Proposed	Aarvi Sand	Ghat	Project	of	Area	1.05	Hectare	Αt	Village	Aarvi	Tehsil-
Gondpipri	i, District-Cho	andrap	ur (Mah	aras	htra)						

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.05 ha at River Wardha adjoining Gut No. 171, 172/2, 161/1, 161/2, Mouza: Aarvi, Tehsil: Gondpipri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09 The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Partio	culars			Details	S	
A.	Nature	of	the	Proposed A	Proposed Aarvi sand ghat quarry (Minor Mineral)		
	Project						
B.	Size of the Project						
1.	Quarry Area	3		1.05 ha			
2.	Proposed	Produ	uction	1855 Brass/Annum			
	capacity						
С	Location D	etails	5				
1.	Village			Aarvi			
2.	Tehsil			Gondpipri			
3.	District			Chandrapur			
4.	State			Maharashtra			
5.	Latitude & I	Longitu	ıde	Sr. No	Latitude "N"	Longitude "E"	
				1	19°37'43.00"N	79°29'30.21"E	

# Proposed Aarvi Sand Ghat Project of Area 1.05 Hectare At Village Aarvi Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

Executive Summ	nary
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		2 19°37'38.21"N 79°29'31.20"E				
		3 19°37'38.01"N 79°29'30.20"E				
		4 19°37'42.80"N 79°29'29.21"E				
6.	Toposheet No.	56M/09				
D	<b>Environmental Setti</b>	gs of the Area				
1.	River / water body	The quarry area is itself part of water body i.e. River-				
		Wardha				
2.	Nearest Town	Nearest Village: Aarvi is at a distance of 0.5 Km				
	City/Village	towards South West from the Mining area.				
3.	Nearest Railwa	Makudi Railway Station at a distance of 6.0 km in SW				
	Station	direction from Aarvi sand ghat Site.				
4.	Nearest Airport	Nagpur Airport 168 km away towards West.				
5.	State Boundary	No State boundary passes through the project site				
6.	Seismic Zone	Zone – III (Moderate)				
		This is said to be the Moderate Seismic Zone.				
D	Cost Details					
1.	Total Upset Price	Rs. 1113000/-				
E	Requirements of Th	Project				
1.	Proposed Wate	2.10 KLD				
	Requirement					
2.	Fuel requirement	N/A				
3.	Man Powe	8 (Skilled and unskilled persons)				
	Requirement					

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.10 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	0.70
3.	Green belt / Plantation	1.00
	Total	2.10

S. No.	Environme ntal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water

# Proposed Aarvi Sand Ghat Project of Area 1.05 Hectare At Village Aarvi Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

			may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	regime. Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

## Proposed Aarvi Sand Ghat Project of Area 1.05 Hectare At Village Aarvi Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

Executive Summary

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to transportation material by. of tractor trolley & transportation of mineral	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.		Water Sprinkling	15,000/-		
		Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	70,000/-		
3.	Green Belt Development	Along River Bank	1,03,800/-		
	(Rs. 300 per tree)	Along haul road	_,,,,,,,,		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	76100/-		
	Total				

### 1. EXECUTIVE SUMMARY

This Report has been prepared for the Proposed sand ghat over the area of 4.92 ha at River Venganga adjoining Gut No. 598, 601, 602, 605 to 612, Mouza: Aawalgaon, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09 and falls between the Latitude 19°58'16.42"N – 19°58'18.69"N and Longitude 79°39'56.67"E – 79°39'56.76"E. The lease area is not an agricultural land and the area is classified as River. Maximum production capacity is 17385 Brass.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars			Details	5		
A.	Nature	of the	Proposed	Aawalgaon	sand	ghat	quarry	(Minor
	Project		Mineral)					
B.	Size of the	e Project						
1.	Quarry Are	a	4.92 ha					
2.	Proposed	Production	17385 Bra	ss/Annum				
	capacity							

Executive Summary

С	<b>Location Details</b>				
1.	Village	Aawalgaor	]		
2.	Tehsil	Bramhpuri			
3.	District	Chandrapur			
4.	State	Maharasht	ra		
5.	Latitude & Longitude	Pillar	Latitude	Longitude	
		1	19°58'16.42"N	79°39'56.67"E	
		2	19°58'16.16"N	79°39'39.48"E	
		3	19°58'18.42"N	79°39'39.56"E	
		4	19°58'18.69"N	79°39'56.76"E	
6.	Toposheet No.	56M/09			
D	<b>Environmental Setting</b>	gs of the A	rea		
1.	River / water body	The quarry	y area is itself part of wa	ater body i.e. River-	
		Wainganga			
2.	Nearest Town /	Nearest Vi	llage: Aawalgaon is at a	distance of 0.5 Km	
	City/Village	towards So	outh East from the Minin	g area.	
3.	Nearest Railway	The near	est railway station is	located Tolewahi	
	Station	Railway S	tation at a distance of	~8.44 km in NW	
		direction fi	rom Project Site.		
4.	Nearest Airport	Chandrapu	ır Airport 47 km away to	wards West.	
5.	State Boundary	No State b	oundary passes through	the project site	
6.	Seismic Zone	Zone – III	(Moderate)		
		This is said	d to be the Moderate Sei	smic Zone.	
D	Cost Details	1			
1.	Total Upset Price	Rs. 27020	300/-		
E	Requirements of The	-			
1.	Proposed Water	2.80 KLD			
	Requirement				
2.	Fuel requirement	N/A			
3.	Man Power	18 (Skilled	and unskilled persons)		
	Requirement	`	. ,		

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Yergaon. The detailed breakup of the water requirement is given below.

Executive Summary

### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.80

S. No	Environment al Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportatio n of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in

Executive Summary

				good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportatio n	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportatio n	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	45,000/-
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	100,000/-
3.	Green Belt Development	Along River Bank	4,86,900/-

Executive Summary

	(Rs. 300 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-
	To	otal	Rs.08,86,900/-

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### **EXECUTIVE SUMMARY**

This Report has been prepared for the proposed sand ghat over the area of 1.95 ha at River Andhari adjoining Kh. No. Ajaypur- 163/1, 163/2, 164, 165, 168, 170 Gondsawari - 29, 31, 32, 33, 34, Mouza: Ajaypur and Gondsawari, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15th January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/12.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan. In order to obtain environmental clearance as per the EIA Notification 2006 the Pre-feasibility Report (PFR) is submitted along with the application Form I M for the project under consideration. The project is categorized as Category B2 vide Notification 141 (E) dated 15th January 2016.

**Table: Salient Features of the Project Site** 

S.	Particulars	Details
No.	Nature of the Project	Proposed Ajaypur-Gondsawari sand ghat quarry (Minor Mineral)
В.	Size of the Pro	ject
1.	Quarry Area	1.95 ha
2.	Proposed Production capacity	3445 Brass/Annum

# Proposed Ajaypur-Gondsawari Sand Ghat Project of Area 1.95 Hectare At Village-Ajaypur and Gondsawari, Tehsil- Chandrapur, District-Chandrapur (Maharashtra)

С	Location Details							
1.	Village	Ajaypur - G	Ajaypur - Gondsawari					
2.	Tehsil	Chandrapur						
3.	District	Chandrapur	Chandrapur					
4.	State	Maharashtra	а					
5.	Latitude &	Pillar	Latitude	Longitude				
	Longitude	B.P 1	20° 0'7.58"N	79°31'12.78"E				
		B.P 2	20° 0'9.65"N	79°31'7.47"E				
		B.P 3	20° 0'11.28"N	79°31'5.17"E				
		B.P 4	20° 0'14.46"N	79°31'3.98"E				
		B.P 5	20° 0'18.17"N	79°31'3.47"E				
		B.P 6	20° 0'21.67"N	79°31'4.41"E				
		B.P 7	20° 0'32.94"N	79°31'9.50"E				
		B.P 8	20° 0'34.86"N	79°31'9.96"E				
		B.P 9	20° 0'34.99"N	79°31'9.19"E				
		B.P 10	20° 0'33.04"N	79°31'8.74"E				
		B.P 11	20° 0'21.84"N	79°31'3.64"E				
		B.P 12	20° 0'18.03"N	79°31'2.66"E				
		B.P 13	20° 0'14.19"N	79°31'3.22"E				
		B.P 14	20° 0'10.72"N	79°31'4.63"E				
6.	Toposheet No.	55P/12						
D	Environmental	Settings of	the Area					
1.	River / water body	The quarry	area is itself part of wate	er body i.e. River-Andhari				

# Proposed Ajaypur-Gondsawari Sand Ghat Project of Area 1.95 Hectare At Village-Ajaypur and Gondsawari, Tehsil- Chandrapur, District-Chandrapur (Maharashtra) Executive Summary

2.	Nearest Town / City/Village	Nearest Village: Gondsawari is at a distance of 1.20 Km towards NE from the Mining area.
3.	Nearest Railway Station	The nearest railway station is located Kelzar Railway Station, 5.20 Km away towards SE from ML
4.	Nearest Airport	Nagpur Airport, 130.50 km away towards North
5.	State Boundary	No State boundary passes through the project site
6.	Seismic Zone	Zone – III (Moderate)
		This is said to be the Moderate Seismic Zone.
		1
D	Cost Details	
		Do 2067000/
<b>D</b>	Cost Details  Total Upset Price	Rs. 2067000/-
	Total Upset	
1.	Total Upset Price Requirements of	
1. E	Total Upset Price	The Project
1. E	Total Upset Price Requirements of Proposed Water	The Project
1. E	Total Upset Price Requirements of Proposed	The Project
1. E	Total Upset Price Requirements of Proposed Water Requirement	The Project  2.90 KLD
1. E	Total Upset Price Requirements of  Proposed Water Requirement Fuel	The Project  2.90 KLD
1. E 1.	Total Upset Price Requirements of Proposed Water Requirement Fuel requirement	The Project  2.90 KLD  N/A

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.90 KLD. It will be procured from the supply source of Village- Gondsawari. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.30
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	2.90

S. NO.	Environ mental Paramet er	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern  Increase in depth may increase the flow velocity  Change in surface water quality and ground water quality  Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0 m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transporta tion of sand via vehicles or tractor movement  Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health  Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline.  Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.

### Proposed Ajaypur-Gondsawari Sand Ghat Project of Area 1.95 Hectare At Village-Ajaypur and Gondsawari, Tehsil- Chandrapur, District-Chandrapur (Maharashtra)

				Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transporta tion	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	Safety distance of 3m or 1/4th of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transporta tion	Short-term disturbance of habitats disturbance of wildlife populations from noise  Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.

Proposed Ajaypur-Gondsawari Sand Ghat Project of Area 1.95 Hectare At Village-Ajaypur and Gondsawari, Tehsil- Chandrapur, District-Chandrapur (Maharashtra)

Executive Summary

6.	Traffic	Increase	Traffic due	to	people	Vehicular	movement	will	be
	Pattern	of	coming to vis	sit		regulated	inside the	project	with
		vehicular				adequate	roads and pa	rking lo	ots in
		traffic				the projec	t.		

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-	
1.	tractor trolley & transportation	ansportation material by. of Water Sprinkling		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-	
2.	Road maintenance	Proper Maintenance of Haul road	70,000/-	
3.	Green Belt Development	Along River Bank	1,92,900/-	
	(Rs. 400 per tree)	Along haul road		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed,	81500/-	
		Mobile toilet etc.	D- 4020001	
	Tot	tal	Rs. 4,03,900/-	

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 1050, 1051/1, 1051/2, 1051/3, 1052, 1053, 1054 Mouza: Anhernawargaon Awali, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars		Details
A.	Nature	of	the	Proposed Anhernawargaon Awali sand ghat quarry
	Project			(Minor Mineral)
B.	Size of the Project			
1.	Quarry Area			4.50 ha
2.	Proposed	Produ	ction	23852 Brass/Annum
	capacity			
С	Location [	Details		
1.	Village			Anhernawargaon Awali
2.	Tehsil			Bramhpuri
3.	District			Chandrapur
4.	State			Maharashtra

### Proposed Anhernawargaon Awali Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Awali Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

5.	Latitude & Longitude	:	Pillar	Latitude	Longitude	
			1	20°40'41.44"N	79°53'59.44"E	
			2	20°40'31.21"N	79°54'10.56"E	
			3	20°40'33.57"N	79°54'12.92"E	
			4	20°40'43.78"N	79°54'1.83"E	
6.	Toposheet No.		55P/15			
D	Environmental Set	ting	gs of the A	rea		
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-	
			Wainganga	a		
2.	Nearest Town	/	Nearest Vi	llage: Village awali is al	bout 3.0 km in NW	
	City/Village		direction from the awali sand ghat Site.			
3.	Nearest Raily	<i>ı</i> ay	Talodhi Railway Station at a distance of ~ 30.0 km in			
	Station		NW direction from awali sand ghat Site.			
4.	Nearest Airport		Nagpur Airport 110 km away towards West.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 14311200/-			
E	Requirements of 1	he	Project			
1.	Proposed Water		4.50 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man Pov	ver	28 (Skilled	and unskilled persons)		
	Requirement					

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Halada-2. The detailed breakup of the water requirement is given below.

### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Anhernawargaon Awali Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Awali Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

### Proposed Anhernawargaon Awali Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Awali Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

			bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-			
3.	Green Belt Development	Along River Bank	4,86,900/-			
J.	(Rs. 300 per tree)	Along haul road	, 4,00,300/			
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-			
	Total					

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 242, 241, 240, 811, 812 Mouza: Anhernawargaon Bhaleshwar, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	Particulars			Details			
A.	Nature	of	the	Proposed	Anhernawargaon	Bhaleshwar	sand	ghat
	Project			quarry (Mi	inor Mineral)			
B.	Size of the Project							
1.	Quarry Area	а		4.50 ha				
2.	Proposed	Produc	tion	23852 Bra	ss/Annum			
	capacity							
С	Location [	Details						
1.	Village			Anhernaw	argaon Bhaleshwa	ar		
2.	Tehsil			Bramhpuri	i			
3.	District			Chandrapi	ur			
4.	State			Maharasht	tra			

### Proposed Anhernawargaon Bhaleshwar Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Bhaleshwar Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

5.	Latitude & Longitu	de	Pillar	Latitude	Longitude	
			1	20°40'56.32"N	79°52'24.45"E	
			2	20°40'59.90"N	79°52'39.52"E	
			3	20°41'2.97"N	79°52'38.36"E	
			4	20°40'59.38"N	79°52'23.29"E	
6.	Toposheet No.		55P/15			
D	<b>Environmental S</b>	etting	gs of the A	rea		
1.	River / water body	•	The quarry	area is itself part of wa	ater body i.e. River-	
			Wainganga	a		
2.	Nearest Town	/	Nearest Vi	llage: Village Bhaleshw	ari about 3.0 km in	
	City/Village		NW direction from the Bhaleshwar sand ghat Site.			
3.		ilway	Talodhi Railway Station at a distance of ~ 30.0 km in			
	Station		NW direction from Bhaleshwar sand ghat Site.			
4.	Nearest Airport		Nagpur Airport 110 km away towards West.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 14311200/-			
E	Requirements of	f The	Project			
1.	Proposed Water		4.50 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man P	ower	28 (Skilled	and unskilled persons)		
	Requirement					

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Halada-2. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

### Proposed Anhernawargaon Bhaleshwar Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Bhaleshwar Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

Proposed Anhernawargaon Bhaleshwar Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Bhaleshwar Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

			Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)					
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-					
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-					
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-					
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-					
3.	Green Belt Development	Along River Bank	4,86,900/-					
	(Rs. 300 per tree)	Rs. 300 per tree) Along haul road						
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-					
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-					
	Total							

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 820, 825, 826, 827, 828, 829 Mouza: Anhernawargaon Chikhaldhokla, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details				
A.	Nature	of the	Proposed Anhernawargaon	Chikhaldhokla sand ghat			
	Project		quarry (Minor Mineral)				
B.	Size of the	e Project					
1.	Quarry Area	a	4.50 ha				
2.	Proposed	Production	23852 Brass/Annum				
	capacity						
С	Location [	Details					
1.	Village		Anhernawargaon Chikhaldho	kla			
2.	Tehsil		Bramhpuri				
3.	District		Chandrapur				
4.	State		Maharashtra				

### Proposed Anhernawargaon Chikldhokla Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Chikaldhokla Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

5.	Latitude & Longitu	de	Pillar	Latitude	Longitude		
			1	20°41'11.57"N	79°53'19.79"E		
			2	20°41'5.79"N	79°53'34.08"E		
			3	20°41'8.71"N	79°53'35.56"E		
			4	20°41'14.50"N	79°53'21.29"E		
6.	Toposheet No.		55P/15				
D	<b>Environmental S</b>	etting	gs of the A	rea			
1.	River / water body		The quarry	y area is itself part of wa	ater body i.e. River-		
			Wainganga	a			
2.	Nearest Town	/	Nearest Vi	llage: Village Chikhaldh	oklais about 3.0 km		
	City/Village		in NW dir	rection from the Chik	naldhoklasand ghat		
			Site.				
3.	Nearest Ra	ilway	Talodhi Ra	ilway Station at a distar	nce of $\sim$ 30.0 km in		
	Station		NW direction from Chikhaldhoklasand ghat Site.				
4.	Nearest Airport		Nagpur Airport 110 km away towards West.				
5.	State Boundary		No State boundary passes through the project site				
6.	Seismic Zone		Zone – III (Moderate)				
			This is said to be the Moderate Seismic Zone.				
D	Cost Details						
1.	Total Upset Price		Rs. 143112	200/-			
E	Requirements of	The	Project				
1.	Proposed V	Vater	4.50 KLD				
	Requirement						
2.	Fuel requirement		N/A				
3.	Man P	ower	28 (Skilled	and unskilled persons)			
	Requirement						

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Halada-2. The detailed breakup of the water requirement is given below.

#### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Anhernawargaon Chikldhokla Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Chikaldhokla Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

### Proposed Anhernawargaon Chikldhokla Sand Ghat Project of Area 4.50 Hectare At Village Anhernawargaon Chikaldhokla Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

			Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)					
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-					
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-					
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-					
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-					
3.	Green Belt Development	Along River Bank	4,86,900/-					
	(Rs. 300 per tree)	Rs. 300 per tree) Along haul road						
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-					
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-					
	Total							

Proposed	Ashta :	Sand	Ghat	Project	of	Area	1.50	Hectare	Αt	Village	Ashta	Tehsil-
Chandrap	ur, Distri	ict-Ch	andro	ipur (Ma	ıha	rashtro	1)					

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.50 ha at River Andhari adjoining Gut No. 329, 331, 332 Mouza: Ashta, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/07.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	5		Details					
A.	Nature	of	the	Proposed A	Proposed Ashta sand ghat quarry (Minor Mineral)					
	Project									
B.	Size of the	e Proj	ect							
1.	Quarry Are	a		1.50 ha						
2.	Proposed	Prod	uction	2650 Brass	s/Annum					
	capacity									
С	Location I	Detail	S							
1.	Village			Ashta						
2.	Tehsil			Chandrapu	ır					
3.	District			Chandrapu	ır					
4.	State			Maharashtra						
5.	Latitude &	Longit	ude	Sr. No	Latitude "N"	Longitude "E"				
				1	19°50'30.71"N	79°40'29.33"E				

### Proposed Ashta Sand Ghat Project of Area 1.50 Hectare At Village Ashta Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

**Executive Summary** 

			2	19°50'21.18"N	79°40'27.11"E			
			3	19°50'20.77"N	79°40'28.78"E			
			4	19°50'30.30"N	79°40'30.98"E			
6.	Toposheet No.		56M/07					
D	Environment	al Setting	gs of the A	rea				
1.	River / water b	ody	The quarry	y area is itself part of wa	ater body i.e. River-			
			Andhari					
2.	Nearest To	own /	Nearest V	illage: Ashta is at a d	istance of 0.5 Km			
	City/Village		towards So	outh West from the Minir	ng area.			
3.	Nearest	Railway	Makudi Ra	ilway Station at a distan	ce of 16.0 km in W			
	Station		direction from Ashta sand ghat Site.					
4.	Nearest Airpor	t	Chandrapur Airport 47 km away towards West.					
5.	State Boundar	γ	No State boundary passes through the project site					
6.	Seismic Zone		Zone – III (Moderate)					
			This is said to be the Moderate Seismic Zone.					
D	<b>Cost Details</b>							
1.	Total Upset Pri	ice	Rs. 29154	00/-				
E	Requirement	s of The	Project					
1.	Proposed	Water	2.60 KLD					
	Requirement							
2.	Fuel requireme	ent	N/A					
3.	Man	Power	17 (Skilled	and unskilled persons)				
	Requirement		•	. ,				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.60

S.		Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

## Proposed Ashta Sand Ghat Project of Area 1.50 Hectare At Village Ashta Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

### Proposed Ashta Sand Ghat Project of Area 1.50 Hectare At Village Ashta Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

Executive Summary

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	2,37,600/-		
	(Rs. 300 per tree)	Along haul road	, , , , , , , ,		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93250/-		
	Total				

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.80 ha at River Vena adjoining Gut No. 58, 59, 62, 63, 64 Mouza: Bamarda, Tehsil: Warora, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature	of the	Proposed Bamarda sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	e Project	
1.	Quarry Area	a	4.80 ha
2.	Proposed	Production	8481 Brass/Annum
	capacity		
С	Location D	Details	
1.	Village		Bamarda
2.	Tehsil		Warora
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Bamarda Sand Ghat Project of Area 4.80 Hectare At Village Bamarda Tehsil- Warora, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Long	itude	Pillar	Latitude	Longitude
		,	1	19°58'16.42"N	79°39'56.67"E
			2	19°58'16.16"N	79°39'39.48"E
			3	19°58'18.42"N	79°39'39.56"E
			4	19°58'18.69"N	79°39'56.76"E
6.	Toposheet No.		56M/09		
D	Environmenta	l Setting	gs of the A	rea	
1.	River / water bo	ody	The quarry	area is itself part of wa	ater body i.e. River-
			Vena		-
2.	Nearest Tov	vn /	Nearest Vi	llage: Bamarda is at a	distance of 0.5 Km
	City/Village			outh East from the Minin	
3.		Railway	The neare	st railway station is loca	ted Warora Railway
	Station	,	Station at a distance of ~14.44 km in NW direction		
			from Proje	ct Site.	
4.	Nearest Airport		Chandrapu	ır Airport 47 km away to	wards West.
5.	State Boundary	/	No State b	oundary passes through	the project site
6.	Seismic Zone		Zone – III	(Moderate)	· ·
			This is said	d to be the Moderate Sei	smic Zone.
D	Cost Details				
1.	Total Upset Pric	e	Rs. 508860	00/-	
Е	Requirements	of The	Project		
1.	Proposed	Water	2.80 KLD		
	Requirement				
2.	Fuel requiremen	nt	N/A		
3.	Man	Power	-	and unskilled persons)	
	Requirement		•	, ,	

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Bamarda. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.80

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No	tal			
	Parameter			

# Proposed Bamarda Sand Ghat Project of Area 4.80 Hectare At Village Bamarda Tehsil- Warora, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil erosion.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining"

Proposed Bamarda Sand Ghat Project of Area 4.80 Hectare At Village Bamarda Tehsil- Warora, District-Chandrapur (Maharashtra)

Executive Summary

			Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	25,000/-
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-
3.	Green Belt Development	Along River Bank	4,75,200/-
	(Rs. 400 per tree)	Along haul road	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93,250/-
	Tot	cal	Rs. 7,63,450/-

Proposed Belgaon jaani Sand Ghat Project of Area 4.50 Hectare At Village Belgaon jaani Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 270, 272, 286, 287/1, 287/2, 292, Mouza: Belgaon jaani, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars			Details						
A.	Nature	of	the	Proposed	Belgaon	jaani	sand	ghat	quarry	(Minor
	Project			Mineral)						
B.	Size of the Project									
1.	Quarry Area			4.50 ha						
2.	Proposed Production			15901 Bra	ıss/Annum	1				
	capacity									
С	Location Details									
1.	Village			Belgaon ja	aani					
2.	Tehsil			Bramhpur	i					
3.	District			Chandrap	ur					
4.	State			Maharash	tra					

Proposed Belgaon jaani Sand Ghat Project of Area 4.50 Hectare At Village Belgaon jaani Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitude	Pillar	Latitude	Longitude	
	Lactade & Longitude	1	20°42'59.44"N	79°47'12.85"E	
		2	20°42'45.64"N	79°47'18.04"E	
		3	20°42'46.93"N	79°47'21.21"E	
		4	20°43'0.72"N	79°47'16.02"E	
6.	Toposheet No.	55P/15			
D	<b>Environmental Settir</b>	gs of the A	rea		
1.	River / water body	The quarr	y area is itself part of wa	ater body i.e. River-	
		Waingang	a		
2.	Nearest Town /	Nearest V	illage: Belgaon jaani is	about 0.50 km in	
	City/Village	South West direction from the Belgaon jaani sand			
		ghat Site.			
3.	Nearest Railway	Brahmpuri	Railway Station at a dis	tance of ~ 19.0 km	
	Station	in NW dire	ection from Belgaon jaan	i sand ghat Site.	
4.	Nearest Airport	Nagpur Ai	lagpur Airport 110 km away towards West.		
5.	State Boundary	No State b	No State boundary passes through the project site		
6.	Seismic Zone	Zone – III	(Moderate)		
		This is said	d to be the Moderate Sei	smic Zone.	
D	Cost Details				
1.	Total Upset Price	Rs. 95406	00/-		
E	Requirements of The	e Project			
1.	Proposed Water	2.80 KLD			
	Requirement				
2.	Fuel requirement	nt N/A			
3.	Man Power	22 (Skilled and unskilled persons)			
	Requirement				

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Belgaon jaani. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.10
2.	Dust Suppression / Water Sprinkling	0.70
3.	Green belt / Plantation	1.00
	Total	2.80

S.	Environm	Activities	Predict Impact	EMP/Mitigation Measures
No.	ental			

Proposed Belgaon jaani Sand Ghat Project of Area 4.50 Hectare At Village Belgaon jaani Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

	Paramet			
	er			
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of	Damage of river bank due to access ramps	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more

Proposed Belgaon jaani Sand Ghat Project of Area 4.50 Hectare At Village Belgaon jaani Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

		sand and transportation	to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
1.	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-	
1.	tractor trolley & transportation of mineral	Water Sprinkling	45,000/-	
		Sand carrying trolleys will be Covered	10,000/-	
2.	Road maintenance	Proper Maintenance of Haul road	1,20,000/-	
3.	Green Belt Development	Along River Bank	4,45,500/-	
	(Rs. 300 per tree)	Along haul road		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,63,300/-	
	Total			

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.40 ha at River Uma adjoining Kh. No. 168, 177 to 179, Mouza: Bhejgaon, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141 (E) dated 15th January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269 (E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought-building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/9.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure.

**Table: Salient Features of the Project Site** 

S.No.	Particulars	Details		
A.	Nature of the Project   Proposed Bhejgaon Sand Ghat quarry (Minor M			rry (Minor Mineral)
B.	Size of the Project			
1.	Quarry Area	2.40 ha		
2.	Proposed Production	4240 Brass	s/Annum	
	capacity			
С	Location Details			
1.	Village	Bhejgaon		
2.	Tehsil	Mul		
3.	District	Chandrapu	ır	
4.	State	Maharashtra		
5.	Latitude & Longitude Pillar Latitude Longitude			Longitude
		BP1	19°58'56.74"N	79°40'31.49"E

		222	4005010 741111	70040124 00115	
		BP2	19°59'9.74"N	79°40'31.88"E	
		BP3	19°59'9.78"N	79°40'29.82"E	
		BP4	19°58'56.78"N	79°40'29.42"E	
6.	Toposheet No.	56M/9			
D	<b>Environmental Settings</b>	of the Ar	ea		
1.	River / water body	The quarry	y area is itself part of wa	ater body i.e. River-	
		Uma			
2.	Nearest Town /	Nearest Vi	llage: Bhejgaon is at a d	distance of 1.45 Km	
	City/Village	towards West from the Mining area.			
3.	Nearest Railway Station	The nearest railway station is located Mul Railway			
		Station at a distance of ~39.20 km in West direction			
		from Project Site.			
4.	Nearest Airport	Chandrapu	ır Airport 47.50 km away	towards West.	
5.	State Boundary	No State b	oundary passes through	the project site	
6.	Seismic Zone	Zone – III	(Moderate)		
		This is said	d to be the Moderate Sei	smic Zone.	
D	Cost Details				
1.	Total Upset Price	Rs. 25440	00/-		
E	Requirements of The P	he Project			
1.	Proposed Water	2.50 KLD			
	Requirement				
2.	Fuel requirement	N/A			
3.	Man Power Requirement 20(Skilled and unskilled persons)				

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.50 KLD. It will be procured from the supply source of Village- Bhejgaon. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.20
2.	Dust Suppression / Water Sprinkling	1.30
3.	Green belt / Plantation	1.00
	Total	2.50

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause

			water quality and ground water quality Waste water discharge	much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks

			Surface degradation due to road network	will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-	
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-	
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-	
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-	
3.	Green Belt Development	Along River Bank	2,37,600/-	
	(Rs. 400 per tree)	Along haul road		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	81,500/-	
	Tot	cal	Rs. 5,44,100/-	

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.50 ha at River Venganga adjoining Gut No. 169, 171, 172 Mouza: Bodhegaon, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars				Details	3		
A.	Nature	of	the	Proposed	Bodhegaon	sand	ghat	quarry	(Minor
	Project			Mineral)					
B.	Size of the	e Proje	ct						
1.	Quarry Area	а		2.50 ha					
2.	Proposed	Produ	ction	13251 Bra	ss/Annum				
	capacity								
С	Location [	Details							
1.	Village			Bodhegaoi	n				
2.	Tehsil			Bramhpuri					
3.	District			Chandrapu	ır				
4.	State			Maharasht	ra				

**Executive Summary** 

5.	Latitude & Longitude	e	Pillar	Latitude	Longitude		
	_		1	20°34'8.53"N	79°55'43.93"E		
			2	20°34'0.85"N	79°55'41.10"E		
			3	20°33'59.61"N	79°55'44.29"E		
			4	20°34'7.29"N	79°55'47.11"E		
6.	Toposheet No.		56M/09				
D	<b>Environmental Se</b>	tting	gs of the A	rea			
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-		
			Venganga				
2.	Nearest Town / Nearest Village: Bodhegaon is			llage: Bodhegaon is at a	distance of 0.5 Km		
	City/Village		towards South East from the Mining area.				
3.	Nearest Rail	way	The near	est railway station is	located Bramhpuri		
	Station	•	Railway Station at a distance of ~8.44 km in NW				
			direction from Project Site.				
4.	Nearest Airport		Chandrapur Airport 47 km away towards West.				
5.	State Boundary		No State boundary passes through the project site				
6.	Seismic Zone		Zone – III	(Moderate)			
			This is said to be the Moderate Seismic Zone.				
D	Cost Details						
1.	Total Upset Price		Rs. 7950600/-				
E	Requirements of	The	Project				
1.	Proposed Wa	ater	2.80 KLD				
	Requirement						
2.	Fuel requirement		N/A				
3.	<u> </u>	wer	18 (Skilled	and unskilled persons)			
	Requirement		,	. ,			

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Bodhegaon. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.80

S.	Environment	Activities	Predict Impact	EMP/Mitigation Measures
No.	al Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transporta tion of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction	Damage of river bank due to access ramps	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more

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		of sand and transporta tion	to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transporta tion	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
1.	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	tractor trolley & transportation	Water Sprinkling	35,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	8000/-			
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-			
3.	Green Belt Development	Along River Bank	2,47,500/-			
	(Rs. 300 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,42,300/-			
	Total					

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.90 ha at River Wainganga adjoining Gut. No. 680, 682 to 686, 753 Mouza: Loandoli Tehsil: Sawali, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details		
A.	Nature of the		Proposed Bormala-1 sand ghat quarry (Minor Mineral)		
	Project				
В.	Size of the Project				
1.	Quarry Area		4.90 ha		
2.	Proposed	Production	25972 Brass/Annum		
	capacity				
С	Location D	Details			
1.	Village		Bormala-1		
2.	Tehsil		Sawali		
3.	District		Chandrapur		
4.	State		Maharashtra		

## Proposed Bormala-1 Sand Ghat Project of Area 4.90 Hectare At Village- Bormala Tehsil- Sawali, District-Chandrapur (Maharashtra)

Executive Summary

5.	Latitude & Longitud	le	Pillar	Latitude	Longitude	
			1	20°12'45.32"N	79°59'5.35"E	
			2	20°12'37.44"N	79°58'50.68"E	
			3	20°12'34.58"N	79°58'52.32"E	
			4	20°12'42.48"N	79°59'6.98"E	
6.	Toposheet No.		55 N/16			
D	<b>Environmental Se</b>	etting	gs of the A	rea		
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-	
			Wainganga	Э		
2.	Nearest Town	/	Nearest V	illage: Bormala at a di	stance of 1.20 Km	
	City/Village		towards South from the Mining area.			
3.	Nearest Railway The nearest			est railway station is	located Sindewahi	
	Station	,	Railway Station, 17.50 Km away towards East from			
			ML	•		
4.	Nearest Airport		Nagpur Airport, 129.50 km away towards North			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III	(Moderate)		
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 155832200/-			
Е	Requirements of	The	Project			
1.	Proposed W	ater	4.80 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	· ·	wer	42 (Skilled	and unskilled persons)		
	Requirement		,	, ,		

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.80 KLD. It will be procured from the supply source of Village- Samda Buj. The detailed breakup of the water requirement is given below.

### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.80
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	2.00
	Total	4.80

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			_

# Proposed Bormala-1 Sand Ghat Project of Area 4.90 Hectare At Village- Bormala Tehsil- Sawali, District-Chandrapur (Maharashtra)

	Parameter			
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or	Damage of river bank	Safety distance of 3m or 1/4 <sup>th</sup> of the

Proposed Bormala-1 Sand Ghat Project of Area 4.90 Hectare At Village- Bormala Tehsil- Sawali, District-Chandrapur (Maharashtra)

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		extraction of sand and transportati on	due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by. of tractor trolley &	Water Sprinkling	35,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	100,000/-
2	Green Belt Development	Along River Bank	4.05.1007
3.	(Rs. 300 per tree)	Along haul road	4,85,100/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,22,300/-
	Tot	al	Rs. 8,92,400/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.40 ha at River Wainganga adjoining Gut. No. 680, 682 to 686, 753 Mouza: BormalaTehsil: Sawali, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature of the		Proposed Bormala-2 sand ghat quarry (Minor Mineral)
	Project		
В.	Size of the	Project	
1.	Quarry Area	Э	2.40 ha
2.	Proposed	Production	10601 Brass/Annum
	capacity		
С	Location D	Details	
1.	Village		Bormala
2.	Tehsil		Sawali
3.	District		Chandrapur
4.	State		Maharashtra

## Proposed Bormala-2 Sand Ghat Project of Area 2.40 Hectare At Village- Bormala Tehsil- Sawali, District-Chandrapur (Maharashtra)

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5.	Latitude & Longitude	Pillar	Latitude	Longitude		
		1	20°12'33.98"N	79°58'22.26"E		
		2	20°12'33.84"N	79°58'13.66"E		
		3	20°12'31.25"N	79°58'13.55"E		
		4	20°12'31.39"N	79°58'22.16"E		
6.	Toposheet No.	55 N/16				
D	<b>Environmental Setting</b>	gs of the A	rea			
1.	River / water body	The quarry	y area is itself part of wa	ater body i.e. River-		
		Wainganga	а			
2.	Nearest Town /	Nearest Village: Bormala at a distance of 1.20 Km				
	City/Village	towards South from the Mining area.				
3.	Nearest Railway	The nearest railway station is located Sindewahi				
	Station	Railway Station, 17.50 Km away towards East from				
		ML				
4.	Nearest Airport	Nagpur Air	ppur Airport, 129.50 km away towards North			
5.	State Boundary	No State boundary passes through the project site				
6.	Seismic Zone	Zone – III	(Moderate)			
		This is said	d to be the Moderate Sei	smic Zone.		
D	Cost Details					
1.	Total Upset Price	Rs. 15583	2200/-			
E	Requirements of The	Project				
1.	Proposed Water	4.20 KLD				
	Requirement					
2.	Fuel requirement	N/A				
3.	Man Power	22 (Skilled	and unskilled persons)			
	Requirement	-				

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.20 KLD. It will be procured from the supply source of Village- Samda Buj. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.20
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	2.00
	Total	4.20

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			
	Parameter			

# Proposed Bormala-2 Sand Ghat Project of Area 2.40 Hectare At Village- Bormala Tehsil- Sawali, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction	Damage of river bank due to access ramps	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more

Proposed Bormala-2 Sand Ghat Project of Area 2.40 Hectare At Village- Bormala Tehsil- Sawali, District-Chandrapur (Maharashtra)

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		of sand and transportati on	to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by. of tractor trolley &	Water Sprinkling	35,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	100,000/-
2	Green Belt Development	Along River Bank	4.05.1007
3.	(Rs. 300 per tree)	Along haul road	4,85,100/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,22,300/-
	Tot	al	Rs. 8,92,400/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.50 ha at River Andhari adjoining Gut No. 26 Mouza: Chak ballarpur, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/07.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars				Deta	ils		
A.	Nature	of	the	Proposed	Chak	ballarpur-1	sand	ghat quarry	(Minor
	Project			Mineral)					
В.	Size of the Project								
1.	Quarry Are	a		2.50 ha					
2.	Proposed	Proposed Production 4417 Brass/Annum							
	capacity								
С	Location I	Details	3						
1.	Village			Chak balla	rpur-1				
2.	Tehsil			Chandrapu	ır				
3.	District			Chandrapu	ır				
4.	State			Maharashtra					
5.	Latitude &	Longitu	ıde	Sr. No Latitude "N" Longitude "E"				E"	
				1		19°50'30.71"	N	79°40'29.	33"E

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			2	19°50'21.18"N	79°40'27.11"E		
			3	19°50'20.77"N	79°40'28.78"E		
			4	19°50'30.30"N	79°40'30.98"E		
6.	Toposheet No.		56M/07				
D	Environmental Settings of the Area						
1.	River / water bo	ody	The quarry area is itself part of water body i.e. River-				
			Andhari				
2.	Nearest To	vn /	Nearest Village: Chak ballarpur-1 is at a distance of				
	City/Village		0.5 Km towards South West from the Mining area.				
3.	Nearest Railway Makudi Railway Station at a distance of 16.0 km			nce of 16.0 km in W			
	Station		direction from Chak ballarpur-1 sand ghat Site.				
4.	Nearest Airport		Chandrapur Airport 47 km away towards West.				
5.	State Boundary	/	No State boundary passes through the project site				
6.	Seismic Zone		Zone – III (Moderate)				
			This is said to be the Moderate Seismic Zone.				
D	Cost Details						
1.	Total Upset Price	æ	Rs. 29154	00/-			
Е	Requirements	of The	Project				
1.	Proposed	Water	2.60 KLD				
	Requirement						
2.	Fuel requirement N/A						
3.	Man	Power	17 (Skilled	and unskilled persons)			
	Requirement			-			

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.60

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

**Executive Summary** 

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

#### **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
1.	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-			
3.	Green Belt Development	Along River Bank	2,37,600/-			
	(Rs. 300 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93250/-			
	Total					

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.40 ha at River Andhari adjoining Gut No. 314 Mouza: Chak ballarpur, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/07.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	3			Details	
A.	Nature	of	the	Proposed	Chak	ballarpur-2 sand	ghat quarry (Minor
	Project			Mineral)			
В.	Size of the Project						
1.	Quarry Area 2.40 ha						
2.	Proposed	Prod	uction	4240 Brass/Annum			
	capacity						
С	Location I	Detail	S				
1.	Village			Chak balla	rpur		
2.	Tehsil			Chandrapu	ır		
3.	District			Chandrapu	ır		
4.	State			Maharashtra			
5.	Latitude & Longitude			Sr. No	Latitu	ude "N"	Longitude "E"
				1		19°49'28.36"N	79°40'21.77"E

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			2	19°49'10.95"N	79°40'31.08"E	
			3	19°49'11.51"N	79°40'32.30"E	
			4	19°49'28.94"N	79°40'23.00"E	
6.	Toposheet No	•	56M/07			
D	Environmental Settings of the Area					
1.	River / water body				ater body i.e. River-	
			Andhari			
2.	Nearest To	own /	Nearest V	illage: Chak ballarpur-1	is at a distance of	
	City/Village		0.5 Km towards South West from the Mining area.			
3.	Nearest	Railway	ailway Makudi Railway Station at a distance of 16.0 km in W			
	Station		direction from Chak ballarpur-1 sand ghat Site.			
4.	Nearest Airpor	t	Chandrapur Airport 47 km away towards West.			
5.	State Bounda	ry	No State b	oundary passes through the project site		
6.	Seismic Zone		Zone – III	(Moderate)		
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Pr	ice	Rs. 254400	00/-		
E	Requirement	ts of The	Project			
1.	Proposed	Water	2.60 KLD			
	Requirement					
2.	Fuel requireme	ent	N/A			
3.	Man	Power	17 (Skilled	and unskilled persons)		
	Requirement					

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.60

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

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			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

#### **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
1.	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-			
3.	Green Belt Development	Along River Bank	2,37,600/-			
	(Rs. 300 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93250/-			
	Total					

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.25 ha at River Uma River adjoining Gut. No. 171, 168 Mouza: Chak Dahegaon-2, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16 The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars				Details	S		
A.	Nature of the			Proposed	Chak	Dahegaon-2 s	and ghat	t quarry (Mir	nor
	Project			Mineral)					
В.	Size of the	e Proj	ect						
1.	Quarry Are	a		1.25 ha					
2.	Proposed Production		uction	2208 Brass	s/Annı	ım			
	capacity								
С	Location I	Details	5						
1.	Village			Chak Dahe	egaon				
2.	Tehsil			Mul					
3.	District			Chandrapur					
4.	State			Maharasht	ra				
5.	Latitude &	Longiti	ude	Pillar		Latitude		Longitude	

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		1 20° 8'37.03"	N 78°58'11.90"E	
		2 20° 8'30.70"	N 78°58'10.35"E	
		3 20° 8'31.75"	N 78°58'7.07"E	
		4 20° 8'38.08"	N 78°58'8.64"E	
6.	Toposheet No.	55 N/16		
D	<b>Environmental Settin</b>	of the Area		
1.	River / water body	The quarry area is itself par	t of water body i.e. River-	
		Jma River		
2.	Nearest Town /	Nearest Village: Chak Dahe	gaon-2 is at a distance of	
	City/Village	0.30 Km towards South from	the Mining area.	
3.	Nearest Railway	The nearest railway station	n is located Mul Railway	
	Station	Station, 7.50 Km away towards East from ML		
4.	Nearest Airport	Nagpur Airport, 111.50 km away towards North		
5.	State Boundary	No State boundary passes through the project site		
6.	Seismic Zone	Zone – III (Moderate)		
		This is said to be the Moderate Seismic Zone.		
D	Cost Details			
1.	Total Upset Price	Rs. 1324800/-		
E	Requirements of The	roject		
1.	Proposed Water	<del>_</del>		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power	·		
	Requirement	,	,	

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.50 KLD. It will be procured from the supply source of Village- Chak Dahegaon-2. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.60

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline.  Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction	Damage of river bank due to access	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is

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		of sand and transportati on	ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by, of tractor trolley &	Water Sprinkling	35,500/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	10000/-
2.	Road and River bank maintenance	Proper Maintenance of Haul road & river bank	80,000/-
2	Green Belt Development	Along River Bank	1 50 400/
3.	(Rs. 400 per tree)	Along haul road	1,58,400/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,37,250/-
	Tot	al	Rs. 4,26,700/-

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.90 ha at River Andhari adjoining Gut No. 178, 179, 180, Mouza: Chak likhithwada, Tehsil: Gondpipri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09 The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars			Details	
A.	Nature	of	the	Proposed (	Chak likhithwada sand	d ghat quarry
	Project			(Minor Mir	neral)	
B.	Size of the	e Proje	ect			
1.	Quarry Area 4.90 ha					
2.	Proposed	Produ	uction	17314 Brass/Annum		
	capacity					
С	Location Details					
1.	Village			Chak likhithwada		
2.	Tehsil			Gondpipri		
3.	District			Chandrapu	ır	
4.	State Maharashtra					
5.	Latitude & Longitude		Sr. No	Latitude "N"	Longitude "E"	
				1	19°37'43.00"N	79°29'30.21"E
				2	19°37'38.21"N	79°29'31.20"E

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		3 19°37'38.01"N 79°29'30.20"E		
		4 19°37'42.80"N 79°29'29.21"E		
6.	Toposheet No.	56M/09		
D	<b>Environmental Settin</b>	gs of the Area		
1.	River / water body	The quarry area is itself part of water body i.e. River-		
		Andhari		
2.	Nearest Town /	Nearest Village: Chak likhithwada is at a distance of		
	City/Village	1.0 Km towards South West from the Mining area.		
3.	Nearest Railway	Makudi Railway Station at a distance of 11.0 km in		
	Station	SW direction from Chak likhithwada sand ghat Site.		
4.	Nearest Airport	Nagpur Airport 165 km away towards West.		
5.	State Boundary	No State boundary passes through the project site.		
6.	Seismic Zone	Zone – III (Moderate)		
		This is said to be the Moderate Seismic Zone.		
D	Cost Details			
1.	Total Upset Price	Rs. 1113000/-		
E	Requirements of The	Project		
1.	Proposed Water	2.10 KLD		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power	8 (Skilled and unskilled persons)		
	Requirement			

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.10 KLD. It will be procured from the supply source of Village-Chak likthwada. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	0.70
3.	Green belt / Plantation	1.00
	Total	2.10

S. No.	Environme ntal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hAndharin health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will

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			Surface degradation due to road network	be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

#### **FUND PROVISION FOR EMP**

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
	Dust generation due to	Dust generation due to Environmental Baseline Monitoring (Air, Water, Noise etc.)		
1.	transportation material by. of tractor trolley &	Water Sprinkling	35,000/-	
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	10,000/-	
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-	
3.	Green Belt Development	Along River Bank	1,03,800/-	
	(Rs. 300 per tree)	Along haul road		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc.)	40000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	76100/-	
	Rs. 3,59,100/-			

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.20 ha at River Andhari River adjoining Gut. No. 97 to 100, 97/1,97/2, 97/3, 102 Mouza: Chak Naleshwar, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/9/NW.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars		Details		
A.	Nature	of the	Proposed Chak Naleshwar sand ghat quarry (Minor		
	Project		Mineral)		
В.	Size of the Project				
1.	Quarry Area		1.20 ha		
2.	Proposed	Production	2120 Brass/Annum		
	capacity				
С	Location Details				
1.	Village		Chak Naleshwar		
2.	Tehsil		Mul		
3.	District		Chandrapur		
4.	State		Maharashtra		

Proposed Chak Naleshwar Sand Ghat Project of Area 1.20 Hectare At Village- Chak Naleshwar, Tehsil- Mul, District-Chandrapur (Maharashtra)

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5.	Latitude & Long	gitude	Pillar	Latitude	Longitude	
			1	19°58'11.84"N	79°37'22.26"E	
			2	19°57'57.69"N	79°37'26.01"E	
			3	19°57'57.47"N	79°37'25.19"E	
			4	19°58'11.60"N	79°37'21.47"E	
6.	Toposheet No.		56M/9/NW	1		
D	Environmenta	al Setting	gs of the A	rea		
1.	River / water bo	ody	The quarry	y area is itself part of w	ater body i.e. River-	
			Andhari			
2.	Nearest To	wn /	Nearest V	illage: Chak Naleshwar	is at a distance of	
	City/Village		1.0 Km tov	wards East from the Min	ing area.	
3.	Nearest	Railway				
	Station		Station at a distance of 5.5 km in North direction from			
			Project Site.			
4.	Nearest Airport		Chandrapur Airport 42.2 km away towards West.			
5.	State Boundary	у	No State boundary passes through the project site			
6.	Seismic Zone		Zone – III	(Moderate)		
			This is said to be the Moderate Seismic Zone.			
D	<b>Cost Details</b>					
1.	Total Upset Price	ce	Rs. 1272000/-			
E	Requirements	s of The	Project			
1.	Proposed	Water	2.30 KLD			
	Requirement					
2.	Fuel requirement	nt	N/A			
3.	Man	Power	·			
	Requirement		(			

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.30 KLD. It will be procured from the supply source of Village- Chak Naleshwar. The detailed breakup of the water requirement is given below.

### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.30
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.30

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
N	ntal			
0.	Parameter			

# Proposed Chak Naleshwar Sand Ghat Project of Area 1.20 Hectare At Village- Chak Naleshwar, Tehsil- Mul, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and	Damage of river bank due to access ramps to river bed,	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the

Proposed Chak Naleshwar Sand Ghat Project of Area 1.20 Hectare At Village- Chak Naleshwar, Tehsil- Mul, District-Chandrapur (Maharashtra)

Executive Summary

		transportation	may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	by. of tractor trolley &	Water Sprinkling	25,000/-		
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	90,000/-		
_	Green Belt Development	Along River Bank	1 50 4007		
3.	(Rs. 400 per tree)	Along haul road	1,58,400/-		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
		Provision of PPE Kits and Periodic health			
5.	Occupational Health	check-up, Temporary Shed, Mobile toilet etc.	1,38,250/-		
	Total Rs. 5,01,650/-				

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.20 ha at River Chak somanpalli Nallah adjoining Gut No. 104,105 Mouza: Chak somanpalli, Tehsil: Gondpipri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/10.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particul	ars		Deta	ils		
A.	Nature of	f the	Proposed	Chak somanpalli	sand g	hat quarry	(Minor
	Project		Mineral)				
B.	Size of the P	roject					
1.	Quarry Area		1.20 ha				
2.	Proposed Pr	roduction	2120 Brass/Annum				
	capacity						
С	Location Details						
1.	Village		Chak soma	anpalli			
2.	Tehsil		Gondpipri				
3.	District Chandrapur						
4.	State		Maharashtra				
5.	Latitude & Longitude		Pillar	Latitude		Longitu	de
			1	19°35'25.22"N		79°38'48.39	"E

Executive Summary

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.35 KLD. It will be procured from the supply source of Village- Dhaba. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.35
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	2.35	

S. No.	Environmen tal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hHivira Nallan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.

**Executive Summary** 

			Surface degradation due to road network	
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)					
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-					
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	30,000/-					
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-					
2.	Road and River bank maintenance	Proper Maintenance of Haul road & river bank	1,00,000/-					
3.	Green Belt Development	Along River Bank	1, 18, 800/-					
	(Rs. 300 per tree)	Along haul road	_, _, _,					
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-					
5.	Occupational Health Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.		76,100/-					
	Total							

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 174, 175, 176, 204, 205, Mouza: Chichgaon, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature	of the	Proposed Chichgaon sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	e Project	
1.	Quarry Area	a	4.50 ha
2.	Proposed	Production	15901 Brass/Annum
	capacity		
С	Location [	Details	
1.	Village		Chichgaon
2.	Tehsil		Bramhpuri
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Chichgaon Sand Ghat Project of Area 4.50 Hectare At Village Chichgaon Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

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5.	Latitude & Longi	tude	Pillar	Latitude	Longitude	
			1	20°27'10.83"N	79°56'19.12"E	
			2	20°26'56.24"N	79°56'17.89"E	
			3	20°26'55.90"N	79°56'21.30"E	
			4	20°27'10.48"N	79°56'22.56"E	
6.	Toposheet No.		55P/15		_	
D	Environmental	Setting	gs of the A	rea		
1.	River / water bo	dy	The quarry	y area is itself part of w	ater body i.e. River-	
			Wainganga	a		
2.	Nearest Tow	n /	Nearest Vi	llage: Chichgaon is abou	ut 0.50 km in South	
	City/Village		West direc	tion from the Chichgaor	sand ghat Site.	
3.	Nearest I	Railway	Brahmpuri Railway Station at a distance of $\sim 19.0 \; \text{km}$			
	Station		in NW direction from Chichgaon sand ghat Site.			
4.	Nearest Airport		Nagpur Airport 110 km away towards West.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price	2	Rs. 95406	00/-		
E	Requirements	of The	Project			
1.	Proposed	Water	2.80 KLD			
	Requirement					
2.	Fuel requiremen	t	N/A			
3.	Man	Power	22 (Skilled	and unskilled persons)		
	Requirement					

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Chichgaon. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.10
2.	Dust Suppression / Water Sprinkling	0.70
3.	Green belt / Plantation	1.00
	Total	2.80

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Chichgaon Sand Ghat Project of Area 4.50 Hectare At Village Chichgaon Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining"

Proposed Chichgaon Sand Ghat Project of Area 4.50 Hectare At Village Chichgaon Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

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5.	Ecology	Extraction of sand and transportation	erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network Short-term disturbance of habitats disturbance of wildlife	Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.  The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
			populations from noise Ecological impact surrounding habitat	
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	tractor trolley & transportation of mineral	Water Sprinkling	45,000/-
	OI IIIIIlerai	Sand carrying trolleys will be Covered with Tarpaulin	10,000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,20,000/-
3.	Green Belt Development	Along River Bank	4,45,500/-
	(Rs. 400 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed,	1,63,300/-
	Joseph Louis Francis	Mobile toilet etc.	2,00,000,
	Tot	Rs. 8,68,800/-	

Proposed	Daheli	Sand	Ghat	<b>Project</b>	of	Area	2.40	Hectare	Αt	Village	Daheli	Tehsil-
Baallarpu	r, District	l-Char	ndrapı	ır (Maha	aras	shtra)						

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.40 ha at River Wardha adjoining Gut No. 15 to 19, 22, Mouza: Daheli Tehsil: Ballarpur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/12 The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	•	Details						
A.	Nature	of	the	Proposed	Proposed Daheli sand ghat quarry (Minor Mineral)					
	Project									
B.	Size of the Project									
1.	Quarry Are	а		2.40 ha						
2.	Proposed	Prod	uction	4240 Brass	s/Annum					
	capacity									
С	Location I	Detail	S							
1.	Village			Daheli						
2.	Tehsil			Gondpipri						
3.	District			Chandrapu	ır					
4.	State			Maharashtra						
5.	Latitude &	Longit	ude	Sr. No Latitude "N" Longitude "E"						
				1	19°48'50.47"N	79°23'10.95"E				

## Proposed Daheli Sand Ghat Project of Area 2.40 Hectare At Village Daheli Tehsil-Baallarpur, District-Chandrapur (Maharashtra)

Executive S	ummary
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			2	19°48'51.93"N	79°23'31.51"E		
			3	19°48'50.63"N	79°23'31.50"E		
			4	19°48'49.17"N	79°23'10.94"E		
6.	Toposheet No.		56M/09				
D	Environmenta	I Setting	gs of the A	rea			
1.	River / water bo	ody	The quarry	area is itself part of wa	ater body i.e. River-		
			Wardha				
2.	Nearest Tov	vn /	Nearest V	illage: Aarvi is at a d	istance of 1.0 Km		
	City/Village towards South West from the Mining area.						
3.	Nearest	Railway	Makudi Ra	ilway Station at a distan	ce of 6.0 km in SW		
	Station	-	direction from Aarvi sand ghat Site.				
4.	Nearest Airport		Nagpur Airport 168 km away towards West.				
5.	State Boundary		No State boundary passes through the project site				
6.	Seismic Zone		Zone – III (Moderate)				
			This is said to be the Moderate Seismic Zone.				
D	Cost Details		<u> </u>				
1.	Total Upset Pric	æ	Rs. 25440	00/-			
E	Requirements	of The	Project				
1.	Proposed	Water	2.80 KLD				
	Requirement						
2.	Fuel requiremen	l requirement N/A					
3.	Man	Power	17 (Skilled and unskilled persons)				
	Requirement		•	. ,			
	1						

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.80
2.	Dust Suppression / Water Sprinkling	1.0
3.	Green belt / Plantation	1.00
	Total	2.80

S. No.	Environme ntal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water

# Proposed Daheli Sand Ghat Project of Area 2.40 Hectare At Village Daheli Tehsil-Baallarpur, District-Chandrapur (Maharashtra)

			may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	regime. Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipment's except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

Proposed Daheli Sand Ghat Project of Area 2.40 Hectare At Village Daheli Tehsil-Baallarpur, District-Chandrapur (Maharashtra)

Executive Summary

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
	Dust generation due to transportation material by. of tractor trolley & transportation of mineral	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-	
1.		Water Sprinkling	35,000/-	
		Sand carrying trolleys will be Covered with Tarpaulin	5000/-	
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-	
3.	Green Belt Development	Along River Bank	2,37,600/-	
	(Rs. 300 per tree)	Along haul road		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93,250/-	
	То	otal	Rs. 5,55,850/-	

Proposed	Dhaba	Sand	Ghat	Project	of A	Area	2.10	Hectare	Αt	Village	Dhaba	Tehsil-
Gondpipr	i, District-	·Chan	drapu	ır (Maha	ırash	tra)						

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.10 ha at River Wardha adjoining Gut No. 369, Mouza: Dhaba, Tehsil: Gondpipri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09 The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	}		Details		
A.	Nature	of	the	Proposed	Proposed Dhaba sand ghat quarry (Minor Mineral)		
	Project						
B.	Size of the Project						
1.	Quarry Are	a		2.10 ha			
2.	Proposed	Produ	uction	1855 Brass	s/Annum		
	capacity						
С	Location [	Details	5				
1.	Village			Dhaba			
2.	Tehsil			Gondpipri			
3.	District			Chandrapu	ır		
4.	State			Maharashtra			
5.	Latitude &	Longitu	ıde	Sr. No Latitude "N" Longitude "E"		Longitude "E"	
				1	19°36'15.02"N	79°38'46.95"E	
				2	19°36'5.50"N	79°38'53.54"E	

## Proposed Dhaba Sand Ghat Project of Area 2.10 Hectare At Village Dhaba Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

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01"E			
5.46"E			
The quarry area is itself part of water body i.e. River-			
1.0 Km			
m in SW			
direction from Dhaba sand ghat Site.			
Nagpur Airport 168 km away towards West.			
No State boundary passes through the project site			
Zone – III (Moderate)			
This is said to be the Moderate Seismic Zone.			
ľ			

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Dhaba. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.90
2.	Dust Suppression / Water Sprinkling	0.70
3.	Green belt / Plantation	1.00
	Total	2.60

S. No.	Environme ntal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

## Proposed Dhaba Sand Ghat Project of Area 2.10 Hectare At Village Dhaba Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will

## Proposed Dhaba Sand Ghat Project of Area 2.10 Hectare At Village Dhaba Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

Executive Summary

			Surface degradation due to road network	be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	transportation material by. of tractor trolley &	Water Sprinkling	15,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	70,000/-
3.	Green Belt Development Along River Bank		1,03,800/-
	(Rs. 300 per tree)	(Rs. 300 per tree) Along haul road	
4.	Security  Display Boards and other security measures (CCTV, Fencing etc)		40000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	76100/-
	Rs. 3,59,100/-		

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**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.44 ha at River Wardha adjoining Gut no. 139,140,141 Mouza: Dindoda soit, Tehsil: Warora, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55L/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars		Details						
A.	Nature	of	the	Proposed	Dindoda	soit sa	and	ghat	quarry	(Minor
	Project			Mineral)						
B.	Size of the Project									
1.	Quarry Area			2.0 ha						
2.	Proposed Production			7067 Brass/Annum						
	capacity									
С	Location I	Details								
1.	Village			Dindoda s	oit					
2.	Tehsil			Warora						
3.	District			Chandrapur						
4.	State	tate		Maharashtra						
5.	Latitude &	Longitu	de	Pillar	L	atitude		L	ongitu	de
				1	20°	17'14.23"N		7	8°48'38.	08"E

Executive Summary

	T			,		
		2	20°17'8.68"N	78°48'44.39"E		
		3	20°17'6.56"N	78°48'42.76"E		
		4	20°17'12.12"N	78°48'36.46"E		
6.	Toposheet No.	55L/16				
D	Environmental Settings of the Area					
1.	River / water body	The quarry	The quarry area is itself part of water body i.e. River-			
		Wardha				
2.	Nearest Town /	Nearest Vi	llage: soit is at a distar	nce of 1.25 km in SE		
	City/Village	direction fi	direction from the project site.			
3.	Nearest Railway The nearest railway station is located Warora Railw					
	Station	Station, 1	4.65 Km away toward	s NE Direction from		
		Project Site.				
4.	Nearest Airport	Chadrapur Airport, 35.60 km away towards SEE				
		direction				
5.	State Boundary	No State boundary passes through the project site				
6.	Seismic Zone	Zone – III	Zone – III (Moderate)			
		This is said to be the Moderate Seismic Zone.				
D	Cost Details					
1.	Total Upset Price	Rs. 424020	Rs. 4240200/-			
E	Requirements of The	Project				
1.	Proposed Water	2.30 KLD				
	Requirement					
2.	Fuel requirement	N/A	N/A			
3.	Man Power	· ·				
	Requirement					

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.30 KLD. It will be procured from the supply source of Village- Karanji. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.30
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.30

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and	Damage of river bank due to access ramps to river bed,	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the

Executive Summary

		transportati on	may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
1.	Dust generation due to	Environmental Baseline Monitoring (Air,	45,000/-
	transportation material by. of	Water, Noise etc.)	
	tractor trolley & transportation of	Water Sprinkling	40,000/-
	mineral	Sand carrying trolleys will be Covered	5000/-
		with Tarpaulin	
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
3.	Green Belt Development	Along River Bank	1,99,800/-
	(Rs. 400 per tree)	Along haul road	
4.	Security	Display Boards and other security	40,000/-
		measures (CCTV, Fencing etc)	
5.	Occupational Health	Provision of PPE Kits and Periodic health	133,100/-
		check-up, Temporary Shed, Mobile	
		toilet etc.	
	Total		Rs. 5,62,900/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.20 ha at River Uma River adjoining Gut. No. 228, 236 Mouza: Dongargaon, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/12/NE.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars			D	etails			
A.	Nature	of	the	Proposed	Dongargaon	sand	ghat	quarry	(Minor
	Project			Mineral)					
B.	Size of the Project								
1.	Quarry Area	a		1.20 ha					
2.	Proposed	Produ	uction	2120 Bras	s/Annum				
	capacity								
С	Location [	Details	5						
1.	Village			Dongarga	on				
2.	Tehsil			Mul					
3.	District			Chandrapu	ır				
4.	State			Maharasht	ra				

Executive Summary

5.	Latitude & Long	itude	Pillar	Latitude	Longitude
			1	20°11'5.68"N	79°39'39.69"E
			2	20°10'45.57"N	79°39'50.98"E
			3	20°10'44.86"N	79°39'50.22"E
			4	20°11'4.97"N	79°39'38.92"E
6.	Toposheet No.		55P/12/NE	-	
D	Environmenta	l Setting	gs of the A	rea	
1.	River / water bo	dy	The quarry	y area is itself part of wa	ater body i.e. River-
			Uma		
2.	Nearest Town / Nearest Village: Dongargaon is at a distance of			t a distance of 2.0	
	City/Village Km towards Sou			ds South East from the M	lining area.
3.	Nearest	Railway	The nearest railway station is located Mul Railway		
	Station		Station at a distance of 14.0 km in South direction		
			from Proje	ect Site.	
4.	Nearest Airport		Chandrapur Airport 101 km away towards SW.		
5.	State Boundary	•	No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	Cost Details				
1.	Total Upset Price	е	Rs. 12720	00/-	
E	Requirements	of The	Project		
1.	Proposed	Water	3.10 KLD		
	Requirement				
2.	Fuel requiremen	ıt	N/A		
3.	Man	Power	12(Skilled	and unskilled persons)	
	Requirement				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Dongargaon. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	3.10

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No	. tal			
	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportatio n of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline.  Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation.  Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportatio n	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be

Executive Summary

			extraction of sand. Surface degradation due to road network	avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-	
1.	by, of tractor trolley &	Water Sprinkling	30,000/-	
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-	
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-	
2	Green Belt Development	Along River Bank	1 10 000/	
3.	(Rs. 300 per tree)	Along haul road	1,18,800/-	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	81,500/	
	Tot	al	Rs. 4,03,000/-	

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Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.80 ha at River Wainganga adjoining Gut No. 89, 90, 91, 96, 97, 959, 958, 954, Mouza: Halda-1, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Partio	culars	Details
A.	Nature of the		Proposed Halada-2 sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	Project	
1.	Quarry Area	a	4.80 ha
2.	Proposed	Production	16961 Brass/Annum
	capacity		
С	Location D	Details	
1.	Village		Halda-1
2.	Tehsil		Bramhpuri
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Halda-1 Sand Ghat Project of Area 4.80 Hectare At Village Halada Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitude	е	Pillar	Latitude	Longitude
			1	20°20'18.21"N	79°57'40.37"E
			2	20°20'9.04"N	79°57'26.98"E
			3	20°20'6.16"N	79°57'28.63"E
			4	20°20'15.34"N	79°57'42.01"E
6.	Toposheet No.		55P/15		
D	<b>Environmental Se</b>	tting	gs of the A	rea	
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-
			Wainganga		
2.	Nearest Town	/	Nearest Vi	llage: Village Halda is a	bout 3.0 km in NW
	City/Village		direction from the Halda sand ghat Site.		
3.	Nearest Rails	way	Talodhi Railway Station at a distance of ~ 30.0 km in		
	Station		NW direction from Halda sand ghat Site.		
4.	Nearest Airport		Nagpur Airport 110 km away towards West.		
5.	State Boundary		No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	Cost Details				
1.	Total Upset Price		Rs. 10176600/-		
E	Requirements of	The	Project		
1.	Proposed Wa	ater	4.50 KLD		
	Requirement				
2.	Fuel requirement		N/A		
3.	Man Po	wer	28 (Skilled	and unskilled persons)	
	Requirement				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Halada-2. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

## Proposed Halda-1 Sand Ghat Project of Area 4.80 Hectare At Village Halada Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

## Proposed Halda-1 Sand Ghat Project of Area 4.80 Hectare At Village Halada Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

			bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to					
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-			
3.	Green Belt Development	Along River Bank	4,86,900/-			
	(Rs. 400 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-			
	Total					

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 915,950,951, 933 to 938 Mouza: Halda-2, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature of the		Proposed Halada-2 sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	e Project	
1.	Quarry Area	a	4.50 ha
2.	Proposed	Production	23852 Brass/Annum
	capacity		
С	Location [	Details	
1.	Village		Halda-2
2.	Tehsil		Bramhpuri
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Halda-2 Sand Ghat Project of Area 4.50 Hectare At Village Halada-2 Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longit	ude	Pillar	Latitude	Longitude
			1	20°20'48.81"N	79°58'9.34"E
			2	20°20'36.05"N	79°58'1.74"E
			3	20°20'34.08"N	79°58'4.53"E
			4	20°20'46.87"N	79°58'12.11"E
6.	Toposheet No.		55P/15		
D	Environmental	Setting	gs of the A	rea	
1.	River / water bod	У	The quarry	y area is itself part of wa	ater body i.e. River-
			Wainganga	a	
2.	Nearest Towr	າ /	Nearest Vi	llage: Village Halda is a	bout 3.0 km in NW
	City/Village		direction from the Halda sand ghat Site.		
3.		ailway	Talodhi Railway Station at a distance of ~ 30.0 km in		
	Station		NW direction from Halda sand ghat Site.		
4.	Nearest Airport		Nagpur Airport 110 km away towards West.		
5.	State Boundary		No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said	d to be the Moderate Sei	smic Zone.
D	Cost Details				
1.	Total Upset Price		Rs. 143112	200/-	
E	Requirements of	of The	Project		
1.	Proposed	Water	4.50 KLD		
	Requirement				
2.	Fuel requirement		N/A		
3.	Man	Power	28 (Skilled	and unskilled persons)	
	Requirement				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Halada-2. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Halda-2 Sand Ghat Project of Area 4.50 Hectare At Village Halada-2 Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

Proposed Halda-2 Sand Ghat Project of Area 4.50 Hectare At Village Halada-2 Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

			bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
1.	Dust generation due to transportation material by. of tractor trolley & transportation of mineral	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-	
		Water Sprinkling	35,000/-	
		Sand carrying trolleys will be Covered with Tarpaulin	5000/-	
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-	
3.	Green Belt Development	Along River Bank	4,86,900/-	
	(Rs. 400 per tree)	Along haul road	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-	
	Rs. 8,35,500/-			

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.50 ha at River Wainganga adjoining Gut No. 912, 910, 909 Mouza: Halda-3, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature	of the	Proposed Halada-3 sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the Project		
1.	Quarry Area		2.50 ha
2.	Proposed	Production	8834 Brass/Annum
	capacity		
С	Location Details		
1.	Village		Halda
2.	Tehsil		Bramhpuri
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Halda-3 Sand Ghat Project of Area 2.50 Hectare At Village Halada Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitud	de	Pillar	Latitude	Longitude
			1	20°21'43.94"N	79°58'6.50"E
			2	20°21'51.57"N	79°58'3.53"E
			3	20°21'52.72"N	79°58'6.74"E
			4	20°21'45.10"N	79°58'9.73"E
6.	Toposheet No.		55P/15		
D	<b>Environmental S</b>	etting	gs of the A	rea	
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-
			Wainganga		
2.	Nearest Town	/	Nearest Vi	llage: Village Halda is a	bout 3.0 km in NW
	City/Village		direction from the Halda sand ghat Site.		
3.	Nearest Rai	lway	Talodhi Railway Station at a distance of ~ 30.0 km in		
	Station		NW direction from Halda sand ghat Site.		
4.	Nearest Airport		Nagpur Airport 110 km away towards West.		
5.	State Boundary		No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	Cost Details				
1.	Total Upset Price		Rs. 5300400/-		
E	Requirements of	The	Project		
1.	Proposed Water		4.50 KLD		
	Requirement				
2.	Fuel requirement		N/A		
3.	Man P	ower	28 (Skilled	and unskilled persons)	
	Requirement				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Halada-2. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Halda-3 Sand Ghat Project of Area 2.50 Hectare At Village Halada Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

## Proposed Halda-3 Sand Ghat Project of Area 2.50 Hectare At Village Halada Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

			bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	4,86,900/-		
	(Rs. 400 per tree)	Along haul road	, , , , , , , , , , , , , , , , , , , ,		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-		
	Total				

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.20 ha at River Uma River adjoining Gut. No. 228, 236 Mouza: Haldigaon ganna, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/12/NE.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature	of the	Proposed Haldigaon ganna sand ghat quarry (Minor
	Project		Mineral)
В.	Size of the	e Project	
1.	Quarry Area		1.20 ha
2.	Proposed	Production	4240 Brass/Annum
	capacity		
С	Location D	Details	
1.	Village		Haldigaon ganna
2.	Tehsil		Mul
3.	District		Chandrapur
4.	State		Maharashtra

**Executive Summary** 

5.	Latitude & Lond	gitude	Pillar	Latitude	Longitude
			1	20° 0'28.97"N	79°41'33.70"E
			2	20° 0'33.67"N	79°41'38.46"E
			3	20° 0'32.54"N	79°41'40.16"E
			4	20° 0'27.84"N	79°41'35.40"E
6.	Toposheet No.		55P/12/NE	-	_
D	Environmenta	al Setting	gs of the A	rea	
1.	River / water b	ody	The quarry	y area is itself part of w	ater body i.e. River-
			Uma		
2.	Nearest To	wn /	/ Nearest Village: Haldigaon ganna is at a distance of		
	City/Village		2.0 Km towards South East from the Mining area.		
3.	Nearest	Railway	The nearest railway station is located Mul Railway		
	Station		Station at a distance of 14.0 km in South direction		
			from Proje	ct Site.	
4.	Nearest Airport		Chandrapur Airport 101 km away towards SW.		
5.	State Boundar	у	No State boundary passes through the project site		
6.	Seismic Zone		Zone – III	(Moderate)	
			This is said to be the Moderate Seismic Zone.		
D	Cost Details				
1.	Total Upset Pric	ce	Rs. 2544000/-		
E	Requirement	s of The	Project		
1.	Proposed	Water	3.10 KLD		
	Requirement				
2.	Fuel requireme	nt	N/A		
3.	Man	Power	12(Skilled	and unskilled persons)	
	Requirement				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Haldigaon ganna. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	3.10

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			
	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportatio n of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportatio n	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be

Executive Summary

			extraction of sand. Surface degradation due to road network	avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items Control Measures		Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by, of tractor trolley &	Water Sprinkling	30,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-
2	Green Belt Development	ment Along River Bank	
3.	(Rs. 300 per tree)	Along haul road	1,18,800/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	81,500/
	Tot	al	Rs. 4,03,000/-

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Proposed Hivira-1 Sand Ghat Project of Area 1.50 Hectare At Village Hivira-1 Te	hsil-
Gondpipri, District-Chandrapur (Maharashtra)	

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.50 ha at River Hivira Nallah adjoining Gut No. 297, 298, 280, Mouza: Hivira-1, Tehsil: Gondpipri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/10.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	•		Details	
A.	Nature	of	the	Proposed I	Hivira-1 sand ghat qu	arry (Minor Mineral)
	Project					
B.	Size of the Project					
1.	Quarry Area	a		1.50 ha		
2.	Proposed	Prod	uction	2650 Brass/Annum		
	capacity					
С	Location I	Details	S			
1.	Village			Hivira-1		
2.	Tehsil			Gondpipri		
3.	District			Chandrapu	ır	
4.	State			Maharashtra		
5.	Latitude &	Longit	ude	Pillar Latitude Longitude		
				1	19°35'25.22"N	79°38'48.39"E

## Proposed Hivira-1 Sand Ghat Project of Area 1.50 Hectare At Village Hivira-1 Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

Executive Summary

	1	TT-				
		2	19°35'9.58"N	79°38'53.08"E		
		3	19°35'25.59"N	79°38'49.35"E		
		4	19°35'9.95"N	79°38'54.04"E		
6.	Toposheet No.	56M/10				
D	<b>Environmental Settin</b>	gs of the Area				
1.	River / water body	The quarry	The quarry area is itself part of water body i.e. River-			
		Hivira Nall	Hivira Nallah			
2.	Nearest Town /	Nearest Village: Hiwara-1 village is about 2.0 km in				
	City/Village	West direction from the Hiwara-1 sand ghat Site.				
3.	Nearest Railway	Shirpur Railway Station at a distance of ~ 16.0 km in				
	Station	SW direction from Hiwara-1 sand ghat Site.				
4.	Nearest Airport	Morwa Airport 64 km away towards West.				
5.	State Boundary	No State b	oundary passes through	the project site		
6.	Seismic Zone	Zone – III (Moderate)				
		This is said	d to be the Moderate Sei	smic Zone.		
D	Cost Details					
1.	Total Upset Price	Rs. 10983	800/-			
E	Requirements of The	Project				
1.	Proposed Water	2.35 KLD				
	Requirement					
2.	Fuel requirement	N/A				
3.	Man Power	8 (Skilled and unskilled persons)				
	Requirement					

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.35 KLD. It will be procured from the supply source of Village- Hivira-1. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.35
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.35

S. No.	Environmen tal	Activities	Predict Impact	EMP/Mitigation Measures
	Parameter			
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

# Proposed Hivira-1 Sand Ghat Project of Area 1.50 Hectare At Village Hivira-1 Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hHivira Nallan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.

Proposed Hivira-1 Sand Ghat Project of Area 1.50 Hectare At Village Hivira-1 Tehsil-Gondpipri, District-Chandrapur (Maharashtra)

**Executive Summary** 

			Surface degradation due to road network	
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

	5	Environmental Baseline Monitoring				
	Dust generation due to (Air, Water, Noise etc.)		45,000/-			
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	30,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road and River bank maintenance	Proper Maintenance of Haul road & river bank	1,80,000/-			
3.	Green Belt Development	Along River Bank	1,38,800/-			
	(Rs. 400 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,37,250/-			
<u> </u>	Total					

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.0 ha at River Wardha adjoining Gut No. 128 to 131, 154, 156 Mouza: Jenaniwali , Tehsil: Bhadravati, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Partic	ulars			Details			
A.	Nature of th	e Project	Proposed	Jenaniwali	sand	ghat	quarry	(Minor
			Mineral)					
B.	Size of the F	Project						
1.	Quarry Area		2.0 ha					
2.	Proposed	Production	3534 Bras	s/Annum				
	capacity							
С	Location De	tails						
1.	Village		Jenaniwali					
2.	Tehsil		Bhadravat	i				
3.	District		Chandrapı	ır				
4.	State		Maharasht	ra				

Proposed Jenaniwali Sand Ghat Project of Area 2.0 Hectare At Village Jenaniwali Tehsil- Bhadravati, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitude	Pillar	Latitude	Longitude	
		1	20°17'58.57"N	79°12'50.71"E	
		2	20°17'45.30"N	79°12'54.14"E	
		3	20°17'45.55"N	79°12'54.96"E	
		4	20°17'58.82"N	79°12'51.53"E	
6.	Toposheet No.	55P/16			
D	<b>Environmental Settings</b>	of the Ar	ea		
1.	River / water body	The quar	ry area is itself part	of water body i.e.	
		River-War	dha		
2.	Nearest Town /	/ Nearest Village: Jenaniwali is about 1.0 km in Eas			
	City/Village	direction from the Ralegaon Reeth sand ghat Site			
3.	Nearest Railway Station	Majri Railway Station at a distance of $\sim$ 7.0 km in			
		East direct	on from Jenaniwali sand ghat Site.		
4.	Nearest Airport	Morwa Airport 47 km away towards West.			
5.	State Boundary	No State b	ooundary passes throug	h the project site	
6.	Seismic Zone	Zone – III (Moderate)			
		This is said	d to be the Moderate Se	eismic Zone.	
D	Cost Details				
1.	Total Upset Price	Rs. 11130	00/-		
E	Requirements of The Pr	oject			
1.	Proposed Water	2.60 KLD			
	Requirement				
2.	Fuel requirement	N/A			
3.	Man Power Requirement	18 (Skilled	(Skilled and unskilled persons)		

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village- Jenaniwali . The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.10
3.	Green belt / Plantation	1.00
	Total	2.60

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

## Proposed Jenaniwali Sand Ghat Project of Area 2.0 Hectare At Village Jenaniwali Tehsil- Bhadravati, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil erosion.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

Proposed Jenaniwali Sand Ghat Project of Area 2.0 Hectare At Village Jenaniwali Tehsil- Bhadravati, District-Chandrapur (Maharashtra)

Executive Summary

			Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	tractor trolley & transportation	Water Sprinkling	35,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-			
3.	Green Belt Development	Along River Bank	1,99,800/-			
	(Rs. 300 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,16,100/-			
	Total					

Proposed Jungaon Sand Ghat Project of Area 1.25 Hectare At Village Jungaon	Tehsil-
Chandrapur, District-Chandrapur (Maharashtra)	

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.25 ha at River Andhari adjoining Gut No. 7, 8, 718 Mouza: Jungaon, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/07.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars		Details			
A.	Nature	of th	ıe	Proposed 3	Proposed Jungaon sand ghat quarry (Minor Mineral)		
	Project						
B.	Size of the	e Project					
1.	Quarry Are	а		1.25 ha			
2.	Proposed	Production	on	4417 Brass/Annum			
	capacity						
С	Location I	Details					
1.	Village			Jungaon			
2.	Tehsil			Chandrapu	ır		
3.	District			Chandrapu	Chandrapur		
4.	State			Maharashtra			
5.	Latitude &	Longitude		Sr. No Latitude "N" Longitude "E"			
				1	19°53'25.22"N	79°47'57.62"E	

## Proposed Jungaon Sand Ghat Project of Area 1.25 Hectare At Village Jungaon Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

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			2	19°53'19.68"N	79°47'51.33"E
			3	19°53'18.41"N	79°47'52.41"E
			4	19°53'23.95"N	79°47'58.69"E
6.	Toposheet No.		56M/07		
D	Environmental Settings of the Area				
1.	River / water b	ody	The quarry	y area is itself part of wa	ater body i.e. River-
			Andhari		
2.	Nearest To	wn /	Nearest Vi	llage: Jungaon-1 is at a	distance of 0.8 Km
	City/Village		towards So	outh West from the Minii	ng area.
3.	Nearest	Railway	Makudi Ra	ilway Station at a distan	ce of 12.0 km in W
	Station		direction from Jungaon sand ghat Site.		
4.	Nearest Airport	t	Chandrapur Airport 47 km away towards West.		
5.	State Boundar	у	No State b	oundary passes through	the project site
6.	Seismic Zone		Zone – III	(Moderate)	
			This is said	d to be the Moderate Sei	smic Zone.
D	Cost Details				
1.	Total Upset Pri	ce	Rs. 610620	00/-	
E	Requirement	s of The	Project		
1.	Proposed	Water	2.60 KLD		
	Requirement				
2.	Fuel requireme	ent	N/A		
3.	Man	Power	17 (Skilled	and unskilled persons)	
	Requirement		•	•	
	l .				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	2.60	

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

## Proposed Jungaon Sand Ghat Project of Area 1.25 Hectare At Village Jungaon Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

Proposed Jungaon Sand Ghat Project of Area 1.25 Hectare At Village Jungaon Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

**Executive Summary** 

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
3.	Green Belt Development	Along River Bank	2,37,600/-
	(Rs. 300 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93000/-
	Tot	tal	Rs. 5,65,500/-

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Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.05 ha at River Uma adjoining Gut No. 145, 146, 246, 247/1, 247/2,249,301 Mouza: Kadamgaon tukam, Tehsil: Sindewahi District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/12.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature of the		Proposed Kadamgaon tukam sand ghat quarry (Minor
	Project		Mineral)
В.	Size of the	e Project	
1.	Quarry Area	a	1.05 ha
2.	Proposed	Production	1855 Brass/Annum
	capacity		
С	Location [	Details	
1.	Village		Kadamgaon tukam
2.	Tehsil		Sindewahi
3.	District		Chandrapur
4.	State		Maharashtra

### Proposed Kadamgaon tukam Sand Ghat Project of Area 1.05 Hectare At Village Kadamgaon tukam, Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

Executive Summary

5.	Latitude & Longitude	Pillar	Latitude	Longitude	
		1	20°14'41.71"N	79°37'50.50"E	
		2	20°14'38.75"N	79°37'51.93"E	
		3	20°14'39.21"N	79°37'53.21"E	
		4	20°14'42.17"N	79°37'51.79"E	
6.	Toposheet No.	55P/12			
D	<b>Environmental Setting</b>	gs of the A	irea		
1.	River / water body	The quarr	y area is itself part of wa	ater body i.e. River-	
		Uma			
2.	Nearest Town /	Nearest V	ʻillage: Kalamgaon Tuku	ım village is about	
	City/Village	1.00 km ii	n SW direction from the	Kalamgaon Tukum	
		sand ghat	Site.		
3.	Nearest Railway	The nearest railway station is located Sindewahi			
	Station	Railway Station at a distance of ~7.0 km in NE			
		direction from Project Site.			
4.	Nearest Airport	Morwa Airport 52 km away towards South.			
5.	State Boundary	No State boundary passes through the project site			
6.	Seismic Zone	Zone – III (Moderate)			
		This is said to be the Moderate Seismic Zone.			
D	Cost Details				
1.	Total Upset Price	Rs. 1113000/-			
Е	Requirements of The	Project			
1.	Proposed Water	2.50 KLD			
	Requirement				
2.	Fuel requirement	N/A			
3.	Man Power	8 (Skilled	and unskilled persons)		
	Requirement				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.50 KLD. It will be procured from the supply source of Village- Kadamgaon tukam. The detailed breakup of the water requirement is given below.

### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.10
3.	Green belt / Plantation	1.00
	Total	2.50

S. Environ Activities Predict Impact EMP/Mitigation Measures	S.	Environ	Activities	Predict Impact	EMP/Mitigation Measures
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Proposed Kadamgaon tukam Sand Ghat Project of Area 1.05 Hectare At Village Kadamgaon tukam, Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

N	mental			
ο.	Parame			
	ter			
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportatio n of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline.  Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportatio n	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed

## Proposed Kadamgaon tukam Sand Ghat Project of Area 1.05 Hectare At Village Kadamgaon tukam, Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

**Executive Summary** 

			extraction of sand. Surface degradation due to road network	for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportatio n	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)				
	Dust generation due to						
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	25,000/-				
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-				
2.	Road and River bank maintenance	Proper Maintenance of Haul road & river bank	120,000/-				
3.	Green Belt Development	Along River Bank	1,03,800/-				
	(Rs. 400 per tree)	(Rs. 400 per tree) Along haul road					
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-				
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,12,100/-				
	Total						

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Proposed Kag Sand	<b>Ghat Project</b>	of Area	1.20	Hectare	Αt	Village-	Kag,	Tehsil-
Chimur, District-Chan	drapur (Maha	rashtra)						

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.00 ha at River Uma adjoining Gut. No. 83, 84, 85, 103/3 Mouza: Kag, Tehsil: Chimur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/7/NE The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars			Details		
A.	Nature	of	the	Proposed I	Kag sand ghat quarry	/ (Minor Mineral)	
	Project						
B.	Size of the Project						
1.	Quarry Area			1.20 ha			
2.	Proposed	Prod	uction	2120 Brass/Annum			
	capacity						
С	Location [	Details	5				
1.	Village			Kag			
2.	Tehsil			Chimur			
3.	District			Chandrapur			
4.	State			Maharashtra			
5.	Latitude &	Longitu	ıde	Pillar Latitude Longitude			
				1	20°28'12.64"N	79°24'34.78"E	

Proposed Kag Sand Ghat Project of Area 1.20 Hectare At Village- Kag, Tehsil-Chimur, District-Chandrapur (Maharashtra)

Executive Summary

2	20°28'17.60"N	79°24'25.87"E			
3	20°28'18.71"N	79°24'26.57"E			
4	20°28'13.76"N	79°24'35.49"E			
55P/7/NE	55P/7/NE				
ettings of the A	tings of the Area				
River / water body The quarry area is itself part of water body i.e. River					
Uma	Uma				
/ Nearest \	/ Nearest Village: Kag is at a distance of 0.30 Km				
City/Village towards South from the Mining area.					
Nearest Railway The nearest railway station is located Chimur R					
Station, 7.50 Km away towards East from ML					
Nearest Airport Nagpur Airport, 111.50 km away towards North					
No State	No State boundary passes through the project site				
Zone – II	Zone – III (Moderate)				
This is sa	This is said to be the Moderate Seismic Zone.				
Rs. 12,72	Rs. 12,72,000/-				
of The Project					
Vater 2.25 KLD					
N/A	N/A				
ower 12 (Skille	d and unskilled persons)				
	3 4 55P/7/NE Settings of the A The quart Uma / Nearest N towards S ilway The neare Station, 7 Nagpur A No State Zone – III This is sai  Rs. 12,72 F The Project Vater 2.25 KLD	3 20°28'18.71"N 4 20°28'13.76"N  55P/7/NE  Settings of the Area  The quarry area is itself part of wards South from the Mining are illway  The nearest railway station is local Station, 7.50 Km away towards Earl Nagpur Airport, 111.50 km away towards Earl No State boundary passes through Zone – III (Moderate)  This is said to be the Moderate Sei  Rs. 12,72,000/-  F The Project  Vater 2.25 KLD			

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.25 KLD. It will be procured from the supply source of Village- Kag. The detailed breakup of the water requirement is given below.

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	0.85
3.	Green belt / Plantation	1.00
	Total	2.25

**Table: Water Demand** 

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change

# Proposed Kag Sand Ghat Project of Area 1.20 Hectare At Village- Kag, Tehsil-Chimur, District-Chandrapur (Maharashtra)

			water quality and ground water quality Waste water discharge	in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and	Short-term disturbance of	The green belt/community forestry near river bank and approach road will restrict

Proposed Kag	Sand	Ghat	Project	of	Area	1.20	Hectare	At	Village-	Kag,	Tehsil-
Chimur, District	-Chan	drapur	r (Mahar	ash	ntra)						
									Executi	ive Sui	mmary

		transportati on	habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by, of tractor trolley &	Water Sprinkling	40,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
_	Green Belt Development	Along River Bank	1.10.000/
3.	(Rs. 400 per tree)	Along haul road	1,18,000/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,16,100/-
	Tot	al	Rs. 4,64,900/-

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.10 ha at River Wardha adjoining Gut No. 145, 146, 147, 148, 149 Mouza: Karanji, Tehsil: Warora, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55L/16/NE.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Partio	culars	Details
A.	Nature	of the	Proposed Karanji sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	Project	
1.	Quarry Area	a	2.10 ha
2.	Proposed	Production	7420 Brass/Annum
	capacity		
С	Location D	<b>Details</b>	
1.	Village		Karanji
2.	Tehsil		Warora
3.	District		Chandrapur
4.	State		Maharashtra

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5.	Latitude & Longi	tude	Pillar	Latitude	Longitude		
		caac	1	20°10'0.10"N	78°57'57.27"E		
			2	20°10'1.74"N	78°57'47.07"E		
			3	20° 9'59.51"N	78°57'46.36"E		
			4	20° 9'57.91"N	78°57'56.56"E		
6.	Toposheet No.		55L/16/NE				
D	Environmental	Setting	gs of the A	irea			
1.	River / water bo	dy	The quarry area is itself part of water body i.e. River-				
			Wardha				
2.	Nearest Tow	n /	Nearest Village: Karanji is at a distance of 2.00 Km				
	City/Village towards North from the M				a.		
3.	Nearest F	Railway					
	Station		Railway St	ilway Station, 8.29 Km away towards SSE Direction			
4.	Nearest Airport		Chandrapur Morwa Airport, 32.90 km away towards SSE				
5.	State Boundary		No State boundary passes through the project site				
6.	Seismic Zone		Zone – III (Moderate)				
			This is said to be the Moderate Seismic Zone.				
D	Cost Details						
1.	Total Upset Price	9	Rs. 44520	00/-			
E	Requirements	of The	Project				
1.	Proposed	Water	2.20 KLD				
	Requirement						
2.	Fuel requiremen	ent N/A					
3.	Man	Power	22 (Skilled	and unskilled persons)			
	Requirement			-			

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.20 KLD. It will be procured from the supply source of Village- Karanji. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	0.80
3.	Green belt / Plantation	1.00
	Total	2.20

S. No.	Environ mental Parame	Activities	Predict Impact	EMP/Mitigation Measures
	ter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining"

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			erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	tractor trolley & transportation	Water Sprinkling	45,000/-
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,50,000/-
3.	Green Belt Development	Along River Bank	2,07,900/-
	(Rs. 400 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,33,100/-
	Tot	tal	Rs. 6,21,000/-

Proposed Karwai Sand Ghat Project of Area 2.40 Hectare At Village- Karwai, Teh	ısil-
Koparna, District-Chandrapur (Maharashtra)	

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.40 ha at River Painganga River adjoining Gut. No. 2, 3, Mouza: **Karwai**, Tehsil: Koparna, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/1.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details			
A.	Nature of the Project Proposed Karwai s		Karwai sand ghat quarr	y (Minor Mineral)	
В.	Size of the Project				
1.	Quarry Area	2.40 ha	2.40 ha		
2.	Proposed Production	4240 Bras	4240 Brass/Annum		
	capacity				
С	<b>Location Details</b>	ocation Details			
1.	Village	Karwai			
2.	Tehsil	Koparna			
3.	District	Chandrapur			
4.	State	Maharashtra			
5.	Latitude & Longitude	Pillar Latitude Longitude			
		1	19°50'42.66"N	79° 6'14.77"E	
		2	19°50'35.67"N	79° 6'3.18"E	

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	•				
		3	19°50'37.72"N	79° 6'2.78"E	
		4	19°50'44.75"N	79° 6'14.37"E	
6.	Toposheet No.	56M/1			
D	<b>Environmental Settings</b>	of the Ar	ea		
1.	River / water body	The quar	The quarry area is itself part of water body i.e.		
		River-Pen	ganga		
2.	Nearest Town /	Nearest Village: Karwai is at a distance of 1.0 Km			
	City/Village	towards S	outh from the Mining ar	ea.	
3.	Nearest Railway Station	The near	est railway station is lo	ocated Chandrapur	
		Railway Station at a distance of 19.10 km in NE			
		direction from Project Site.			
4.	Nearest Airport	Nagpur Airport 138.50 km away towards North.			
5.	State Boundary	No State boundary passes through the project site			
6.	Seismic Zone	Zone – III (Moderate)			
		This is said to be the Moderate Seismic Zone.			
D	Cost Details				
1.	Total Upset Price	Rs. 2544000/-			
E	Requirements of The Project				
1.	Proposed Water	2.50 KLD			
	Requirement				
2.	Fuel requirement N/A				
3.	Man Power Requirement	ement 13 (Skilled and unskilled persons)			

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.50 KLD. It will be procured from the supply source of Village- Tamsi Rith. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)		
1.	Domestic Purpose	0.50		
2.	Dust Suppression / Water Sprinkling	1.00		
3.	Green belt / Plantation	1.00		
Total 2.50				

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which

2.	Air	Mining Activity, transportati	ground water quality Waste water discharge  Generation of fugitive dust may lead to Adverse	will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated. Green belt shall be developed within the premises as per CPCB guideline.
		on of sand via vehicles or tractor movement Loading and unloading of mineral	effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per

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		on	erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	"Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by. of tractor trolley & transportation of mineral	Water Sprinkling	30,000/-
		Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
3.	Green Belt Development (Rs. 400 per tree)	Along River Bank Along haul road	2,37,600/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	78,300/-
	Rs. 5,45,900/-		

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 3.00 ha at River Wainganga adjoining Gut No. 166, 167, 168, 169, 170 Mouza: Kharkada, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars		Details
A.	Nature of the		Proposed Kharkada sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	e Project	
1.	Quarry Area	a	3.00 ha
2.	Proposed	Production	10601 Brass/Annum
	capacity		
С	Location [	Details	
1.	Village		Kharkada
2.	Tehsil		Bramhpuri
3.	District		Chandrapur
4.	State		Maharashtra

## Proposed Kharkada Sand Ghat Project of Area 3.00 Hectare At Village Kharkada Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

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5.	Latitude & Longitu	ude	Pillar	Latitude	Longitude	
			1	20°31'52.92"N	79°56'59.78"E	
			2	20°31'43.51"N	79°57'2.52"E	
			3	20°31'44.34"N	79°57'5.82"E	
			4	20°31'53.75"N	79°57'3.12"E	
6.	Toposheet No.		56M/09			
D	Environmental	Setting	gs of the A	rea		
1.	River / water bod	у	The quarry area is itself part of water body i.e. Rive			
			Wainganga	a		
2.	Nearest Town	ı /		llage: Kharkada is at a		
	City/Village		towards South East from the Mining area.			
3.	Nearest R	ailway	,			
	Station		Railway S	Railway Station at a distance of ~8.44 km in NW		
			direction f	rom Project Site.		
4.	Nearest Airport		Nagpur Airport 112 km away towards West.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 63606	00/-		
E	Requirements of	f The	Project			
1.	Proposed	Water	2.80 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man	Power	18 (Skilled	and unskilled persons)		
	Requirement					

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Kharkada. The detailed breakup of the water requirement is given below.

#### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.80

S.		Activities	Predict Impact	EMP/Mitigation Measures
N	al Parameter			
0.				

## Proposed Kharkada Sand Ghat Project of Area 3.00 Hectare At Village Kharkada Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of Vengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining"

Proposed Kharkada Sand Ghat Project of Area 3.00 Hectare At Village Kharkada Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

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			erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)				
	Dust generation due to						
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	25,000/-				
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-				
2.	Road and River bank maintenance	Proper Maintenance of Haul road & river bank	80,000/-				
3.	Green Belt Development	Along River Bank	2,99,700/-				
	(Rs. 300 per tree)	Along haul road					
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-				
5. Occupational Health		Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,3,2300/-				
	Total						

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.60 ha at River Painganga River adjoining Gut. No. 11, 12 Mouza: Kodashi Khu., Tehsil: Koparna, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars				D	etails			
A.	Nature	of	the	Proposed	Kodashi	Bu.	sand	ghat	quarry	(Minor
	Project			Mineral)						
B.	Size of the Project									
1.	Quarry Area	a		1.60 ha						
2.	Proposed	Produ	ıction	2827 Bras	s/Annum					
	capacity									
С	Location [	Details	}							
1.	Village			Kodashi B	u.					
2.	Tehsil			Koparna						
3.	District			Chandrapu	ır					
4.	State			Maharasht	ra					

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5.	Latitude & Longitu	de	Pillar	Latitude	Longitude	
			1	19°48'19.99"N	78°59'2.29"E	
			2	19°48'20.47"N	78°58'55.44"E	
			3	19°48'23.04"N	78°58'55.92"E	
			4	19°48'22.55"N	78°59'2.77"E	
6.	Toposheet No.		55 N/16			
D	<b>Environmental S</b>	Setting	gs of the A	rea		
1.	River / water body			y area is itself part of wa	ater body i.e. River-	
			Penganga			
2.	Nearest Town	/	Nearest Vi	illage: Kodshi Khu is at	a distance of 0.30	
	City/Village		Km towards South from the Mining area.			
3.	Nearest Ra	ilway	The nearest railway station is located Kayar Railway			
	Station	•	Station at a distance of 15.10 km in NW direction			
			from Proje	ect Site.		
4.	Nearest Airport		Nagpur Airport 147.50 km away towards North.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 1696200/-			
E	Requirements of	f The	Project			
1.	Proposed V	Vater	3.30 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	•	ower	12 (Skilled	and unskilled persons)		
	Requirement		,	,,		

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.30 KLD. It will be procured from the supply source of Village- Kodashi Khu. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.80
2.	Dust Suppression / Water Sprinkling	1.50
3.	Green belt / Plantation	1.00
	Total	3.30

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			
	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transporta tion of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand	Damage of river bank due to access ramps to river bed,	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the

Executive Summary

		and transporta tion	may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transporta tion	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by. of tractor trolley &	Water Sprinkling	30,000/-
transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-	
2.	Road maintenance	Proper Maintenance of Haul road	90,000/-
2	Green Belt Development	Development Along River Bank	
3.	(Rs. 300 per tree)	Along haul road	1,58,400/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	88,300/-
	Tot	al	Rs. 4,56,700/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 3.15 ha at River Painganga River adjoining Gut. No. 6, 7, 8 Mouza: Kodashi Khu., Tehsil: Koparna, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars				De	etails			
A.	Nature	of	the	Proposed	Kodashi	Khu.	sand	ghat	quarry	(Minor
	Project			Mineral)						
B.	Size of the	e Proje	ect							
1.	Quarry Area	a		3.15 ha						
2.	Proposed	Produ	ıction	5565 Bras	s/Annum					
	capacity									
С	Location [	Details								
1.	Village			Kodashi K	hu.					
2.	Tehsil			Koparna						
3.	District			Chandrapi	Jr					
4.	State			Maharasht	tra					

**Executive Summary** 

5.	Latitude & Long	itude	Pillar	Latitude	Longitude	
			1	19°48'19.96"N	79° 0'30.41"E	
			2	19°48'16.16"N	79° 0'41.75"E	
			3	19°48'18.70"N	79° 0'43.39"E	
			4	19°48'22.51"N	79° 0'32.07"E	
6.	Toposheet No.		55 N/16			
D	Environmenta	I Setting	gs of the A	rea		
1.	River / water body The quarry area is itself part of water body i.e. River			ater body i.e. River-		
			Penganga			
2.	Nearest Tov	vn /	/ Nearest Village: Kodshi Khu is at a distance of 0.30			
	City/Village		Km towards South from the Mining area.			
3.	Nearest Railway The nearest railway station is located Kayar Railwa			ated Kayar Railway		
	Station	-	Station at a distance of 15.10 km in NW direction			
			from Proje	ct Site.		
4.	Nearest Airport		Nagpur Airport 147.50 km away towards North.			
5.	State Boundary	′	No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Pric	е	Rs. 333900	00/-		
E	Requirements	of The	Project			
1.	Proposed	Water	3.30 KLD			
	Requirement					
2.	Fuel requiremen	nt	N/A			
3.	Man	Power	18 (Skilled	and unskilled persons)		
	Requirement			. ,		

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.30 KLD. It will be procured from the supply source of Village- Kodashi Khu. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.80
2.	Dust Suppression / Water Sprinkling	1.50
3.	Green belt / Plantation	1.00
	Total	3.30

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			
	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transporta tion of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand	Damage of river bank due to access ramps to river bed,	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the

Executive Summary

		and transporta tion	may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transporta tion	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by, of tractor trolley &	Water Sprinkling	40,000/-
transportation of min		Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	96,000/-
2	Green Belt Development	en Belt Development Along River Bank	
3.	(Rs. 300 per tree)	Along haul road	2,22,900/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,37,250/-
	Tot	al	Rs. 5,56,150/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.80 ha at River Wainganga adjoining Gut No. 75, 78, 79, 80 Mouza: Kolari, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Partio	culars	Details
A.	Nature of the		Proposed Kolari sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	Project	
1.	Quarry Area	a	4.80 ha
2.	Proposed	Production	16961 Brass/Annum
	capacity		
С	Location D	Details	
1.	Village		Kolari
2.	Tehsil		Bramhpuri
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Kolari Sand Ghat Project of Area 4.80 Hectare At Village Kolari Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

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5.	Latitude & Longitu	de	Pillar	Latitude	Longitude	
			1	20°43'40.00"N	79°46'21.27"E	
			2	20°43'30.90"N	79°46'34.74"E	
			3	20°43'33.23"N	79°46'37.27"E	
			4	20°43'42.28"N	79°46'23.73"E	
6.	Toposheet No.		55P/15			
D	<b>Environmental S</b>	etting	gs of the A	rea		
1.	River / water body	,	The quarry	y area is itself part of wa	ater body i.e. River-	
			Wainganga	a		
2.	Nearest Town	/	Nearest Vi	llage: Village kolari is a	bout 3.0 km in NW	
	City/Village direction from the Kolari sand ghat Site.					
3.	Nearest Ra	ilway	Talodhi Railway Station at a distance of ~ 30.0 km in			
	Station		NW direction from Kolari sand ghat Site.			
4.	Nearest Airport		Nagpur Airport 110 km away towards West.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 10176600/-			
Е	Requirements of	The I	Project			
1.	Proposed V	Vater	4.50 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man P	ower	28 (Skilled	and unskilled persons)		
	Requirement					

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Kolari-2. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Kolari Sand Ghat Project of Area 4.80 Hectare At Village Kolari Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

## Proposed Kolari Sand Ghat Project of Area 4.80 Hectare At Village Kolari Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

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			bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	4,86,900/-		
	(Rs. 400 per tree)	Along haul road	,,,,,,,,,,		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-		
	Total				

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Uma River adjoining Gut. No. 442 to 245, 410 Mouza: Kosambi, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/12/NE.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Partic	culars	Details	
A.	Nature of the		Proposed Kosambi sand ghat quarry (Minor Mineral)	
	Project			
B.	Size of the Project			
1.	Quarry Area		4.50 ha	
2.	Proposed	Production	15901 Brass/Annum	
	capacity			
С	Location D	Details		
1.	Village		Kosambi	
2.	Tehsil		Mul	
3.	District		Chandrapur	
4.	State		Maharashtra	

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5.	Latitude & Long	itude	Pillar	Latitude	Longitude
			1	20° 6'2.97"N	79°40'16.19"E
			2	20° 5'52.99"N	79°40'27.52"E
			3	20° 5'55.15"N	79°40'30.10"E
			4	20° 6'5.13"N	79°40'18.78"E
6.	Toposheet No.		55P/12/NE		
D	Environmenta	l Setting	gs of the A	rea	
1.	River / water bo	dy	The quarry	y area is itself part of wa	ater body i.e. River-
			Uma		
2.	Nearest Tov	vn /	Nearest V	illage: Kosambi is at a	distance of 2.0 Km
	City/Village		towards So	outh East from the Minin	g area.
3.	Nearest Railway		The nearest railway station is located Mul Railway		
	Station		Station at a distance of 14.0 km in South direction		
			from Project Site.		
4.	Nearest Airport		Chandrapur Airport 101 km away towards SW.		
5.	State Boundary	,	No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	Cost Details				
1.	Total Upset Price	е	Rs. 95406	00/-	
E	Requirements of The		Project		
1.	Proposed	Water	3.10 KLD		
	Requirement				
2.	Fuel requiremen	nt	N/A		
3.	Man	Power	22(Skilled	and unskilled persons)	
	Requirement				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Kosambi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	3.10

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			
	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportatio n of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportatio n	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be

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			extraction of sand. Surface degradation due to road network	avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by, of tractor trolley &	Water Sprinkling	35,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
2	Green Belt Development	Along River Bank	4 45 5007
3.	(Rs. 300 per tree)	Along haul road	4,45,500/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	107300/
	Tot	al	Rs. 7,82,800/-

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.12 ha at River Bokaddoh adjoining Gut No. 113,114,115,112,111 Mouza: Laadbori, Tehsil: Sindewahi District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/11.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature	of the	Proposed Laadbori sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	e Project	
1.	Quarry Area		1.12 ha
2.	Proposed	Production	1988 Brass/Annum
	capacity		
С	Location [	Details	
1.	Village		Laadbori
2.	Tehsil		Sindewahi
3.	District		Chandrapur
4.	State		Maharashtra

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5.	Latitude & Longitud	le	Pillar	Latitude	Longitude
			1	20°18'25.04"N	79°36'56.42"E
			2	20°18'39.10"N	79°37'0.73"E
			3	20°18'39.37"N	79°36'59.92"E
			4	20°18'25.32"N	79°36'55.61"E
6.	Toposheet No.		55P/11		_
D	<b>Environmental Se</b>	etting	gs of the A	rea	
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-
			Bokaddoh		
2.	Nearest Town	/	Nearest Vi	llage: Laadbori village i	s about 2.00 km in
	City/Village		East direction from the Laadbori sand ghat Site		
3.	Nearest Rail	way	Sindewahi Railway Station at a distance of $\sim$ 6.0 km		
	Station		in SE direction from Ladbori a sand ghat Site .		
4.	Nearest Airport		Morwa Airport 55 km away towards North.		
5.	State Boundary		No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	Cost Details				
1.	Total Upset Price		Rs. 1192800/-		
E	Requirements of	The	Project		
1.	Proposed W	ater	3.10 KLD		
	Requirement				
2.	Fuel requirement		N/A		
3.	Man Po	wer			
	Requirement				

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Laadbori. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.70
3.	Green belt / Plantation	1.00
	Total	3.10

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
N	ntal			
0.	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportatio n of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportatio n	Damage of river bank due to access ramps to river bed, may cause soil erosion.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

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			Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	25,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road and River bank maintenance	Proper Maintenance of Haul road & river bank	1,00,000/-			
3.	Green Belt Development	Along River Bank	1,11,000/-			
	(Rs. 400 per tree)	Along haul road	_,,			
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,16,100/-			
	Total					

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 3.0 ha at River Bokaddoh adjoining Gut No. 74,75,76,77,80 Mouza: Lalchichbodi, Tehsil: Sindewahi District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/11.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details			
A.	Nature of the Project	Proposed Lalchichbodi sand ghat quarry (Minor			
		Mineral)			
B.	Size of the Project				
1.	Quarry Area	3.0 ha			
2.	Proposed Production capacity	5300 Brass/Annum			
С	<b>Location Details</b>				
1.	Village	Lalchichbodi			
2.	Tehsil	Sindewahi			
3.	District	Chandrapur			
4.	State	Maharashtra			
5.	Latitude & Longitude	Pillar Latitude Longitude			

## Proposed Lalchichbodi Sand Ghat Project of Area 3.0 Hectare At Village Lalchichbodi Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

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		BP1	20°16'40.83"N	79°35'42.91"E	
		BP2	20°16'44.82"N	79°35'33.69"E	
		BP3	20°16'50.02"N	79°35'29.40"E	
		BP4	20°16'58.12"N	79°35'27.84"E	
		BP5	20°16'57.90"N	79°35'26.48"E	
		BP6	20°16'49.55"N	79°35'28.16"E	
		BP7	20°16'43.78"N	79°35'32.87"E	
		BP8	20°16'39.64"N	79°35'42.34"E	
6.	Toposheet No.	55P/11			
D	<b>Environmental Settings of th</b>	e Area			
1.	River / water body	The quar	ry area is itself part	of water body i.e.	
		River-Bok	kaddoh		
2.	Nearest Town / City/Village	Nearest	Village: Lalchichbod	i village is about	
			in East direction fror		
		sand gha	sand ghat Site		
3.	Nearest Railway Station		Sindewahi Railway Station at a distance of ~		
	, , , , , , , , , , , , , , , , , , , ,	6.0 km in SE direction from Ladbori a sand			
		ghat Site			
4.	Nearest Airport		rport 55 km away to	wards North.	
5.	State Boundary		boundary passes th		
5.	State Boundary	site	boundary passes a	irough the project	
6.	Seismic Zone		I (Moderate)		
0.	Scisific Zoffe		,	o Soismic Zono	
D	Cost Details	11115 15 50	This is said to be the Moderate Seismic Zone.		
ש	Cost Details				
1.	Total Upset Price	Rs. 3180	000/-		
E	Requirements of The Project				
1.	Proposed Water Requirement	3.10 KLD			
2.	Fuel requirement	N/A			
3.	Man Power Requirement		d and unskilled person	ons)	
	a o man magain annaine	22 (Skilled dild dilskilled persons)			

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Lalchichbodi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.70
3.	Green belt / Plantation	1.00
	Total	3.10

Proposed Lalchichbodi Sand Ghat Project of Area 3.0 Hectare At Village Lalchichbodi Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
N	ntal			
0.	Parameter			
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and	Damage of river bank due to access ramps to river bed, may cause	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river

## Proposed Lalchichbodi Sand Ghat Project of Area 3.0 Hectare At Village Lalchichbodi Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

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		transportati on	soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	(as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	maintained.  The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	transportation material by. of tractor trolley & transportation of mineral	Water Sprinkling	35,000/-			
	or mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road and River bank maintenance	Proper Maintenance of Haul road & river bank	1,00,000/-			
3.	Green Belt Development	Along River Bank	2,99,700/-			
	(Rs. 400 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,27,050/-			
	Total					

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut. No. 640 to 642, 645, 646,627, 637, 634, 628, 625, 463 Mouza: Loandoli Tehsil: Sawali, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars		Details
A.	Nature of the		Proposed Loandoli sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	e Project	
1.	Quarry Area	a	4.50 ha
2.	Proposed	Production	23852 Brass/Annum
	capacity		
С	Location [	Details	
1.	Village		Loandoli
2.	Tehsil		Sawali
3.	District		Chandrapur
4.	State		Maharashtra

Executive Summary

5.	Latitude & Longitud	le	Pillar	Latitude	Longitude		
			1	19°58'28.87"N	79°53'32.49"E		
			2	19°58'35.15"N	79°53'18.51"E		
			3	19°58'32.28"N	79°53'16.89"E		
			4	19°58'26.01"N	79°53'30.87"E		
6.	Toposheet No.		55 N/16				
D	<b>Environmental Se</b>	etting	gs of the A	rea			
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-		
			Wainganga	а			
2.	Nearest Town	/	Nearest V	illage: Loandoli at a di	stance of 0.50 Km		
	City/Village		towards South from the Mining area.				
3.	Nearest Rail	Railway The nearest railway station is located Sindewahi					
	Station	•	Railway St	tation, 17.50 Km away	towards East from		
			ML				
4.	Nearest Airport		Nagpur Airport, 129.50 km away towards North				
5.	State Boundary		No State boundary passes through the project site				
6.	Seismic Zone		Zone – III	(Moderate)			
			This is said	d to be the Moderate Sei	smic Zone.		
D	Cost Details						
1.	Total Upset Price		Rs. 14311	200/-			
E	Requirements of The Project						
1.	Proposed W	ater	4.50 KLD				
	Requirement						
2.	Fuel requirement		N/A				
3.	·	wer	42 (Skilled and unskilled persons)				
	Requirement		•	. ,			
	Requirement						

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.80 KLD. It will be procured from the supply source of Village- Samda Buj. The detailed breakup of the water requirement is given below.

### **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.80
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	2.00
	Total	4.80

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			_

	Parameter			
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or	Damage of river bank	Safety distance of 3m or 1/4 <sup>th</sup> of the

Executive Summary

		extraction of sand and transportati on	due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by, of tractor trolley &	Water Sprinkling	35,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	100,000/-
2	Green Belt Development	Along River Bank	4.05.1007
3.	(Rs. 300 per tree)	Along haul road	4,85,100/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,22,300/-
	Tot	al	Rs. 7,96,800/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.12 ha at River Uma adjoining Gut No. 162, 165, 167, to 174, 176, 177 Mouza: Mohadi, Tehsil: Sindewahi District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details
A.	Nature of the Project	Proposed Mohadi sand ghat quarry (Minor Mineral)
B.	Size of the Project	
1.	Quarry Area	1.12 ha
2.	Proposed Production	3180 Brass/Annum
	capacity	
С	<b>Location Details</b>	
1.	Village	Mohadi
2.	Tehsil	Sindewahi
3.	District	Chandrapur
4.	State	Maharashtra
5.	Latitude & Longitude	Pillar Latitude Longitude

**Executive Summary** 

		1	19°58'16.42"N	79°39'56.67"E	
		2	19°58'16.16"N	79°39'39.48"E	
		3	19°58'18.42"N	79°39'39.56"E	
		4	19°58'18.69"N	79°39'56.76"E	
6.	Toposheet No. 56M/09				
D	<b>Environmental Settings</b> of	of the Area	3		
1.	River / water body	The quar	ry area is itself part	of water body i.e.	
		River-Uma	Э		
2.	Nearest Town /	Nearest V	ïllage: Mohadi is at a	distance of 0.5 Km	
	City/Village	towards S	outh East from the Mir	ning area.	
3.	Nearest Railway Station	The near	est railway station is	located Sindewahi	
		Railway Station at a distance of ~8.44 km in NW			
		direction from Project Site.			
4.	Nearest Airport	Chandrap	ur Airport 47 km away	towards West.	
5.	State Boundary	No State	ooundary passes throu	gh the project site	
6.	Seismic Zone	Zone – III	(Moderate)		
		This is sai	d to be the Moderate S	Seismic Zone.	
D	Cost Details				
1.	Total Upset Price	Rs. 49425	i00/-		
E	Requirements of The Project				
1.	Proposed Water				
	Requirement				
2.	Fuel requirement	N/A			
3.	Man Power Requirement	18 (Skilled	killed and unskilled persons)		
L	1	15 (Stated and distance persons)			

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Mohadi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.80

S. No.	Environme ntal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground

	I	I		
2.	Air	Mining Activity, transportatio	increase the flow velocity Change in surface water quality and ground water quality Waste water discharge  Generation of fugitive dust may lead to Adverse effect of	water regime. Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated. Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the
		n of sand via vehicles or tractor movement Loading and unloading of mineral	human health Stomatal index may be minimized due to dust deposit on leaf.	workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportatio n	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.

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			extraction of sand. Surface degradation due to road network	Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportatio n	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
1.	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
	tractor trolley & transportation	Water Sprinkling	35,000/-
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-
3.	Green Belt Development	Along River Bank	1,11,000/-
	(Rs. 400 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,16,100/-
	Rs. 4,22,100/-		

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Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.80 ha at River Uma adjoining Kh. No.Mul 242, 241,240,239/1,239/2 Akapur-117,114,112,111, Mouza: Mul - Akapur, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14<sup>th</sup> September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141 (E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269 (E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14<sup>th</sup> September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought- building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 P/12.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars			<b>Details</b>			
A.	Nature	of the	Proposed	Mul-Akapur	sand	ghat	quarry	(Minor
	Project		Mineral)					
В.	Size of the	e Project						
1.	Quarry Area	a	1.80 ha					
2.	Proposed	Production	3816 Bras	s/Annum				
	capacity							
С	Location [	Details						
1.	Village		MUL- Akaj	our				
2.	Tehsil		Mul					
3.	District		Chandrapi	ur				
4.	State		Maharasht	tra				

## Proposed Mul- Akapur Sand Ghat Project of Area 1.80 Hectare at Village Akapur, Tehsil- Mul, District-Chandrapur (Maharashtra)

Executive Summary

5.	Latitude & Long	itude	Pillar	Latitude	Longitude	
			BP1	20° 3'56.23"N	79°42'13.35"E	
			BP2	20° 3'42.80"N	79°42'28.33"E	
			BP3	20° 3'43.52"N	79°42'29.02"E	
			BP4	20° 3'56.95"N	79°42'14.04"E	
6.	Toposheet No.		55 P/12			
D	Environmenta	l Setting	gs of the A	rea		
1.	River / water bo	ody	The quarry	area is itself part of wa	ater body i.e. River-	
			Uma			
2.	Nearest Tov	vn /	Nearest V	illage: Akapur is at a d	distance of 2.6 Km	
	City/Village		towards So	outh from the Mining are	a.	
3.	Nearest	Railway	The nearest railway station is located Mul Railway			
	Station		Station at a distance of 5.3 km in W direction from			
			Project Site.			
4.	Nearest Airport		Chandrapur Airport 51.24 km away towards W.			
5.	State Boundary	,	No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	<b>Cost Details</b>					
1.	Total Upset Pric	е	Rs. 1908000/-			
E	Requirements	of The	Project			
1.	Proposed	Water	2.10 KLD			
	Requirement					
2.	Fuel requiremen	nt	N/A			
3.	Man	Power	18 (Skilled	and unskilled persons)		
	Requirement					

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.10 KLD. It will be procured from the supply source of Village- Akapur. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	0.50
3.	Green belt / Plantation	1.00
	Total	2.10

S.	Environmental	Activities	Predict Impact	EMP/Mitigation Measures
No.	Parameter			

# Proposed Mul- Akapur Sand Ghat Project of Area 1.80 Hectare at Village Akapur, Tehsil- Mul, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining

## Proposed Mul- Akapur Sand Ghat Project of Area 1.80 Hectare at Village Akapur, Tehsil- Mul, District-Chandrapur (Maharashtra)

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		on	erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	25,000/-
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
3.	Green Belt Development	Along River Bank	1,78,200/-
	(Dc. 400 por tros)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
		Provision of PPE Kits and Periodic	
5.	Occupational Health	health check-up, Temporary Shed, Mobile toilet etc.	81500/-
	Tot	al	Rs. 4,74,700/-

Proposed Nakoda Sand Ghat Project of Area 2.75 Hectare At Village Nakoda Tehsi	<b> </b> -
Chandrapur, District-Chandrapur (Maharashtra)	

**Executive Summary** 

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.75ha at River Wardha adjoining Gut No. 52, 53, 54 Mouza: Nakoda, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	5		Details		
A.	Nature	of	the	Proposed	Nakoda sand ghat quai	rry (Minor Mineral)	
	Project						
B.	Size of the	e Proj	ect				
1.	Quarry Are	a		2.75 ha			
2.	Proposed	Prod	uction	4859 Brass	59 Brass/Annum		
	capacity						
С	Location Details						
1.	Village			Nakoda			
2.	Tehsil			Chandrapur			
3.	District		Chandrapur				
4.	State			Maharashtra			
5.	Latitude & Longitude		ude	Sr. No	Latitude "N"	Longitude "E"	
				1	19°55'26.20"N	79° 5'25.07"E	

## Proposed Nakoda Sand Ghat Project of Area 2.75 Hectare At Village Nakoda Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

**Executive Summary** 

			2	19°55'8.77"N	79° 5'29.32"E
			3	19°55'8.18"N	79° 5'27.70"E
			4	19°55'25.62"N	79° 5'23.47"E
6.	Toposheet No.		56M/09		
D	Environment	al Setting	gs of the A	rea	
1.	River / water b	ody	The quarry	area is itself part of wa	ater body i.e. River-
			Wardha		
2.	Nearest To	own /	Nearest V	illage: Nakoda is at a d	distance of 0.5 Km
	City/Village		towards So	outh West from the Minir	ng area.
3.	Nearest	Railway	Makudi Railway Station at a distance of 6.0 km in SW		
	Station		direction from Nakoda sand ghat Site.		
4.	Nearest Airpor	t	Chandrapur Airport 47 km away towards West.		
5.	State Boundar	γ	No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	<b>Cost Details</b>				
1.	Total Upset Pr	ice	Rs. 291540	00/-	
E	Requirement	s of The	Project		
1.	Proposed	Water	2.60 KLD		
	Requirement				
2.	Fuel requireme	ent	N/A		
3.	Man	Power	·		
	Requirement		•	. ,	

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.60

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

# Proposed Nakoda Sand Ghat Project of Area 2.75 Hectare At Village Nakoda Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

## Proposed Nakoda Sand Ghat Project of Area 2.75 Hectare At Village Nakoda Tehsil-Chandrapur, District-Chandrapur (Maharashtra)

**Executive Summary** 

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	40,000/-		
3.	Green Belt Development	Along River Bank	2,90,400/-		
	(Rs. 400 per tree)	Along haul road	, , , , , , ,		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	81,500/-		
	Total				

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Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.12 ha at River Andhari River adjoining Gut. No. 231, 229, 228, 227 Mouza: Naleshwar Mo, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/9/NW.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra, Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars				De	tails			
A.	Nature	of	the	Proposed	Naleshwar	Мо	sand	ghat	quarry	(Minor
	Project			Mineral)						
В.	Size of the	e Proje	ect							
1.	Quarry Area	a		1.12 ha						
2.	Proposed	Produ	ıction	1988 Bras	s/Annum					
	capacity									
С	Location [	Details	}							
1.	Village			Naleshwar	r Mo					
2.	Tehsil			Mul						
3.	District			Chandrapi	ur					
4.	State			Maharasht	tra					

**Executive Summary** 

5.	Latitude & Longitu	ide	Pillar	Latitude	Longitude		
			1	19°58'11.84"N	79°37'22.26"E		
			2	19°57'57.69"N	79°37'26.01"E		
			3	19°57'57.47"N	79°37'25.19"E		
			4	19°58'11.60"N	79°37'21.47"E		
6.	Toposheet No.		56M/9/NW	1			
D	<b>Environmental S</b>	Setting	ngs of the Area				
1.	River / water body	/	The quarry	y area is itself part of w	ater body i.e. River-		
			Uma				
2.	Nearest Town	/	Nearest Village: Uthal Peth is at a distance of 1.0 Km				
	City/Village		towards Ea	ast from the Mining area	l <b>.</b>		
3.	Nearest Ra	ilway	The near	est railway station is	located Tolewahi		
	Station		Railway S	tation at a distance of	5.5 km in North		
			direction from Project Site.				
4.	Nearest Airport		Chandrapur Airport 42.2 km away towards West.				
5.	State Boundary		No State boundary passes through the project site				
6.	Seismic Zone		Zone – III	(Moderate)			
			This is said	d to be the Moderate Se	ismic Zone.		
D	Cost Details						
1.	Total Upset Price		Rs. 11928	00/-			
E	Requirements o	f The	Project				
1.	Proposed \	Nater	2.30 KLD				
	Requirement						
2.	Fuel requirement		N/A				
3.	Man F	ower	12 (Skilled	and unskilled persons)			
	Requirement		•	. ,			

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.30 KLD. It will be procured from the supply source of Village- Naleshwar Mo. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.30
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.30

S.	Environmental	Activities	Predict Impact	EMP/Mitigation Measures
No.	Parameter			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining"

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		on	erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by. of tractor trolley &	Water Sprinkling	35,750/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-
3.	Green Belt Development	Along River Bank	1,23,600/-
	(Rs. 400 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	10,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,37,250/-
	Tot	al	Rs. 4,36,600/-

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#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.05 ha at River Wardha adjoining Gut No. 128 to 131, 154, 156 Mouza: Parodhi, Tehsil: Bhadravati, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details		
A.	Nature of the Project Proposed Parodhi sand ghat quarry (Minor Minera			
B.	Size of the Project			
1.	Quarry Area	1.05 ha		
2.	Proposed Production	1855 Brass/Annum		
	capacity			
С	<b>Location Details</b>			
1.	Village	Parodhi		
2.	Tehsil	Bhadravati		
3.	District	Chandrapur		
4.	State	Maharashtra		
5.	Latitude & Longitude	Pillar Latitude Longitude		

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		1	20°17'58.57"N	79°12'50.71"E
		2	20°17'45.30"N	79°12'54.14"E
		3	20°17'45.55"N	79°12'54.96"E
		4	20°17'58.82"N	79°12'51.53"E
6.	Toposheet No.	55P/16		
D	<b>Environmental Settings</b>	of the Ar	ea	
1.	River / water body	The quar	y area is itself part	of water body i.e.
		River-War	dha	
2.	Nearest Town /	Nearest V	'illage: Parodhi is abo	ut 1.0 km in East
	City/Village	direction from the Ralegaon Reeth sand ghat Site		
3.	Nearest Railway Station	Majri Railway Station at a distance of ~ 7.0 km in		
		East direction from Parodhi sand ghat Site.		
4.	Nearest Airport	Morwa Airport 47 km away towards West.		
5.	State Boundary	No State boundary passes through the project site		
6.	Seismic Zone	Zone – III	(Moderate)	
		This is said to be the Moderate Seismic Zone.		
D	Cost Details			
1.	Total Upset Price	Rs. 11130	00/-	
E	Requirements of The Pr	roject		
1.	Proposed Water	3.0 KLD		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power Requirement	18 (Skilled	and unskilled persons	)
		' '		

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.0 KLD. It will be procured from the supply source of Village- Parodhi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.90
2.	Dust Suppression / Water Sprinkling	1.10
3.	Green belt / Plantation	1.00
	Total	3.0

S. No.	Environme ntal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.		Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will

Executive Summary

			Surface degradation due to road network	be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	tractor trolley & transportation of mineral	Water Sprinkling	25,000/-			
	or mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-			
3.	Green Belt Development	Along River Bank	1,03,800/-			
	(Rs. 300 per tree)	Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,16,100/-			
	Total					

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Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 257, 258, 259, 260, 261, 262, 263 Mouza: Pimpalgaon, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/15.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	}		[	Details			
A.	Nature	of	the	Proposed	Pimpalgaon	sand	ghat	quarry	(Minor
	Project			Mineral)					
B.	Size of the	e Proje	ect						
1.	Quarry Are	a		4.50 ha					
2.	Proposed	Prod	uction	15901 Bra	ss/Annum				
	capacity								
С	Location I	Details	5						
1.	Village			Pimpalgao	n				
2.	Tehsil			Bramhpuri					
3.	District			Chandrapu	ır				
4.	State			Maharasht	ra				

Proposed Pimpalgaon Sand Ghat Project of Area 4.50 Hectare At Village Pimpalgaon Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitude	ude	Pillar	Latitude	Longitude	
			1	20°38'35.38"N	79°54'48.10"E	
			2	20°38'48.88"N	79°54'42.11"E	
			3	20°38'50.35"N	79°54'45.19"E	
			4	20°38'36.85"N	79°54'51.18"E	
6.	Toposheet No.		55P/15			
D	Environmental	Setting	gs of the A	rea		
1.	River / water bod	у	The quarry	area is itself part of w	ater body i.e. River-	
			Wainganga	a		
2.	Nearest Town		Nearest Vi	llage: Village Halda is a	bout 3.0 km in NW	
	City/Village		direction from the Halda sand ghat Site.			
3.	Nearest R	ailway	Talodhi Railway Station at a distance of ~ 30.0 km in			
	Station		NW direction from Halda sand ghat Site.			
4.	Nearest Airport		Nagpur Airport 110 km away towards West.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 9540600/-			
E	Requirements of	f The	Project			
1.	Proposed	Water	4.50 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man	Power	28 (Skilled	and unskilled persons)		
	Requirement					

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Halada-2. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.90
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	4.50

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Pimpalgaon Sand Ghat Project of Area 4.50 Hectare At Village Pimpalgaon Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

## Proposed Pimpalgaon Sand Ghat Project of Area 4.50 Hectare At Village Pimpalgaon Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

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			bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	4,86,900/-		
	(Rs. 400 per tree)	Along haul road	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-		
	Total				

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wardha adjoining Gut No. 45 to 50, 52 to 57, Mouza: Pipri de, Tehsil: Bhadravati, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details		
A.	Nature of the Project Proposed Pipri de sand ghat quarry (Minor Minera			
В.	Size of the Project			
1.	Quarry Area	4.50 ha		
2.	Proposed Production	15901 Brass/Annum		
	capacity			
С	<b>Location Details</b>			
1.	Village	Pipri de		
2.	Tehsil	Bhadravati		
3.	District	Chandrapur		
4.	State	Maharashtra		
5.	Latitude & Longitude	Pillar Latitude Longitude		

**Executive Summary** 

		BP1	20° 1'39.26"N	79° 4'53.59"E
		BP2	20° 1'23.59"N	79° 5'5.89"E
		BP3	20° 1'21.84"N	79° 5'4.10"E
		BP4	20° 1'37.47"N	79° 4'51.75"E
6.	Toposheet No.	55P/16		
D	<b>Environmental Settings</b>	of the Ar	ea	
1.	River / water body	The quar	y area is itself part	of water body i.e.
		River-War	dha	
2.	Nearest Town /	Nearest V	illage: Ralegaon Reeth	is about 1.0 km in
	City/Village	East direc	tion from the Ralegao	n Reeth sand ghat
		Site		
3.	Nearest Railway Station	Majri Rail	way Station at a distar	nce of ~ 7.0 km in
		East direc	tion from Ralegaon Ree	eth sand ghat Site.
4.	Nearest Airport	Morwa Air	port 47 km away towar	ds West.
5.	State Boundary	No State l	oundary passes throug	h the project site
6.	Seismic Zone	Zone – III	(Moderate)	
		This is sai	d to be the Moderate S	eismic Zone.
D	Cost Details			
1.	Total Upset Price	Rs. 95406	00/-	
E	Requirements of The Project			
1.	Proposed Water	3.10 KLD		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power Requirement	18 (Skilled and unskilled persons)		
	<u>'</u>	`	<u>'</u>	

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Pipri de. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.90
2.	Dust Suppression / Water Sprinkling	1.20
3. Green belt / Plantation		1.00
	Total	3.10

S. No.	Environm ental	Activities	Predict Impact	EMP/Mitigation Measures
	Paramet			
	er			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining

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			erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	tractor trolley & transportation of mineral	Water Sprinkling	45,000/-		
	or mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	4,45,500/-		
	(Rs. 300 per tree)	Along haul road			
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,33,100/-		
	Total				

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wardha adjoining Gut No. 45,46,47,48/2,49,50,52 to 57 Mouza: Pipri, Tehsil: Bhadravati, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details		
A.	Nature of the Project	Proposed Pipri sand ghat quarry (Minor Mineral)		
В.	Size of the Project			
1.	Quarry Area	4.50 ha		
2.	Proposed Production	15901 Brass/Annum		
	capacity			
С	<b>Location Details</b>			
1.	Village	Pipri		
2.	Tehsil	Bhadravati		
3.	District	Chandrapur		
4.	State	Maharashtra		
5.	Latitude & Longitude	Pillar Latitude Longitude		

		1	20° 1'39.26"N	79° 4'53.59"E
		2	20° 1'23.59"N	79° 5'5.89"E
		3	20° 1'21.84"N	79° 5'4.10"E
		4	20° 1'37.47"N	79° 4'51.75"E
6.	Toposheet No.	55P/16		
D	<b>Environmental Settings</b>	of the Ar	ea	
1.	River / water body	The quar	ry area is itself part	of water body i.e.
		River-War	dha	
2.	Nearest Town /	Nearest \	/illage: pipri is about	1.20 km in East
	City/Village	direction from the Ralegaon Reeth sand ghat Site		
3.	Nearest Railway Station	Majri Railway Station at a distance of ~ 8.0 km in		
		East direc	tion from Ralegaon Ree	th sand ghat Site.
4.	Nearest Airport	Morwa Air	port 47 km away towar	ds West.
5.	State Boundary	No State b	ooundary passes throug	h the project site
6.	Seismic Zone	Zone – III	(Moderate)	
		This is sai	d to be the Moderate Se	eismic Zone.
D	Cost Details			
1.	Total Upset Price	Rs. 95406	00/-	
E	Requirements of The Pr	Requirements of The Project		
1.	Proposed Water	3.60 KLD		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power Requirement 18 (Skilled and unskilled persons)			)

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.60 KLD. It will be procured from the supply source of Village- Pipri. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	3.60

S. No.	Environm ental	Activities	Predict Impact	EMP/Mitigation Measures
	Paramet			
	er			

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining

Executive Summary

			erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	tractor trolley & transportation of mineral	Water Sprinkling	45,000/-
	of milleral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
3.	Green Belt Development	Along River Bank	4,45,500/-
	(Rs. 300 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,33,100/-
	Tot	tal	Rs. 8,13,600/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.10 ha at River Uma River adjoining Gut. No. 935, 922/1, 907/1, Mouza: Rajoli, Tehsil: Mul, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/12/NE.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature	of the	Proposed Rajoli sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	Project	
1.	Quarry Area	a	2.10 ha
2.	Proposed	Production	3710 Brass/Annum
	capacity		
С	Location D	Details	
1.	Village		Rajoli
2.	Tehsil		Mul
3.	District		Chandrapur
4.	State		Maharashtra

## Proposed Rajoli Sand Ghat Project of Area 2.10 Hectare At Village- Rajoli, Tehsil-Mul, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Long	itude	Pillar	Latitude	Longitude			
			1	20°11'5.68"N	79°39'39.69"E			
			2	20°10'45.57"N	79°39'50.98"E			
			3	20°10'44.86"N	79°39'50.22"E			
			4	20°11'4.97"N	79°39'38.92"E			
6.	Toposheet No.		55P/12/NE	-				
D	Environmenta	Setting	gs of the A	rea				
1.	River / water bo	dy	The quarry	y area is itself part of wa	ater body i.e. River-			
			Uma					
2.	Nearest Tow	/n /	Nearest V	'illage: Rajoli is at a c	listance of 2.0 Km			
	City/Village		towards South East from the Mining area.					
3.	Nearest	Railway	The nearest railway station is located Mul Railway					
	Station		Station at a distance of 14.0 km in South direction					
			from Proje	ect Site.				
4.	Nearest Airport		Chandrapur Airport 101 km away towards SW.					
5.	State Boundary		No State boundary passes through the project site					
6.	Seismic Zone		Zone – III (Moderate)					
			This is said to be the Moderate Seismic Zone.					
D	Cost Details							
1.	Total Upset Price	e	Rs. 22260	00/-				
E	Requirements	of The	Project					
1.	Proposed	Water	2.50 KLD					
	Requirement							
2.	Fuel requiremen	t	N/A					
3.	Man	Power	18 (Skilled	and unskilled persons)				
	Requirement							

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Rajoli. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.60
3.	Green belt / Plantation	1.00
	Total	3.10

S.	Environmental	Activities	Predict Impact	EMP/Mitigation Measures
No.	Parameter			

# Proposed Rajoli Sand Ghat Project of Area 2.10 Hectare At Village- Rajoli, Tehsil-Mul, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining

Proposed Rajoli Sand Ghat Project of Area 2.10 Hectare At Village- Rajoli, Tehsil-Mul, District-Chandrapur (Maharashtra)

Executive Summary

		on	erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	by, of tractor trolley &	Water Sprinkling	25,000/-
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	176,000/-
3.	Green Belt Development (Rs. 300 per tree)	Along River Bank Along haul road	2,07,900/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,,27,100/
	Tot	al	Rs. 5,81,000/-

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wardha adjoining Gut No. 6/1, 7, 10, 13, 14, 15, 17, to 25, Mouza: Ralegaon Rith, Tehsil: Bhadravati, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars				Det	tails			
A.	Nature of the Pro	oject	Proposed	Ralegaon	Rith	sand	ghat	quarry	(Minor
			Mineral)						
B.	Size of the Proje	ct							
1.	Quarry Area		4.50 ha						
2.	Proposed Prod	luction	6360 Bras	s/Annum					
	capacity								
С	<b>Location Details</b>								
1.	Village		Ralegaon	Rith					
2.	Tehsil		Bhadravat	i					
3.	District		Chandrapi	ur					
4.	State		Maharasht	tra					

Proposed Ralegaon Rith Sand Ghat Project of Area 4.50 Hectare At Village Ralegaon Rith Tehsil- Bhadravati, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitude	Pillar	Latitude	Longitude
		1	20°7'34.76"N	78°58'23.46"E
		2	20°7'33.41"N	78°58'22.48"E
		3	20° 7'27.63"N	78°58'40.21"E
		4	20°7'29.26"N	78°58'39.98"E
6.	Toposheet No.	55P/16		
D	<b>Environmental Settings</b>	of the Ar	ea	
1.	River / water body	The quarry area is itself part of water body i.e.		
		River-Wardha		
2.	Nearest Town /	Nearest Village: Ralegaon Reeth is about 1.0 km in		
	City/Village	East direction from the Ralegaon Reeth sand ghat		
		Site		
3.	Nearest Railway Station	Majri Railway Station at a distance of ~ 7.0 km in		
		East direction from Ralegaon Reeth sand ghat Site.		
4.	Nearest Airport	Morwa Airport 47 km away towards West.		
5.	State Boundary	No State boundary passes through the project site		
6.	Seismic Zone	Zone – III (Moderate)		
		This is said	d to be the Moderate Se	eismic Zone.
D	Cost Details			
1.	Total Upset Price	ral Upset Price Rs. 4770600/-		
E	Requirements of The Project			
1.	Proposed Water	3.10 KLD		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power Requirement	18 (Skilled	and unskilled persons	)

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Ralegaon rith. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.90
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	3.10

S. No.	Environm ental Paramet	Activities	Predict Impact	EMP/Mitigation Measures
	er			

# Proposed Ralegaon Rith Sand Ghat Project of Area 4.50 Hectare At Village Ralegaon Rith Tehsil- Bhadravati, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportation of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportation	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining

Proposed Ralegaon Rith Sand Ghat Project of Area 4.50 Hectare At Village Ralegaon Rith Tehsil- Bhadravati, District-Chandrapur (Maharashtra)

Executive Summary

			erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportation	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to transportation material by. of	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	tractor trolley & transportation of mineral	Water Sprinkling	35,000/-
	oi minerai	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,30,000/-
3.	Green Belt Development	Along River Bank	4,45,500/-
	(Rs. 300 per tree)	Along haul road	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,33,100/-
	Rs. 8,33,600/-		

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.50 ha at River Wainganga adjoining Gut No. 123, 124, 125, 127, 129, 131, 132, 134, 135, 138, Mouza: Ranmochan, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/14.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars				etails			
A.	Nature	of	the	Proposed	Ranmochan	sand	ghat	quarry	(Minor
	Project			Mineral)					
B.	Size of the	e Proje	ect						
1.	Quarry Area	a		4.50 ha					
2.	Proposed	Prod	uction	15901 Bra	ss/Annum				
	capacity								
С	Location I	Details	5						
1.	Village			Ranmocha	ın				
2.	Tehsil			Bramhpuri					
3.	District			Chandrapu	ır				
4.	State			Maharasht	ra				

## Proposed Ranmochan Sand Ghat Project of Area 4.50 Hectare At Village Ranmochan Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitue	de	Pillar	Latitude	Longitude	
			1	20°33'29.27"N	79°55'27.18"E	
			2	20°33'42.80"N	79°55'33.10"E	
			3	20°33'41.55"N	79°55'36.28"E	
			4	20°33'28.02"N	79°55'30.34"E	
6.	Toposheet No.		55P/14			
D	<b>Environmental S</b>	etting	gs of the A	rea		
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-	
			Wainganga	a		
2.	Nearest Town	/	Nearest Vi	llage: Ranmochan is abo	out 1.0 km in South	
	City/Village		direction from the Ranmochan sand ghat Site.			
3.	Nearest Railway		Brahmpuri Railway Station at a distance of ~ 8.0 km			
	Station		in NW direction from Ranmochan sand ghat Site.			
4.	Nearest Airport		Nagpur Airport 107 km away towards West.			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 9540600/-			
E	Requirements of	The	Project			
1.	Proposed V	/ater	2.80 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man P	ower	18 (Skilled	and unskilled persons)		
	Requirement					

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Ranmochan. The detailed breakup of the water requirement is given below.

## **Table: Water Demand**

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.00
2.	Dust Suppression / Water Sprinkling	0.80
3.	Green belt / Plantation	1.00
	Total	2.80

S.	Environment	Activities	Predict Impact	EMP/Mitigation Measures
No.	al Parameter			

# Proposed Ranmochan Sand Ghat Project of Area 4.50 Hectare At Village Ranmochan Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hVengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline.  Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation.  Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati	Damage of river bank due to access ramps to river bed, may cause soil	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining"

Proposed Ranmochan Sand Ghat Project of Area 4.50 Hectare At Village Ranmochan Tehsil- Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

		on	erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to transportation material by. of	(,,,				
1.	tractor trolley & transportation	Water Sprinkling	45,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-			
3.	Green Belt Development	Along River Bank	4,86,900/-			
	(Rs. 400 per tree)	(Rs. 400 per tree) Along haul road				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,65,000/-			
	Total					

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.40 ha at River Wainganga adjoining Gut. No. 177, 178/3, 179, 180, 181 Mouza: Sakhari, Tehsil: Sawali, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars		Details	
A.	Nature	of the	Proposed Sakhari sand ghat quarry (Minor Mineral)	
	Project			
B.	Size of the Project			
1.	Quarry Are	a	4.90 ha	
2.	Proposed	Production	17314 Brass/Annum	
	capacity			
С	Location I	Details		
1.	Village		Sakhari	
2.	Tehsil		Sawali	
3.	District		Chandrapur	
4.	State		Maharashtra	

Proposed Sakhari Sand Ghat Project of Area 4.90 Hectare At Village- Sakhari, Tehsil-Sawali, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitude		Pillar	Latitude	Longitude	
	_		1	19°59'27.64"N	79°52'25.97"E	
			2	19°59'43.05"N	79°52'21.67"E	
			3	19°59'42.79"N	79°52'18.20"E	
			4	19°59'27.39"N	79°52'22.49"E	
6.	Toposheet No.		55 N/16			
D	<b>Environmental Setti</b>	ng	s of the A	rea		
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-	
			Wainganga	a		
2.	Nearest Town	/	Nearest V	illage: Sakhari at a dis	stance of 0.50 Km	
	City/Village		towards South from the Mining area.			
3.	Nearest Railway		The nearest railway station is located Sawali Railway			
	Station		Station, 7.50 Km away towards East from ML			
4.	Nearest Airport		Nagpur Airport, 119.50 km away towards North			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said to be the Moderate Seismic Zone.			
D	Cost Details					
1.	Total Upset Price		Rs. 10388400/-			
E	Requirements of Th	e F	Project			
1.	Proposed Wate	r	4.50 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man Powe	r	28 (Skilled	and unskilled persons)		
	Requirement		`	, ,		

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 4.50 KLD. It will be procured from the supply source of Village- Samda Buj. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	1.50
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	2.00
	Total	4.50

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			
	Parameter			

# Proposed Sakhari Sand Ghat Project of Area 4.90 Hectare At Village- Sakhari, Tehsil-Sawali, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction	Damage of river bank due to access ramps	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more

Proposed Sakhari Sand Ghat Project of Area 4.90 Hectare At Village- Sakhari, Tehsil-Sawali, District-Chandrapur (Maharashtra)

Executive Summary

		of sand and transportati on	to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	by. of tractor trolley &	Water Sprinkling	35,000/-			
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	100,000/-			
_	Green Belt Development	Along River Bank	4.05.4007			
3.	(Rs. 300 per tree)	Along haul road	4,85,100/-			
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,22,300/-			
	Total					

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.40 ha at River Wainganga adjoining Gut. No. 628, 629, 630, 649, 648 Mouza: Samda Buj, Tehsil: Sawali, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	S. No. Particulars		Details							
A.	Nature	of	the	Proposed	Samda	Buj	sand	ghat	quarry	(Minor
	Project			Mineral)						
B.	Size of the	e Proje	ect							
1.	Quarry Are	a		2.40 ha						
2.	Proposed	Produ	uction	8481 Bras	s/Annum					
	capacity									
С	Location I	Details	3							
1.	Village			Samda Bu	j					
2.	Tehsil			Sawali						
3.	District			Chandrapu	ır					
4.	State			Maharasht	ra					

Proposed Samda Buj Sand Ghat Project of Area 2.40 Hectare At Village- Samda Buj, Tehsil- Sawali, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitude		Pillar	Latitude	Longitude	
	_		1	20° 6'42.73"N	79°58'11.74"E	
			2	20° 6'54.10"N	79°58'5.06"E	
			3	20° 6'55.08"N	79°58'6.83"E	
			4	20° 6'43.72"N	79°58'13.53"E	
6.	Toposheet No.		55 N/16			
D	<b>Environmental Setti</b>	ng	s of the A	rea		
1.	River / water body	er body The quarry area is itself part of water body i.e. River-				
			Wainganga	Э		
2.	Nearest Town	/	Nearest Village: Samda Buj is at a distance of 0.30			
	City/Village		Km towards South from the Mining area.			
3.	Nearest Railwa	arest Railway The nearest railway station is located Sawali Railwa			ated Sawali Railway	
	Station	-	Station, 7.50 Km away towards East from ML			
4.	Nearest Airport		Nagpur Airport, 111.50 km away towards North			
5.	State Boundary		No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said	d to be the Moderate Sei	smic Zone.	
D	Cost Details					
1.	Total Upset Price		Rs. 5088600/-			
E	Requirements of Th	e I	Project			
1.	Proposed Wate	er	2.50 KLD			
	Requirement					
2.	Fuel requirement		N/A			
3.	Man Powe	er		and unskilled persons)		
	Requirement		> <b>(</b> ==========	,		

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.50 KLD. It will be procured from the supply source of Village- Samda Buj. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.50

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
No.	tal			
	Parameter			

## Proposed Samda Buj Sand Ghat Project of Area 2.40 Hectare At Village- Samda Buj, Tehsil- Sawali, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction	Damage of river bank due to access ramps	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more

Proposed Samda Buj Sand Ghat Project of Area 2.40 Hectare At Village- Samda Buj, Tehsil- Sawali, District-Chandrapur (Maharashtra)

Executive Summary

		of sand and transportati on	to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)				
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-				
1.	by. of tractor trolley &	Water Sprinkling	35,000/-				
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-				
2.	Road maintenance	Proper Maintenance of Haul road	100,000/-				
3.	Green Belt Development (Rs. 300 per tree)	Along River Bank Along haul road	2,37,600/-				
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-				
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,22,300/-				
	Total Rs. 5,84,900/-						

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 3.80 ha at River Uma adjoining Gut No. 411/1, Mouza: Saradpar, Tehsil: Sindewahi District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	S. No. Particulars		Details
A.	A. Nature of the		Proposed Saradpar sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the	e Project	
1.	Quarry Area	a	3.80 ha
2.	Proposed	Production	13428 Brass/Annum
	capacity		
С	Location [	Details	
1.	Village		Saradpar
2.	Tehsil		Sindewahi
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Saradpar Sand Ghat Project of Area 3.80 Hectare At Village Saradpar Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Long	gitude	Pillar	Latitude	Longitude	
			1	19°58'16.42"N	79°39'56.67"E	
			2	19°58'16.16"N	79°39'39.48"E	
			3	19°58'18.42"N	79°39'39.56"E	
			4	19°58'18.69"N	79°39'56.76"E	
6.	Toposheet No.		56M/09			
D	Environmenta	al Setting	gs of the A	rea		
1.	River / water be	ody	The quarry area is itself part of water body i.e. River			
			Uma			
2.	Nearest To	wn /	Nearest Village: Saradpar is at a distance of 0.5 Km			
	City/Village		towards South East from the Mining area.			
3.	Nearest Railway The nearest railway station is located Sindewa			located Sindewahi		
	Station	,	Railway Station at a distance of 6.90 km in N			
			direction fi	rom Project Site.		
4.	Nearest Airport		Chandrapur Airport 117 km away towards West.			
5.	State Boundar	у	No State boundary passes through the project site			
6.	Seismic Zone		Zone – III (Moderate)			
			This is said	d to be the Moderate Sei	smic Zone.	
D	<b>Cost Details</b>					
1.	Total Upset Price	ce	Rs. 20870200/-			
Е	Requirements	s of The	Project			
1.	Proposed	Water	3.10 KLD			
	Requirement					
2.	Fuel requirement	nt	N/A			
3.	Man	Power	22 (Skilled and unskilled persons)			
	Requirement		•	. ,		

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Saradpar. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.90
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	3.10

S.	Environmen	Activities	Predict Impact	EMP/Mitigation Measures
N	tal			
0.	Parameter			

# Proposed Saradpar Sand Ghat Project of Area 3.80 Hectare At Village Saradpar Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

Proposed Saradpar Sand Ghat Project of Area 3.80 Hectare At Village Saradpar Tehsil- Sindewahi, District-Chandrapur (Maharashtra)

Executive Summary

			Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	3,76,200/-		
	(Rs. 300 per tree)	Along haul road	37. 67.2667		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,27,050/-		
	Total				

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.0 ha at River Wenganga adjoining Gut No. 197, 198, 200 Mouza: Sondri, Tehsil: Bramhpuri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55P/14.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details
A.	Nature of the		Proposed Sondri sand ghat quarry (Minor Mineral)
	Project		
B.	Size of the Project		
1.	Quarry Area		2.0 ha
2.	Proposed Production		3534 Brass/Annum
	capacity		
С	Location Details		
1.	Village		Sondri
2.	Tehsil		Bramhpuri
3.	District		Chandrapur
4.	State		Maharashtra

Proposed Sondri Sand Ghat Project of Area 2.0 Hectare At Village Sondri Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

**Executive Summary** 

5.	Latitude & Longitud	de	Pillar	Latitude	Longitude
			1	20°38'25.52"N	79°54'56.41"E
			2	20°38'22.26"N	79°55'2.39"E
			3	20°38'25.00"N	79°55'4.25"E
			4	20°38'28.25"N	79°54'58.27"E
6.	Toposheet No.		55P/14		
D	<b>Environmental S</b>	etting	gs of the A	rea	
1.	River / water body		The quarry	area is itself part of wa	ater body i.e. River-
			Wainganga		
2.	Nearest Town	/	Nearest Village: Sondri is about 1.0 km in South East		
	City/Village		direction from the Sondri sand ghat Site.		
3.		lway	$\prime$ Brahmpuri Railway Station at a distance of $\sim$ 3.0 km		
	Station		in South d	irection from Sondri sand	d ghat Site
4.	Nearest Airport		Nagpur Air	port 101 km away towa	rds South.
5.	State Boundary		No State boundary passes through the project site		
6.	Seismic Zone			(Moderate)	
			This is said	d to be the Moderate Sei	smic Zone.
D	Cost Details				
1.	Total Upset Price		Rs. 212040	00/-	
E	Requirements of	The	Project		
1.	Proposed W	/ater	2.70 KLD		
	Requirement				
2.	Fuel requirement		N/A		
3.	Man Po	ower	12 (Skilled	and unskilled persons)	
	Requirement				

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.70 KLD. It will be procured from the supply source of Village- Sondri. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.60
2.	Dust Suppression / Water Sprinkling	1.10
3.	Green belt / Plantation	1.00
	Total	2.70

S.	Environment	Activities	Predict Impact	EMP/Mitigation Measures
No.	al Parameter			

# Proposed Sondri Sand Ghat Project of Area 2.0 Hectare At Village Sondri Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transporta tion of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of Vengangan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline.  Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation.  Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and	Damage of river bank due to access ramps to river bed, may cause soil erosion.	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining"

## Proposed Sondri Sand Ghat Project of Area 2.0 Hectare At Village Sondri Tehsil-Bramhpuri, District-Chandrapur (Maharashtra)

Executive Summary

		transporta tion	Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transporta tion	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-		
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	25,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	1,99,800/-		
	(Rs. 400 per tree)	Along haul road	1/33/000/		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,22,300/-		
	Total				

Proposed Tamsi Rith Sand Ghat Project of Area 1.75 Hectare At Village- Tamsi Rith,
Tehsil- Koparna, District-Chandrapur (Maharashtra)

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.75 ha at River Painganga River adjoining Gut. No. 15, 16, 19, 22, Mouza: Tamsi Rith, Tehsil: Koparna, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/1.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details
A.	Nature of the Project	Proposed Tamsi Rith sand ghat quarry (Minor
		Mineral)
B.	Size of the Project	
1.	Quarry Area	1.75 ha
2.	Proposed Production	6184 Brass/Annum
	capacity	
С	<b>Location Details</b>	
1.	Village	Tamsi Rith
2.	Tehsil	Koparna
3.	District	Chandrapur
4.	State	Maharashtra
5.	Latitude & Longitude	Pillar Latitude Longitude
		1 19°53'40.03"N 79° 9'3.67"E

Proposed Tamsi Rith Sand Ghat Project of Area 1.75 Hectare At Village- Tamsi Rith, Tehsil- Koparna, District-Chandrapur (Maharashtra)

Executive Summary

	1			
		2 19°53'44.44"N 79° 9'14.76"E		
		3 19°53'45.99"N 79° 9'14.23"E		
		4 19°53'41.58"N 79° 9'3.14"E		
6.	Toposheet No.	56M/1		
D	Environmental Settings	of the Area		
1.	River / water body	The quarry area is itself part of water body i.e.		
		River-Penganga		
2.	Nearest Town /	Nearest Village: Tamsi Reeth is at a distance of 1.50		
	City/Village	Km towards South from the Mining area.		
3.	Nearest Railway Station	The nearest railway station is located Chandrapur		
		Railway Station at a distance of 17.10 km in NE		
		direction from Project Site.		
4.	Nearest Airport	Nagpur Airport 138.50 km away towards North.		
5.	State Boundary	No State boundary passes through the project site		
6.	Seismic Zone	Zone – III (Moderate)		
		This is said to be the Moderate Seismic Zone.		
D	Cost Details			
1.	Total Upset Price	Rs. 3710400/-		
E	Requirements of The Pr	s of The Project		
1.	Proposed Water	2.50 KLD		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power Requirement	13 (Skilled and unskilled persons)		

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.50 KLD. It will be procured from the supply source of Village- Tamsi Rith. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.50

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be

# Proposed Tamsi Rith Sand Ghat Project of Area 1.75 Hectare At Village- Tamsi Rith, Tehsil- Koparna, District-Chandrapur (Maharashtra)

			water quality and ground water quality Waste water discharge	restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline.  Dust mask will be provided to the workers engaged.  Regular water sprinkling on unpaved road.  Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and	Damage of river bank due to access ramps to river bed,	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both

Proposed Tamsi Rith Sand Ghat Project of Area 1.75 Hectare At Village- Tamsi Rith, Tehsil- Koparna, District-Chandrapur (Maharashtra)

Executive Summary

		transportati on	may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand.  Surface degradation due to road network	the bank of the river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)	
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-	
1.	by. of tractor trolley &	Water Sprinkling	45,000/-	
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-	
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-	
	Green Belt Development	Along River Bank	1 72 100/	
3.	(Rs. 400 per tree)	Along haul road	1,73,100/-	
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-	
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,17,250/-	
	Total Rs. 5,05,350/			

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.25 ha at River Andhari adjoining Gut No. 36, 37 Mouza: Thergaon, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/07.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars	Details			
A.	Nature	of the	Proposed <sup>-</sup>	Proposed Thergaon sand ghat quarry (Minor Mineral)		
	Project					
B.	Size of the	e Project				
1.	Quarry Area	a	1.25 ha			
2.	Proposed	Production	2208 Brass	s/Annum		
	capacity					
С	Location [	Details				
1.	Village		Thergaon			
2.	Tehsil		Chandrapu	ır		
3.	District		Chandrapu	ır		
4.	State		Maharashtra			
5.	Latitude &	Longitude	Sr. No Latitude "N" Longitude "E"			
			1	19°52'48.50"N	79°39'5.84"E	

**Executive Summary** 

			2	19°52'40.78"N	79°39'3.15"E
			3	19°52'41.54"N	79°39'1.59"E
			4	19°52'49.25"N	79°39'4.31"E
6.	Toposheet No.	•	56M/07		
D	Environment	tal Setting	gs of the A	rea	
1.	River / water l	oody	The quarry	y area is itself part of wa	ater body i.e. River-
			Andhari		
2.	Nearest To	own /	Nearest Vi	llage: Thergaon-1 is at a	distance of 0.8 Km
	City/Village	City/Village towards South West from the Mining area.			ng area.
3.	Nearest	Railway	Makudi Ra	ilway Station at a distan	ce of 12.0 km in W
	Station		direction from Thergaon sand ghat Site.		
4.	Nearest Airpor	t	Chandrapu	ır Airport 47 km away to	wards West.
5.	State Bounda	ry	No State b	oundary passes through	the project site
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	Cost Details				
1.	Total Upset Pr	ice	Rs. 1324800/-		
E	Requirement	ts of The	Project		
1.	Proposed	Water	2.60 KLD		
	Requirement				
2.	Fuel requireme	ent	N/A		
3.	Man	Power	·		
	Requirement			-	
-	•				

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.60

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

**Executive Summary** 

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
3.	Green Belt Development	Along River Bank	2,37,600/-
	(Rs. 300 per tree)	Along haul road	,,,,,,,,,
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93000/-
	Tot	tal	Rs. 5,65,500/-

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Proposed Tulana-2 Sand Ghat Project of Area 1.44 Hectare At Village Tulana, Teh	ısil-
Warora, District-Chandrapur (Maharashtra)	

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.44 ha at River Wardha adjoining Gut no. 393, 394, 363, Mouza: Tulana, Tehsil: Warora, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55L/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars		Details				
A.	Nature	of	the	Proposed <sup>-</sup>	Proposed Tulana -2 sand ghat quarry (Minor Mineral)			
	Project							
B.	Size of the	e Proje	ect					
1.	Quarry Are	a		1.44 ha				
2.	Proposed	Produ	uction	2544 Brass/Annum				
	capacity							
С	Location [	Details	5					
1.	Village			Tulana				
2.	Tehsil			Warora				
3.	District			Chandrapur				
4.	State			Maharashtra				
5.	Latitude &	Longitu	ıde	Pillar Latitude Longitude				
				1	20°11'49	).40"N	78°57'29.29"E	

## Proposed Tulana-2 Sand Ghat Project of Area 1.44 Hectare At Village Tulana, Tehsil-Warora, District-Chandrapur (Maharashtra)

Executive Summary

	T				
		2 20°11'55.24"N 78°57'34.77"E			
		3 20°11′56.55″N 78°57′33.26″E			
		4 20°11'50.72"N 78°57'27.77"E			
6.	Toposheet No.	55L/16			
D	<b>Environmental Setting</b>	gs of the Area			
1.	River / water body	The quarry area is itself part of water body i.e. River-			
		Wardha			
2.	Nearest Town /	Nearest Village: Karanji is at a distance of 1.25 km in			
	City/Village	SE direction from the project site.			
3.	Nearest Railway	The nearest railway station is located Warora Railway			
	Station	Station, 7.65 Km away towards NE Direction from			
		Project Site.			
4.	Nearest Airport	Chadrapur Airport, 35.60 km away towards SEE			
		direction			
5.	State Boundary	No State boundary passes through the project site			
6.	Seismic Zone	Zone – III (Moderate)			
		This is said to be the Moderate Seismic Zone.			
D	Cost Details				
1.	Total Upset Price	Rs. 1526400/-			
E	Requirements of The	Project			
1.	Proposed Water	2.30 KLD			
	Requirement				
2.	Fuel requirement	N/A			
3.	Man Power	09 (Skilled and unskilled persons)			
	Requirement				
	<u> </u>				

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.30 KLD. It will be procured from the supply source of Village- Karanji. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.30
2.	Dust Suppression / Water Sprinkling	1.00
3.	Green belt / Plantation	1.00
	Total	2.30

S.	Environme	Activities	Predict Impact	EMP/Mitigation Measures
No.	ntal			
	Parameter			

# Proposed Tulana-2 Sand Ghat Project of Area 1.44 Hectare At Village Tulana, Tehsil-Warora, District-Chandrapur (Maharashtra)

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and	Damage of river bank due to access ramps to river bed,	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the

Proposed Tulana-2 Sand Ghat Project of Area 1.44 Hectare At Village Tulana, Tehsil-Warora, District-Chandrapur (Maharashtra)

Executive Summary

		transportati on	may cause soil erosion.  Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	river (as per "Sustainable Sand Mining Guidelines"). Mining will not exceeds beyond the allowed extraction capacity. Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
1.	Dust generation due to	Environmental Baseline Monitoring (Air,	45,000/-
	transportation material by. of	Water, Noise etc.)	
	tractor trolley & transportation of	Water Sprinkling	35,000/-
	mineral	Sand carrying trolleys will be Covered	5000/-
		with Tarpaulin	
2.	Road maintenance	Proper Maintenance of Haul road	80,000/-
3.	Green Belt Development	Along River Bank	1,42,000/-
	(Rs. 400 per tree)	Along haul road	
4.	Security	Display Boards and other security	40,000/-
		measures (CCTV, Fencing etc)	
5.	Occupational Health	Provision of PPE Kits and Periodic health	93,250/-
		check-up, Temporary Shed, Mobile	
		toilet etc.	
	Total		Rs. 4,40,450/-

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.75 ha at River Uma adjoining Gut No. 310 to 313, 146 Mouza: Usegaon, Tehsil: Chimur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details			
A.	Nature of the Project	Proposed Usegaon sand ghat quarry (Minor Mineral)			
B.	Size of the Project				
1.	Quarry Area	2.75 ha			
2.	Proposed Production capacity	9717 Brass/Annum			
С	<b>Location Details</b>				
1.	Village	Usegaon			
2.	Tehsil	Chimur			
3.	District	Chandrapur			
4.	State	Maharashtra			
5.	Latitude & Longitude	Pillar Latitude Longitude			

**Executive Summary** 

		1	20°25'32.36"N	79°26'37.29"E
		2	20°25'14.98"N	79°26'41.80"E
		3	20°25'14.58"N	79°26'40.14"E
		4	20°25'31.95"N	79°26'35.62"E
6.	Toposheet No.	56M/09		
D	<b>Environmental Settings of </b>	the Area		
1.	River / water body	The quari	ry area is itself part o	of water body i.e.
		River-Uma	1	
2.	Nearest Town / City/Village	Nearest V	illage: Usegaon is at a c	listance of 0.75 Km
		towards S	outh East from the Mini	ng area.
3.	Nearest Railway Station	The near	est railway station i	s located Chimur
		Railway S	tation at a distance of	f 14.22 km in NW
		direction f	rom Project Site.	
4.	Nearest Airport	Nagpur Airport 87 km away towards West.		
5.	State Boundary	No State b	oundary passes through	h the project site
6.	Seismic Zone	Zone – III	(Moderate)	
		This is said	d to be the Moderate Se	eismic Zone.
D	Cost Details			
1.	Total Upset Price	Rs. 58302	00/-	
E	Requirements of The Project	ct		
1.	Proposed Water Requirement	3.10 KLD		
2.	Fuel requirement	N/A		
3.	Man Power Requirement	22 (Skilled	and unskilled persons)	
	-	1		

## **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 3.10 KLD. It will be procured from the supply source of Village- Usegaon. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.80
2.	Dust Suppression / Water Sprinkling	1.30
3.	Green belt / Plantation	1.00
	Total	3.10

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction	Change in flow pattern	No diversion is proposed. There will not be any adverse impact on flow
		of sand	Increase in depth may increase the	pattern, surface hydrology and ground water regime.

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed.  Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers.  Development of effective greenbelt which shall help in noise attenuation.  Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.

Executive Summary

			ecological due to extraction of sand. Surface degradation due to road network	Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)
1.	Dust generation due to transportation material by. of tractor trolley & transportation of mineral	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-
		Water Sprinkling	25,000/-
		Sand carrying trolleys will be Covered with Tarpaulin	5000/-
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-
3.	Green Belt Development Along River Bank		2,72,100/-
	(Rs. 300 per tree)	Along haul road	2,72,100/-
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93,250/-
	Rs. 5,80,250/-		

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Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 2.88 ha at River Andhari adjoining Gut No. 56, 57, 58, 61, 63, 67 Mouza: Velwa chak, Tehsil: Chandrapur, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/07.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

In order to obtain environmental clearance as per the EIA Notification 2006 the Pre-feasibility Report (PFR) is submitted along with the application Form I M for the project under consideration. The project is categorized as **Category B2** vide Notification 141 (E) dated 15<sup>th</sup> January 2016.

**Table: Salient Features of the Project Site** 

S. No.	Particulars				D	etails				
A.	Nature	of	the	Proposed	Velwa	chak	sand	ghat	quarry	(Minor
	Project			Mineral)						
B.	Size of the Project									
1.	Quarry Are	a		2.88 ha						
2.	Proposed Production		uction	10177 Brass/Annum						
	capacity									
С	Location I	Details	5							
1.	Village			Velwa cha	k					
2.	Tehsil			Chandrapur						
3.	District			Chandrapur						
4.	State		Maharasht	ra						
5.	Latitude &	Longiti	ude	Sr. No	Latitud	e "N"		Lo	ngitude "	E"
				1	19	9°51'1.4	18"N		79°40'20.	44"E

**Executive Summary** 

	1				
			2	19°51'11.80"N	79°40'8.06"E
			3	19°51'10.44"N	79°40'6.60"E
			4	19°51'0.12"N	79°40'18.97"E
6.	Toposheet No.		56M/07		
D	Environment	al Setting	gs of the A	rea	
1.	River / water b	ody	The quarry	area is itself part of wa	ater body i.e. River-
			Andhari		
2.	Nearest Town / Nearest Village: Velwa chak-1 is at a distance of			at a distance of 0.8	
	City/Village		Km toward	Is South West from the I	Mining area.
3.	Nearest	Railway	Makudi Railway Station at a distance of 16.0 km in W		
	Station		direction from Velwa chak sand ghat Site.		
4.	Nearest Airpor	t	Chandrapur Airport 47 km away towards West.		
5.	State Boundar	ry	No State boundary passes through the project site		
6.	Seismic Zone		Zone – III (Moderate)		
			This is said to be the Moderate Seismic Zone.		
D	<b>Cost Details</b>				
1.	Total Upset Pri	ice	Rs. 610620	00/-	
E	Requirement	s of The	Project		
1.	Proposed Water		2.60 KLD		
	Requirement				
2.	Fuel requireme	ent	N/A		
3.	Man	Power	17 (Skilled and unskilled persons)		
	Requirement				
			,	and unskilled persons)	

### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.60 KLD. It will be procured from the supply source of Village-Aarvi. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.40
2.	Dust Suppression / Water Sprinkling	1.20
3.	Green belt / Plantation	1.00
	Total	2.60

#### **ENVIRONMENT MANAGEMENT PLAN**

S. No.	Environmental Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.

Executive Summary

			flow velocity Change in surface water quality and ground water quality Waste water discharge	Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of hWardhan health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river

**Executive Summary** 

			extraction of sand. Surface degradation due to road network	bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

#### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)		
	Dust generation due to				
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	35,000/-		
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-		
2.	Road maintenance	Proper Maintenance of Haul road	1,00,000/-		
3.	Green Belt Development	Along River Bank	2,85,000/-		
	(Rs. 300 per tree)	Along haul road	_,,_,		
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-		
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	93250/-		
	Total				

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Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 1.57 ha at River Uma adjoining Gut No. 244 to 248, 252, Mouza: Virwah, Tehsil: Sindewahi, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 56M/09.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

In order to obtain environmental clearance as per the EIA Notification 2006 the Pre-feasibility Report (PFR) is submitted along with the application Form I M for the project under consideration. The project is categorized as **Category B2** vide Notification 141 (E) dated 15<sup>th</sup> January 2016.

**Table: Salient Features of the Project Site** 

S. No.	Particulars	Details		
A.	Nature of the Project	Proposed Virwah sand ghat quarry (Minor Mineral)		
B.	Size of the Project			
1.	Quarry Area	1.57 ha		
2.	Proposed Production	5565 Brass/Annum		
	capacity			
С	<b>Location Details</b>			
1.	Village	Virwah		
2.	Tehsil	Sindewahi		
3.	District	Chandrapur		
4.	State	Maharashtra		
5.	Latitude & Longitude	Pillar Latitude Longitude		

# Proposed Virwah Sand Ghat Project of Area 1.57 Hectare At Village Virwah Tehsil-Sindewahi, District-Chandrapur (Maharashtra)

		1	19°58'16.42"N	79°39'56.67"E		
		2	19°58'16.16"N	79°39'39.48"E		
		3	19°58'18.42"N	79°39'39.56"E		
		4	19°58'18.69"N	79°39'56.76"E		
6.	Toposheet No.	56M/09				
D	<b>Environmental Settings</b>	of the Are	ea			
1.	River / water body	The quarry Uma	area is itself part of wa	ater body i.e. River-		
2.	Nearest Town / Nearest Village: Virwah is at a distance of 0.5 City/Village towards South East from the Mining area.					
3.	7. 5			<u> </u>		
	Railway Station at a distance of ~8.9					
		direction from Project Site.				
4.	Nearest Airport		r Airport 87 km away to	wards West		
5.	State Boundary	No State boundary passes through the project site				
6.	Seismic Zone	Zone – III (Moderate)				
0.	Scisific Zoric	This is said to be the Moderate Seismic Zone.				
D	Cost Details	11113 13 3410	to be the Moderate Sei	Sittle Zorie.		
	Cost Details					
1.	Total Upset Price	Rs. 8649300/-				
E	Requirements of The Pr	roject				
1.	Proposed Water	2.50 KLD				
	Requirement					
2.	Fuel requirement	N/A				
3.	Man Power Requirement	18 (Skilled	ed and unskilled persons)			
		`	<u> </u>			

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.50 KLD. It will be procured from the supply source of Village- Virwah. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.0
3.	Green belt / Plantation	1.00
	Total	2.50

#### **ENVIRONMENT MANAGEMENT PLAN**

S.		Activities	Predict Impact	EMP/Mitigation Measures
	Paramet			
	er			

# Proposed Virwah Sand Ghat Project of Area 1.57 Hectare At Village Virwah Tehsil-Sindewahi, District-Chandrapur (Maharashtra)

Executive Summary

1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may increase the flow velocity Change in surface water quality and ground water quality Waste water discharge	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology and ground water regime.  Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river.  Portable toilets will be used; hence no sewage/ liquid effluent will be generated.
2.	Air	Mining Activity, transportati on of sand via vehicles or tractor movement Loading and unloading of mineral	Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road. Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers. The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done.  No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound.  Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling.  Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of sand and transportati on	Damage of river bank due to access ramps to river bed, may cause soil erosion. Destruction of river	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").

Proposed Virwah Sand Ghat Project of Area 1.57 Hectare At Village Virwah Tehsil-Sindewahi, District-Chandrapur (Maharashtra)

Executive Summary

			bank interland and ecological due to extraction of sand. Surface degradation due to road network	Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportati on	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

### **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	transportation material by. of tractor trolley & transportation	Water Sprinkling	25,000/-			
	of mineral	Sand carrying trolleys will be Covered with Tarpaulin	5000/-			
2.	Road maintenance	Proper Maintenance of Haul road	1,08,000/-			
3.	Green Belt Development	Along River Bank	2,07,200/-			
J.	(Rs. 300 per tree)	Along haul road	2,07,200/			
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	1,27,050/-			
	Total					

Executive Summary

#### **EXECUTIVE SUMMARY**

This Report has been prepared for the Proposed sand ghat over the area of 4.90 ha at River Wainganga River adjoining Gut. No. 356, 357, 359, 158 Mouza: Vitthalwada-Yenbothla, Tehsil: Gondpipri, District: Chandrapur, Maharashtra in accordance with the Notification of MoEF S.O. 1533 dated 14th September 2006. The Ministry of Environment, Forest and Climate Change amended Principal Notification vide 141(E) dated 15<sup>th</sup> January 2016 and included Minor Minerals from 0 ha to 50 ha in the Principal Notification S.O. 1533 (E) dated 14.09.2006. Central Government made further amendments to the notification vide S.O. 2269(E) dated 01.07.2016. In obedience all relevant notifications to the principal Notification dated 14th September 2006, application for the excavation of sand ghat from proposed sand ghat is being submitted to SEIAA/SEAC, Maharashtra.

Sand is one of the most sought building materials for the construction purpose. Since Sand has hard texture and durability. It is used chiefly for construction, pavement of roads and imperviousness to moisture and acid. Sand is a perfect countertop material.

The mining for this sand ghat excavation is proposed to be carried out manually with opencast method of mining engaging labours with help of crow bars, hand shovel, pick axes and baskets. Loading will be carried out manually and transportation of mineral from the sand ghat to the depot by tractor with tipper arrangement. As the mineral is soft & loose in nature, drilling and blasting are not required. The proposed sand ghat area is located at Survey of India Toposheet No: 55 N/16.

The Mining Plan and Progressive Mine Closure Plan have been approved by DGM govt. of Maharashtra. Copy of Mining Plan and Progressive Mine Closure Plan.

In order to obtain environmental clearance as per the EIA Notification 2006 the Pre-feasibility Report (PFR) is submitted along with the application Form I M for the project under consideration. The project is categorized as **Category B2** vide Notification 141 (E) dated 15<sup>th</sup> January 2016.

**Table: Salient Features of the Project Site** 

S. No.	Parti	culars			Details	
A.	Nature	of	the	Proposed	Vitthalwada-Yenbothla	sand ghat quarry
	Project			(Minor Mir	neral)	
B.	Size of the	e Proje	ect			
1.	Quarry Are	a		4.90 ha		
2.	Proposed	Produ	uction	8657 Brass/Annum		
	capacity					
С	Location I	Location Details				
1.	Village			Vitthalwada-Yenbothla		
2.	Tehsil			Gondpipri		
3.	District			Chandrapı	ır	
4.	State			Maharasht	ra	
5.	Latitude &	Longitu	ıde	Pillar	Latitude	Longitude
				1	19°42'41.76"N	79°46'56.51"E
				2	19°43'4.11"N	79°46'52.15"E

Executive Summary

		3	19°43'4.84"N	79°46'54.44"E
		4	19°42'42.46"N	79°46'58.80"E
6.	Toposheet No.	55 N/16		
D	<b>Environmental Setting</b>	gs of the A	rea	
1.	River / water body	The quarry	area is itself part of w	ater body i.e. River-
		Wainganga	a River	
2.	Nearest Town /	Nearest '	Village: Vitthalwada-Ye	enbothla is at a
	City/Village	distance o	f 1.20 Km towards Sou	uth from the Mining
		area.		
3.	Nearest Railway	The neare	st railway station is lo	cated Virur Railway
	Station	Station, 7.50 Km away towards East from ML		
4.	Nearest Airport	Nagpur Airport, 131.50 km away towards North		
5.	State Boundary	No State b	oundary passes through	n the project site
6.	Seismic Zone	Zone – III	(Moderate)	
		This is said	d to be the Moderate Se	ismic Zone.
D	Cost Details			
1.	Total Upset Price	Rs. 13455	000/-	
E	Requirements of The	Project		
1.	Proposed Water	2.80 KLD		
	Requirement			
2.	Fuel requirement	N/A		
3.	Man Power	22 (Skilled	and unskilled persons)	
	Requirement			

#### **AVAILABILITY OF WATER & ITS SOURCE**

The daily water demand for the proposed project is 2.80 KLD. It will be procured from the supply source of Village- Vitthalwada-Yenbothla. The detailed breakup of the water requirement is given below.

**Table: Water Demand** 

S. No.	Particulars	Quantity (KLD)
1.	Domestic Purpose	0.50
2.	Dust Suppression / Water Sprinkling	1.30
3.	Green belt / Plantation	1.00
	Total	2.80

### **ENVIRONMENT MANAGEMENT PLAN**

S. N o.	Environmen tal Parameter	Activities	Predict Impact	EMP/Mitigation Measures
1.	Water	Mining or extraction of sand	Change in flow pattern Increase in depth may	No diversion is proposed. There will not be any adverse impact on flow pattern, surface hydrology

Executive Summary

2.	Air	Mining Activity, transportatio n of sand via vehicles or tractor movement	increase the flow velocity Change in surface water quality and ground water quality Waste water discharge  Generation of fugitive dust may lead to Adverse effect of human health Stomatal index may be minimized due to dust deposit on leaf.	and ground water regime. Mining activities will be restricted to 3.0m depth, which will not cause much change in flow pattern of the river. Portable toilets will be used; hence no sewage/ liquid effluent will be generated. Green belt shall be developed within the premises as per CPCB guideline. Dust mask will be provided to the workers engaged. Regular water sprinkling on unpaved road.
		Loading and unloading of mineral		Levelling of roads will be done to maintain the uniform speed of the trucks/ tippers.  The speed of trucks plying on the haul road will be limited and covering of material during transportation. Overloading will be avoided.
3.	Noise	Traffic on nearby road to mining site.	Noise generation due to vehicular traffic and mining activity	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles will be allowed. Proper maintenance of vehicles and their silencers to minimize vibration and sound. Ear muffs will be provided to workers. Development of effective greenbelt which shall help in noise attenuation. Road surfaces will be maintained in good condition to reduce tyre noise and to assure continuous traffic flow to avoid prolonged idling. Noisy activities will be scheduled at normal working hours (daytime hours) to the extent possible when the environment is least sensitive to noise impact.
4.	Land	Mining or extraction of	Damage of river bank due to access ramps	Safety distance of 3m or 1/4 <sup>th</sup> of the width of the river whichever is

Executive Summary

		sand and transportatio n	to river bed, may cause soil erosion. Destruction of river bank interland and ecological due to extraction of sand. Surface degradation due to road network	more will be left from both the bank of the river (as per "Sustainable Sand Mining Guidelines").  Mining will not exceeds beyond the allowed extraction capacity.  Minimum no. of access roads to river bed for which cutting of river banks will be avoided and ramps are to be maintained.
5.	Ecology	Extraction of sand and transportatio n	Short-term disturbance of habitats disturbance of wildlife populations from noise Ecological impact surrounding habitat	The green belt/community forestry near river bank and approach road will restrict the fugitive emission.
6.	Traffic Pattern	Increase of vehicular traffic	Traffic due to people coming to visit	Vehicular movement will be regulated inside the project with adequate roads and parking lots in the project.

## **FUND PROVISION FOR EMP**

Following provisions are proposed to be taken for improving, control and monitoring of environment protection measures:

S. No.	Particulars/Items	Control Measures	Amount (In Rs.)			
	Dust generation due to transportation material	Environmental Baseline Monitoring (Air, Water, Noise etc.)	45,000/-			
1.	by. of tractor trolley &	Water Sprinkling	55,000/-			
	transportation of mineral	Sand carrying trolleys will be Covered with Tarpaulin	10000/-			
2.	Road maintenance	Proper Maintenance of Haul road	1,50,000/-			
2	Green Belt Development	Along River Bank	4.45.5007			
3.	(Rs. 300 per tree)	Along haul road	4,45,500/-			
4.	Security	Display Boards and other security measures (CCTV, Fencing etc)	40,000/-			
5.	Occupational Health	Provision of PPE Kits and Periodic health check-up, Temporary Shed, Mobile toilet etc.	77,250/-			
	Total Rs					