of Yavatmal District of M.S. It can be approached from Nagpur-Yavatmal road NH-361 which is further connected to Yavatmal-Umardhed Road. The Tiwadi Sand Ghat is about 25 Km in South direction of Yavatmal. Tiwadi is a Village in Umardhed Taluka in Yavatmal District of Maharashtra State, India. It belongs to Vidarbha region. It is located at 80 Km towards South from District headquarters Yavatmal and around ~750km from State capital Mumbai.

(ii) Land Form and land ownership

The area specified for sand removal is a barren land in a river bed, fall in Khasra no. 11 to 14, 18 & Toposheet no – 56E/10 covering an area of 1.50 Ha. as shown in the map.

(iii) Topography along with maps

The area notified for sand removal falls in the bed of Penganga River. This river is perennial. The highest RL is 393 MRL & lowest 394 MRL. The flow of Penganga River from North West to South East. The Sand Ghat area is flat while surrounding is gently undulating. The climate is sub-tropical with hot summer.

(iv) Climatic data form Secondary Sources

April and May are the hottest months in the area. The temperature rises up to 44.5 °C in the month of May. December and January are the coldest months with temperature falls down to as much as 10 °C. The average rainfall of 5 years is 911.34 mm.

(v) Social Infrastructure Available

There is well developed infrastructure to the Tiwadi village, Primary schooling, Primary health center, etc. Higher Education facilities are available at Yavatmal City.

3.0 PLANNING BRIEF

(i) Planning concept (type of industries, facilities, transportation etc.) town and country Planning/Development authority classification:

Sand has become a very important mineral for the expansion of the society, it is always in great demand but it is also true that an unsystematic and unlawful mining of sand leads to the destruction of the entire river system and finally effecting the environment severally. Hence removal of sand from the river/nala bed must be with a systematic planning. Keeping this very important view in mind the removal of sand will be carried out with a planned way as mentioned in the documents. The transportation of the removal sand will be done through trucks, tractors only ensuring the compliances of the environmental parameters.

(ii) Population Projection

Since there will be hardly any influx of people from outside in the region, hence there will not be by any impact on the population projection of the region.

(iii) Land Use Planning

The notified area for sand removal is 1.50 Ha. It is non forest, non-agriculture area situated in Penganga river bed. Scantly small shrubs and bushes are on the bank of the river. The stock yard will be created nearby road side area by successful bidder.

(iv) Assessment of Infrastructure Demand (Physical & Social)

Since there will not be any major influx of people from outside, in this region because of the project, no adverse effect on physical and social infrastructure like roads, electricity, water supplies et are anticipated.

4.0 PROPOSED INFRASTRUCTURE

(i) Industrial Area (Processing Area)

Not required.

(ii) Residential

There is no plan for development of residential area in the region.

(iii) Green Belt

Plantation will be carried preferably on the river bank and along the path used for transportation or the area proposed by the Tehsildar and gram panchayat.

(iv) Social Infrastructure

It is expected that the project will lead to much needed employment opportunities in the villages which will contribute to the socio-economic development of the area.

(v) Drinking Water Management (Source and Supply of Water)

The drinking water requirement for personnel working at the site will be met from the river itself or from the nearby village.

(vi) Sewerage System

In view of the personals engaged in the project the system of sewerage will be developed for use on the bank of the river under the guidance from the Tehsildar and local administration.

(vii) Industrial Waste Management

No industrial waste will be generated hence management not required.

(viii) Power Requirement & Supply /Source

There is no electric supply at sand ghat site. The arrangement of Battery back-up power supply will be done by successful bidder.

5.0 REHABILITATION AND RESETTLEMENT (R&R) PLAN

As the sand removal is from river bed, quite away from the habilitation hence R&R not required.

6.0 RECOMMENDATIONS

The removal of sand and allied activities has no impacts on the surrounding environment. Moreover based on development of this project certain positive impact will be there on the nearby village population in terms of infrastructure development like education, transport, communication, employment, health etc. Hence this project may be cleared and clearances accorded.

Photograph of the Sand Ghat Area

