

Executive Summary on Environment Management Plan

For

Sand Ghats

At

Bhandara District, State Maharashtra

For

Public Hearing for 64 Sand Ghats

Project Proponent

District Mining Officer, Collector Office, Bhandara

Environment Consultant

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1. Introduction:

District Collector, Bhandara intends to auction sand ghats and appointed District Mining Officer, Bhandara as project proponent as per Sand Mining Guidelines dated 03rd September 2019. Total 64 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 G.S.DA., representative of Maharashtra Pollution Control Board for scoping of sand by manual method.

List of Sand ghats proposed for auction prior Environment Clearance are as given below in Table no. 1.0:

Table 1.0 Details of Sand Ghats

Sr. No.	Name of Village	Taluka	Nearest Gut. No.	Name of River/ Stream	Dimension of sand Gat in Cum			Area of Sand Ghat in Ha	Sand Proposed for scoping in Brass	Width of approach road	Length of approach Road	No. of workers	No. of Tractors	No. of trees along bank & transportation road	Water requirement in cum/day	EMP cost in Rs.
1.	Wadegaon	Bhandara	1 Partly	Wainganga	360	100	2	3.60	12721	3-6 m	780 m	15	5	750	2.5	584600
2.	Mandvi	Bhandara	558, 559, 560, 561, 562	Wainganga	350	100	2	3.50	12367	3-6 m	254 m	13	5	477	2.5	575600
3.	Kothurna	Bhandara	573, 571/1, 571/2, 569, 570 & 559	Wainganga	270	60	1	1.62	5724	3-6 m	164 m	15	5	352	3	605600
4.	Juni Takli	Bhandara	319/1, 319/2	Wainganga	400	100	1	4.00	14134	3-6 m	444 m	15	5	620	3	585600
5.	Junona	Pauni	412, 413, 415/1 A, 415/1 B, 415/2A, 415/2 B, 432	Wainganga	200	150	1	3.00	10601	3-6 m	171 m	15	5	285	3	646200
6.	Bhojapur	Pauni	230 3, 231, 232/1, 232/2, 245/1, 245/2, 233, 234, 235	Wainganga	300	100	1	3.00	10601	3-6 m	382 m	15	5	441	3	611200
7.	Gudegaon	Pauni	175, 176, 177, 178, 179, 148 Partly, 180	Wainganga	400	100	1	4.00	14134	3-6 m	886 m	15	5	843	3	526800
8.	Pauni	Pauni	15 partly, 16, 593, 594 part.	Wainganga	300	130	1.5	3.90	20671	3-6 m	168 m	15	5	384	2.5	463600
9.	Shivnala	Pauni	609	Wainganga	250	160	1	4.00	14134	3-6 m	131 m	15	5	365	2.5	746200
10.	Walani	Pauni	880 part, 881, 882, 883, 884, 885	Wainganga	250	160	1	4.00	14134	3-6 m	397 m	15	5	448	2.5	705600
11.	Khatkheda	Pauni	202 part, 217, 568, 219, 220, 560, 221, 561, 570 part	Wainganga	300	100	1	3	10601	3-6 m	949 m	15	5	725	2.5	651000
12.	Wilam	Pauni	276 part, 275, 270, 272, 270, 273	Wainganga	250	80	1	2.00	7067	3-6 m	118 m	15	5	309	2.5	522600
13.	Itgaon	Pauni	8, 13, 14, 19,	Wainganga	300	180	1	3.90	13781	3-6 m	201 m	15	5	400	2.5	532000

			20, 23, 691													
14.	Yenoda	Pauni	38 partly, 41 Partly	Wainganga	125	100	1	1.25	4417	3-6 m	405 m	15	5	325	2.5	647000
15.	Kurza	Pauni	760, 759, 758, 757, 745, 744, 743, 742, 741, 776, 773, 774, 770, 772, 764, 763, 762, 761	Wainganga	400	30	1	1.2	4240	3-6 m	282 m	15	5	540	2.5	527800
16.	Chargaon	Tumsar	10, 11, 16, 17	Wainganga	350	114	1	3.99	14099	3-6 m	76.5 m	15	5	390	2.5	425400
17.	Brahmni	Tumsar	371, 372, 373/1, 373/2	Wainganga	350	100	1	3.50	12367	3-6 m	249 m	15	5	425	2.5	686200
18.	Sukli De	Tumsar	446, 450, 451, 454, 455	Wainganga	200	100	1	2.00	7067	3-6 m	259 m	15	5	325	2.5	569000
19.	Tamaswadi	Tumsar	187 part, 188 part, 229 Part	Wainganga	400	100	1	4.00	14134	3-6 m	641 m	15	5	720	2.5	514800
20.	Panjara Re	Tumsar	132/1, 132/2	Wainganga	400	100	1	4.00	14134	3-6 m	160 m	15	5	480	2.5	572800
21.	Umarwada	Tumsar	365, 366, 369, 370	Wainganga	400	100	1	4.00	14134	3-6 m	433 m	15	5	810	2.5	510000
22.	Mandwi	Tumsar	14 part	Wainganga	400	100	1	4.00	14134	3-6 m	438 m	15	5	810	2.5	596000
23.	Warpindkepar	Tumsar	339 part, 340, 412, 413, 414	Bawanthadi	300	100	1	3.00	10601	3-6 m	509 m	15	5	550	2.5	548400
24.	Sondya	Tumsar	227, 235	Bawanthadi	400	100	1	4.00	14134	3-6 m	117 m	15	5	455	2.5	606200
25.	Chandmara	Tumsar	101, 971, 168	Bawanthadi	200	150	1	3.00	10601	3-6 m	530 m	15	5	475	2.5	454400
26.	Sakardhara	Tumsar	255 Partly, 256 Partly, 260, 261, 262, 257, 258, 259	Bawanthadi	250	60	1	1.50	5300	3-6 m	125 m	15	5	325	2.5	506200
27.	Lobhi	Tumsar	248 Partly, 249, 250, 258 Partly	Bawanthadi	230	50	1	1.15	4064	3-6 m	530 m	15	5	520	2.5	506200
28.	Aashti	Tumsar	1183, 2818, 1821, 1190	Bawanthadi	175	90	1	1.575	5565	3-6 m	192 m	15	5	275	2.5	606200
29.	Bethala South	Mohadi	1035, 1036, 1037, 1040, 1041, 1042 &	Wainganga	340	115	1	3.91	13816	3-6 m	528 m	15	5	580	2.5	724600

			1043													
30.	Bethala North	Mohadi	887(Partly) 753 , 754, 884, 886	Wainganga	360	117	1	4.21	14883	3-6 m	567 m	15	5	620	2.5	684500
31.	Nilaj Bu	Mohadi	427,428& 429/1	Wainganga	400	100	1	4.00	14134	3-6 m	256 m	15	5	520	2.5	783600
32.	Nilaj Khurd	Mohadi	154&220	Wainganga	460	85	1	3.91	13816	3-6 m	500 m	15	5	720	2.5	686400
33.	Dhiwarwada	Mohadi	460 (Partly), 461, 462 & 463 (Partly)	Wainganga	500	80	1	4.00	14134	3-6 m	176 m	15	5	590	2.5	613000
34.	Mudhari Bu	Mohadi	468, 463, 464	Wainganga	350	100	1	3.50	12367	3-6 m	163 m	15	5	430	2.5	617000
35.	Kanhalgaon	Mohadi	374 & 375	Wainganga	220	50	1	1.10	3887	3-6 m	168 m	15	5	300	2.5	509000
36.	Takli	Mohadi	154, 155, 158, 159, 160, 203, 204, & 205	Sur	450	50	1	2.25	7951	3-6 m	187 m	15	5	540	2.5	585600
37.	Panchgaon- 1	Mohadi	258, 259, 260, 261, 264, 265, 266 & 263	Sur	400	30	1	1.20	4240	3-6 m	214 m	15	5	500	2.5	420400
38.	Mohagaon Devi	Mohadi	319, 320	Sur	210	53	1	1.113	3933	3-6 m	228 m	15	5	320	2.5	628600
39.	Bothali	Mohadi	181, 182, 183, 201(A)	Sur	500	50	1	2.50	8834	3-6 m	210 m	15	5	605	2.5	484500
40.	Deewara Khurd	Mohadi	33, 32, 31, 25/1, 25/2	Sur	132	107	1	1.4124	4991	3-6 m	450 m	15	5	352	2.5	585600
41.	Salebardi	Sakoli	122,123, 124	Chulbandh	220	50	1	1.10	3887	3-6 m	306 m	15	5	270	2.5	334600
42.	Sasra	Sakoli	553 & 549	Chulbandh	220	50	1.5	1.10	5830	3-6 m	748 m	15	5	590	2.5	449800
43.	Khandala	Sakoli	58 & 59	Chulbandh	345	33	1.2	1	4023	3-6 m	115 m	15	5	395	2.5	393200
44.	Parsodi (Madeghat)	Sakoli	540 Party, 541, 581, 653 Party	Chulbandh	300	45	1	1.35	4770	3-6 m	122 m	15	5	360	3	443800
45.	Parsodi (Amrai)	Sakoli	533, 534, 536, 537	Chulbandh	260	45	1	1.17	4134	3-6 m	199 m	15	5	360	3	585600

46.	Parsodi (Powartoli)	Sakoli	865 Party, 867 Party, 863, 864, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845 & 847,	Chulbandh	400	50	1	2.0	7067	3-6 m	111 m	15	5	455		420800
47.	Wattekar	Sakoli	10, 11, 12	Chulbandh	220	50	1	1.10	3887	3-6 m	177 m	15	5	295	3	585600
48.	Palasgaon	Lakhani	17/1/1, 17/2, 17/3, 19/2, 19/3, 19/4, 19/5, 19/6, 19/7, 19/8, 19/9, 19/11, 19/12, 19/15 & 19/16	Chulbandh	380	50	1.2	1.90	8057	3-6 m	650 m	15	5	700	3	560000
49.	Marhegaon	Lakhani	405, 406, 407, 408/1, 408/2, 410, 467/1, 467/2, 467/3	Chulbandh	350	70	1.2	2.45	10389	3-6 m	152 m	15	5	425	3	402800
50.	Vihirgaon	Lakhani	329, 328, 327, 326, 318, 316, 315, 314, 313	Chulbandh	300	40	1.5	1.20	6360	3-6 m	547 m	15	5	575	3	402800
51.	Narvah	Lakhani	137, 139, 140, 141, 173, 178, 179, 180, 183, 184, 185, 186, 187	Chulbandh	500	60	2	3.00	10601	3-6 m	207 m	15	5	600	3	460600
52.	Miregaon	Lakhani	621, 307/1, 307/2, 306, 305, 304, 303, 302	Chulbandh	400	40	1.2	1.60	6784	3-6 m	717 m	15	5	735		402800
53.	Vakal	Lakhani	164, 165, 173, 174, 175, 176, 177, 178, 181, 182, 186	Chulbandh	550	45	1.2	2.475	10495	3-6 m	419 m	15	5	710	3	860600
54.	Asola	Lakhandur	26, 3, 27, 872, 34, 35	Chulbandh	250	45	1	1.125	3975	3-6 m	417 m	15	5	460	3	488100
55.	Lakhandur	Lakhandur	130,132 & 143	Chulbandh	220	50	1	1.10	3887	3-6 m	169 m	15	5	300	3	427300
56.	Antargaon Kha	Lakhandur	338, 339, 342, 343 & 344	Chulbandh	220	50	1	1.10	3887	3-6 m	615 m	15	5	530	3	602000

57.	Bhagadi	Lakhandur	62,63,64	Chulbandh	240	55	1	1.32	4664	3-6 m	804 m	15	5	640	3	427300
58.	Moharna	Lakhandur	834, 835, 836	Wainganga	300	130	1	3.90	13781	3-6 m	752 m	15	5	625	2.5	648800
59.	Nanded	Lakhandur	210, 211, 206	Wainganga	220	170	1	3.74	13216	3-6 m	500 m	15	5	470	2.5	746100
60.	Gavralla	Lakhandur	65/1, 65/2	Wainganga	200	200	1	4.00	14134	3-6 m	900 m	15	5	650	2.5	636200
61.	Khairna	Lakhandur	476, 477, 478	Wainganga	230	50	1	1.15	4064	3-6 m	200 m	15	5	330	2.5	648800
62.	Vihirgaon	Lakhandur	252, 257, 258	Wainganga	140	80	1	1.12	3958	3-6 m	950 m	15	5	600	3	648800
63.	Kholmara	Lakhandur	163, 125, 124, 117, 116, 112, 113	Chulbandh	240	50	1	1.2	4240	3-6 m	925 m	15	5	760	3	427300
64	Donad	Lakhandur	714, 716, 761	Chulbandh	230	130	1	3.00	10601	3-6 m	580 m	15	5	520	3	648800

Status of Statuary Clearances for Sand Ghat

The status of Statuary Clearances for Sand Ghat is given below in Table no .2.0

Table 2.0: Status of Statuary Clearances for Sand Ghat

S. No	Particulars	Details
1	Name and address of Allottee	District Mining Officer, Bhandara
2	Status of lease	New
3	Mineral for which 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 G.S.DA., 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	Upto one year from the date of allocation of Sand ghat or upto scoping of Allotted /Permitted quantity mined out which ever is earlier excluding stipulated monsoon period between 10 June to 30 September.

METHOD OF MINING

The mining will be manual opencast mining method of scoping using simple tool like spade/pawada.

- a. Overburden/Soil Removal
No Overburden/Soil is anticipated
- b. Scooping of Sand/Loading
The ordinary sand will be loaded manually by labours
- c. Hauling
Ordinary sand is transported through the tractors/trucks with permissible quantity.
- d. No machinery will be utilized.
- e. Period of scooping of sand will be for one year excluding monsoon period of 10th June - 30th September or as defined by District Collector.
- f. About 13 labours per ghat will be required

- g. The site services will be provided by allottee/Successful Bidder, Office, First Aid and Rest Shelter will be temporarily constructed 20 m away from the bank of river.
- h. Applied area for sand extraction is covered by dark basalt and which has been derived /transported from basalt of surrounding flat and well tilled area. The sand of the applied area is found to be underlain by dark basalt of river bed.

1. Anticipated Environment Impacts and Management Plan

- **Air**

A summary of Air Pollution control measures is given below:

Details	Management Plan
Air Pollution	<ul style="list-style-type: none"> • Water Sprinkling of approach roads upto 1.00 km will be done 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 trolleys covered with tarpaulin sheets • Tractor trolleys will not be overloaded
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 attenuate noise generation
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 mine site for labours • Sand mining will be carried out in dry river bed only. • Waste material like polythene bag, jute bag, etc. will not be allowed to remain/spill in river bed

Details	Management Plan
Land Environment	<ul style="list-style-type: none"> Minimum safe distance of 3 m or 1/10th of the width of the river shall be kept from both sides of the bank to avoid erosion Depth of mining will be maximum 1.5 m depending upon availability of sand.
Biological Environment	<ul style="list-style-type: none"> Since the mining activity will be done of dry bed, hence there will not be any impact on biological environment
Socio Economic Environment	<ul style="list-style-type: none"> Employment generation due to this mining activity and local villagers will be given priority.
Waste/Overburden Management	<ul style="list-style-type: none"> There will not be any generation of waste or overburden due to this mining activity

OCCUPATIONAL HEALTH AND SERVICES

A summary of Occupational Health and Services is given below:

- Labour will be provided with Personal Protective Equipments like safety helmet, ear plugs, ear muffs, gum boot, facemasks etc
- Facemasks shall be provided for protection from dust
- Drinking water and toilet facility shall be provided to labours
- First aid kit shall be made available in mining area
- Mobile toilets shall be provided for the labours
- Dust bins shall be provided for waste collection and disposed by the local authorities

PLANTATION PROGRAMME

- It is proposed to plant local species during monsoon period along the bank of river and village roads.
- List of species proposed for greenbelt development plantation are Neem, Peepal, Banyan tree
- Local Species of atleast 500 no of trees will be planted with c/c distance of 2 m

Location of greenbelt	Both sides of approach road, On the river banks of the sand spot & nearby open areas. Haul Road outside riverbed
No. of plants to be planted	500 Per Hectare
Spacing of plants	2 m grid interval
Species selected	Native species

BENEFITS OF THE PROJECT

- Scientific method of mining will restrict water from spreading on agriculture land and in nearby habitation creating flood situation
- Government will be benefitted in the form of Royalty due to the mining activity
- Employment will be generated for local villagers due to mining
- This will help in stopping of illegal mining in the market
- Around 13 to 15 people of local area will get the employment due to this project

Successful Bidder/Sand ghat allottee will submit compliance to terms of conditions stipulated in the prior Environment Clearance to the District Mining officer and respective Tehsildars with the expense made on implementation of EMP.

District Mining officer/Respective Tehsildar will monitor the implementation of approved Environment Management Plan along with District Level Committee headed by District Collector as stipulated in Sand Mining rules 2019.

