

EXECUTIVE SUMMARY
ENVIRONMENT MANAGEMENT PLAN

for

SAND GHATS

at

SOLAPUR DISTRICT, STATE
MAHARASHTRA

for

PUBLIC HEARING
FOR 13 SAND GHATS

PROJECT PROPONENT
DISTRICT MINING OFFICER,
COLLECTOR OFFICE, SOLAPUR

Environment consultant

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INDEX

Introduction.....	6
List of sand ghat in solapur.....	8
Status of Statuary Clearances for Sand Ghat.....	10
Mining Methodology	11
Method of Mining.....	11
Machinery / Equipment required	11
Transportation.....	11
Reclamation.....	11
Environmental Management Plan	12
Occupation, Health and Services	14
Plantation Program	15
Conclusion.....	16

LIST OF TABLES

TABLE 1 - List of approved 13 sand ghats list.....	8
TABLE 2 Status of Statuary Clearances for Sand Ghat	10
TABLE 3-Anticipated Impact and Management Plan	12
TABLE 4-Green belt details	15
TABLE 5-List of tree species recommended for Plantation	15

LIST OF FIGURES

Fig 1 Location of Solapur.....7

ABBREVIATIONS

Short Form	Long Form
DMO	District Mining Officer
GSDA	Groundwater Surveys & Development Agency
MPCB	Maharashtra Pollution Control Board
PPE	Personal Protective Equipment
EC	Environmental Clearance
MoEFCC	Ministry of Environment Forest and Climate Change

EXECUTIVE SUMMARY

INTRODUCTION

The District Collector, Solapur intends to auction sand ghats and designated District Mining Officer (¹DMO), Solapur as a project proponent.

A total of 13 sand ghats are identified by Taluka level technical committee chaired by Tehsildar and Dy. Engineer, Irrigation and Junior Geologist, Directorate of Geology and Mining, Junior Geologist Groundwater Surveys & Development Agency (²GSDA)., representative of Maharashtra Pollution Control Board (³MPCB) for scoping of sand by manual method.

1. Environmental Clearance is attempted for 13 Sand ghats located in Akkalkot, Mohol Mangalvedha, Mohol, South Solapur, Madha, Pandharpur Talukas in Solapur District.
2. As Per the Government of Maharashtra Letter No: Sankirn-2019/P.K.01/Ta.K.3 dated 03/12/2019, a Public Hearing must be conducted for mines less than 5 Hectares.
3. Mahabal Enviro Engineers Pvt. Ltd. was awarded work to obtain Environmental Clearances for Sand Spots of Solapur by the Collector Office, Solapur.

¹ District Mining officer

² Groundwater Surveys & Development Agency

³ Maharashtra Pollution Control Board

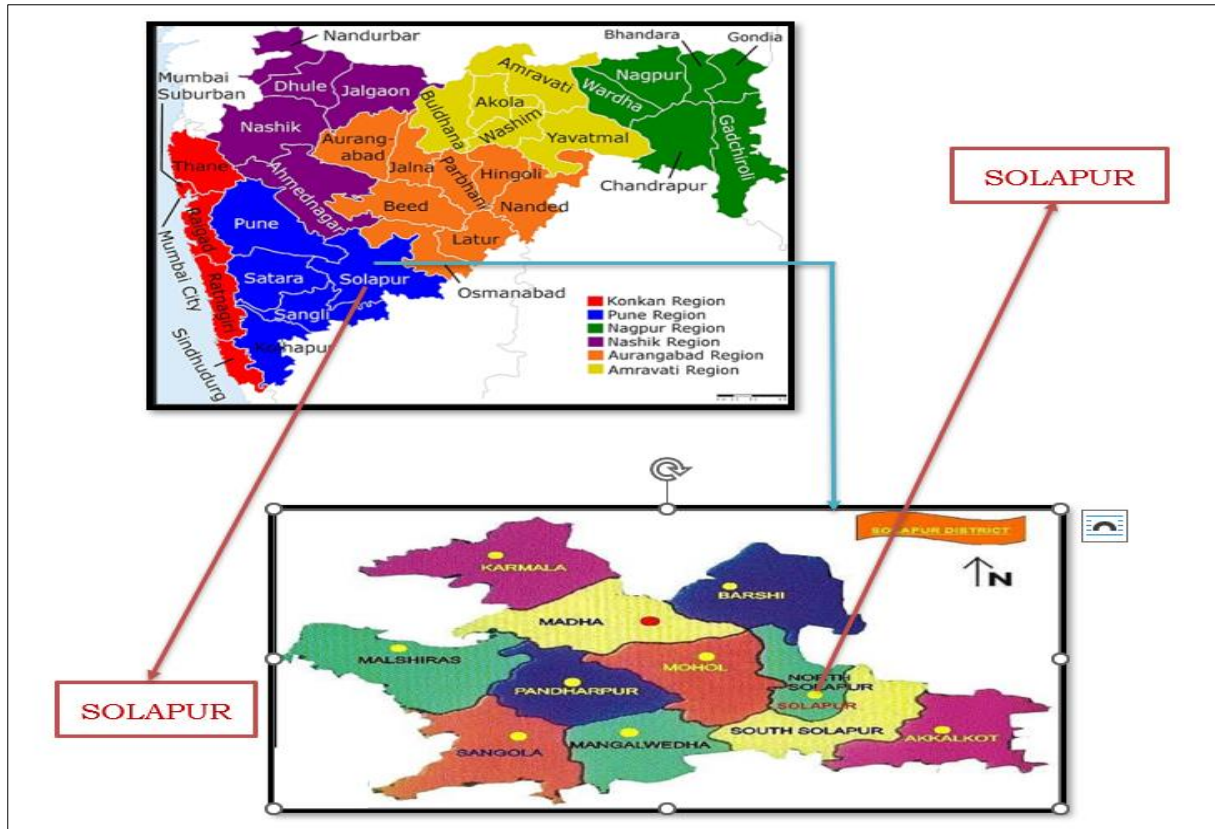


Fig 1 Location of Solapur

LIST OF SAND GHAT IN SOLAPUR

TABLE 1 - List of approved 13 sand ghats list.

Sr.	Sand Ghat Name	Tahsil	River Name	Gut no.	Area (in ha)	Area in meter			Availabe sand in brass	GSDA feedback	Gram sabha resolution	Sand auction yes/no
						Length	Width	Depth				
1	Khanapur	Akkalkot	Bhima	225 to 266	4.88	800	61	1	17244	YES	YES	YES
2	Kudal	Akkalkot	Bhima	72 to 90	4.5	900	50	1	15901	YES	YES	YES
3	Devi Kavathe	Akkalkot	Bhima	9,8, 7, 6, 2	3.75	500	75	1	13251	YES	YES	YES
4	Miri Tandor	Mohol Mangalvedha	Bhima	Miri- 55 to 58; Tandor- 203, 205, 207, 208, 209, 213, 214	4.45	570	78	1	15710	YES	YES	YES
5	Balgi	South Solapur	Bhima	1 to 25	3.18	1061	30	1	11247	YES	YES	YES
6	Bhandar Kavthe	South Solapur	Bhima	829, 791 to 797	4.2	1400	30	1	14841	YES	YES	YES
7	Lawangi	South Solapur	Bhima	115, 148 & 157	2.29	850	27	1	8110	YES	YES	YES
8	Malegaon	Madha	Bhima	60,61,70 to 72, 81, 88	1.63	762.19	21.34	1	5747	YES	YES	YES
9	Alegaon Khu	Madha	Bhima	92 to 97, 100 to 102, 104, 108, 109, 110, 113	4.83	1584.96	30.48	1	17070	YES	YES	YES
10	Takli Te	Madha	Bhima	157, 160 to 165, 168 to 170, 175, 176,180,181, 185 to 190	4.75	1250	38	1	16784	YES	YES	YES
11	Garakole	Madha	Bhima	38, 40 to 43, 47 to 49	4.72	1350	35	1	16696	YES	YES	YES
12	Aavhe	Pandharpur	Bhima	46 to 54, 56, 57, 59, 60, 61	3.78	492	77	1	13387	YES	YES	YES

Executive Summary For 13 Sand ghats Solapur

Sr.	Sand Ghat Name	Tahsil	River Name	Gut no.	Area (in ha)	Area in meter			Availabe sand in brass	GSDA feedback	Gram sabha resolution	Sand auction yes/no
13	Nandore	Pandharpur	Bhima	187 to 189, 193 to 200, 77, 201, 202	3.36	480	70	1	11873	YES	YES	YES

STATUS OF STATUARY CLEARANCES FOR SAND GHAT

The status of statutory clearance for sand ghat is shown below in Table No, 2

TABLE 2 Status of Statuary Clearances for Sand Ghat

Sr	Particulars	Details
1	Name and address of Allottee	District Mining Officer, Solapur
2.	Status of lease	New
3.	Mineral for which the lessee intends to mine	River bed sand
4.	Name and Address of Prospecting Agency	Taluka Level Technical Committee chaired by Tehsildar and Dy. Engineer Irrigation, Junior Geologist, Directorate of Geology and Mining, Junior Geologist Groundwater Surveys & Development Agency (GSDA)., representative of Maharashtra Pollution Control Board.
5.	Gram Panchayat NOC	Received from Gram Panchayat as per Sand Mining Policy of Maharashtra State.
6.	Plan Period for activity	Up to one year from the date of allocation of the sand ghat.

MINING METHODOLOGY

Method of Mining

Opencast manual method without drilling & blasting will be used for sand mining. Labours with hand tools such as Spade, and Ghamelas will be used. Excavation of sand is done from dry riverbeds only.

The following process is followed for the estimation of sand in the sand ghat:

- 1) The demarcation and benchmarking of the sand ghat are done at 10m x 10m intervals.
- 2) Auger driller is used to find out the depth of sand in each grid.
- 3) Auger driller is used to create the holes in sand ghat using a 10mx10m grid pattern.
- 4) The depth of holes is measured by using a measuring tape.
- 5) After taking all the readings the average depth of sand ghat of the river is calculated in meters.

Machinery / Equipment required

Spades, Ghamelas, and Tractors with trolleys are the machinery/equipment used for sand mining.

Transportation

Transportation will be done by tractor trolley from the sand spot to the stockyard & to consumers.

Reclamation

The mined-out area will be replenished automatically after the monsoon. Plantation will be carried out along the riverbank and along the transport road.

ENVIRONMENTAL MANAGEMENT PLAN

TABLE 3-Anticipated Impact and Management Plan

Sr	Impact	Management Plan
1.	Air Pollution	<ul style="list-style-type: none"> ▪ Water Sprinkling will be done on approach roads up to 1.00km for dust suppression. ▪ Speed of the tractors will be within limits. ▪ Road maintenance will be done regularly. ▪ Compaction of roads will be done. ▪ Sand will be transported by tractor, and trolleys covered with tarpaulin sheets. ▪ Tractor trolleys will not be overloaded.
2.	Noise Pollution	<ul style="list-style-type: none"> ▪ Ear muffs and ear plugs will be provided to labours. ▪ Heavy noise-generating machines will not be deployed other than tractor trolleys. ▪ Tractor engines will be shut down while loading. ▪ Greenbelt shall be developed to reduce noise generation.
3.	Water Pollution	<ul style="list-style-type: none"> ▪ Mining activity will be closed during the monsoon, so that replenishment of sand can take place. ▪ Mobile toilets will be provided at the mine site for labours. ▪ Sand mining will be carried out in dry river beds only. ▪ Waste material like polythene bags,

Sr	Impact	Management Plan
		jute bags, etc. will not be allowed to remain/spill in the riverbed.
4.	Land Environment	<ul style="list-style-type: none"> ▪ Minimum safe distance of 7.5m or 1/4th of the width of the river shall be kept from both sides of the bank to avoid erosion ▪ Mining Depth should be restricted to 3m.
5.	Biological Environment	<ul style="list-style-type: none"> ▪ Since the mining activity will be done on a dry bed, hence there will not be any impact on the biological environment.
6.	Socio-Economic Environment	<ul style="list-style-type: none"> ▪ Employment generation due to this mining activity. Local villagers will be given priority for employment.
7.	Waste/Overburden Management	<ul style="list-style-type: none"> ▪ There will not be any generation of waste or overburden due to this mining activity.

OCCUPATION, HEALTH AND SERVICES

A summary of Occupational Health and Services is given below

1. Labour will be provided with Personal Protective Equipment (PPE) like a safety helmet, ear plugs, earmuffs, gum boot, facemasks, etc.
2. Facemasks shall be provided for protection from dust.
3. Drinking water and toilet facility shall be provided to labours
4. First aid kit shall be made available in the mining area.
5. Mobile toilets shall be provided for the labours.
6. Dust bins shall be provided for waste collection and disposed of by the local authority

⁴ Personal Protective Equipment

PLANTATION PROGRAM

It is proposed to plant local species during the monsoon period along the bank of the river and village roads.

TABLE 4-Green belt details

Particular	Details
Location of greenbelt	Both sides of the approach road, On the riverbanks of the sand spot & nearby open areas. Haul Road outside the riverbed
No. of plants to be planted	2000 Per Hectare
Spacing of plants	2 m grid interval
Species selected	Native species

TABLE 5-List of tree species recommended for Plantation

Sr	Botanical name	Local name	Importance
1.	Azadirachta Indica	Neem	Neem oil & neem products
2.	Tectona Grandis	Teak	Antibacterial, Antifungal, Antiulcer
3.	Ficus Religiosa	Peepal	Medicinal use, Fruits & figs
5.	Bambusa Vulgaris	Bamboo	Anthelmintic Anti-inflammatory, Astringent Properties
6.	Madhuca Longifolia	Mahua	Acts as a Stimulant & cough relief

CONCLUSION

1. Environmental Clearance (⁵EC) is applied for 13 Sand spots located in Akkalkot, Mohol Mangalvedha, Mohol, South Solapur, Madha, Pandharpur Talukas in Solapur District. Maharashtra having a lease area of less than 5ha, fall under the B2 category as per Ministry of Environment Forest and Climate Change (⁶MoEFCC) guidelines.
2. Empirical method of mining will control water from spreading on agricultural land and in nearby habitation creating a flood situation
3. Government will be benefitted in the form of royalty due to the mining activity
4. Business opportunities will be generated for local villagers due to mining
5. The proposed project will also make an optimistic contribution to the social infrastructure and overall development of the region.
6. All environmental issues like air, water, noise, soil, solid waste management, etc. will be dealt with as per the MoEFCC guidelines.

*** END ***

⁵ Environmental Clearance

⁶ Ministry of Environment Forest and Climate Change