

# District Environment Plan



Prepared By



Environment Department, Government of Maharashtra



Maharashtra Pollution Control Board

**Osmanabad**

## 1.0 Preamble

Hon'ble National Green Tribunal vide order dated 26/09/2019 in O.A. No. 360 of 2018 filed by Shree Nath Sharma Vs Union of India and Others directed that CPCB shall facilitate the District Magistrates in preparation of District Environmental Plan by placing Model plan on its website. This model plan may be adopted as per local requirements by all Districts under supervision of District Magistrate.

The said Order also directs that Department of Environment in respective States / UTs should collect district plans to prepare State Environment Plan, which shall be monitored by respective Chief Secretaries of State/UT by 15/12/2019.

Based on State Environmental plans, CPCB and Ministry of Environment, Forest & Climate Change shall prepare National Environmental Plan, under the supervision of Secretary, MoEF&CC and Chairman, CPCB by 31/01/2020. The National Action Plan needs to be submitted before Hon'ble NGT 15/02/2020.

In compliance to above directions and as per the model DEP prepared by CPCB, Environment Action plan for the district is prepared.

## 2.0 Introduction

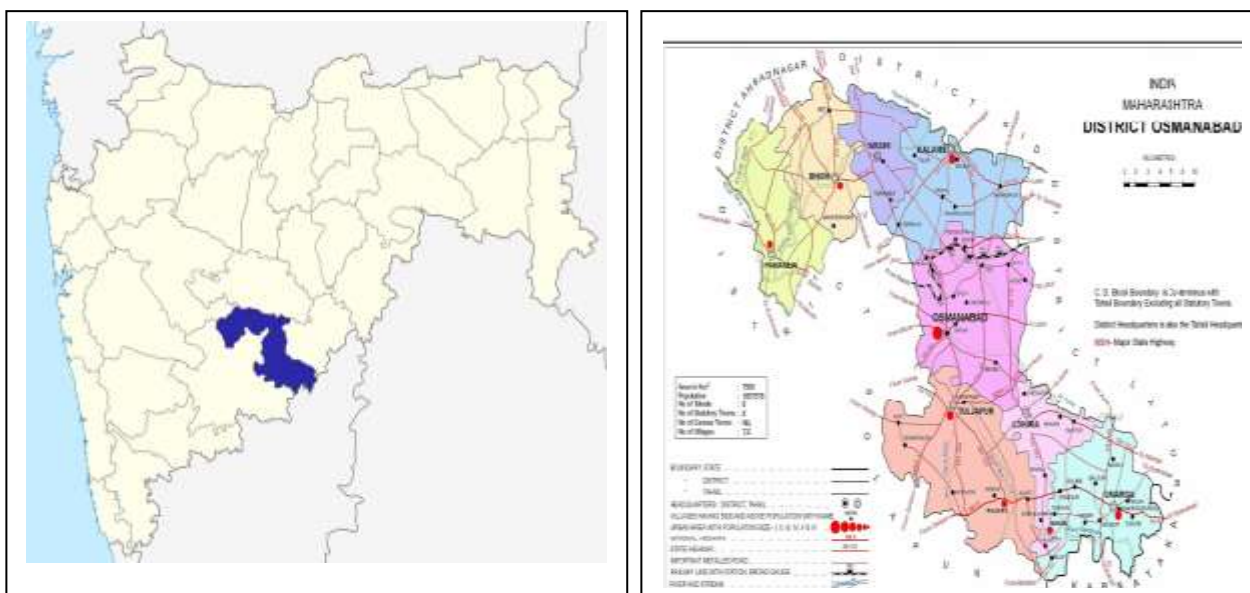
Osmanabad district lies in the southern part of state. Most of the district area is rocky while the remaining part is plain. The height of district is 600 mm above sea level. Most part of the district is surrounded by small mountain called "Balaghat". Bhoom, Washi, Kalamb, Osmanabad & Tuljapur Tahsil lie in the range of this Balaghat mountain. Some part of the major rivers like Godawari and Bhima come under this district.

General Osmanabad district profile is presented in the **Table 1**

**Table 1 District Profile**

Description	Details
Average Climate	Summer: 25.8 °C. Winter :8°C TO 25°C. Rainfall: 833 mm.
Geographical Location	The district is located on east side of Marathwada region within North latitude 17.35 to 18.40 degree and east latitude 75.16 to 76.40 degree.
Area	7569 Sq. km.
Boundaries	The district is surrounded by following districts: Solpaur – South-west, Ahmednagar – North-west, Beed – North, Latur – East, Bidar & Gulbarga (Karnataka) – South
Languages Spoken	Marathi, Hindi, English are major languages but all Indian languages are spoken
Population	Total: 3,11,859 [According to 2011 Census Report]
Population Density	219 Per Sq. km.
Literacy Rate	78.44
Rivers	Godawari and Bhima
ULBs	10 Numbers
Municipal Corporations	No
Villages	733 Numbers
Statutory Towns	8 Numbers
Tahsils	8 Numbers

Description	Details
	Paranda, Bhum, Washi, Kalamb, Osmanabad, Tuljapur, Lohara and Umarga.
Pin Code	413501



**Figure 1 Location of District**

### 3.0 Waste Management Plan

Solid waste management is among the basic essential services provided by municipal authorities in the country to keep cities clean. Primary sources of solid waste are local households, commercial establishments, hospitals, hotels, restaurants, and markets. Local Bodies are responsible for collection, storage, segregation, transportation and disposal of all solid waste generated in the city. There are 10 Urban Local Bodies [ULBs] in the district. **Table 2** represents the list of ULBs along with population.

**Table 2 Name of ULBs with Population**

Sr. No.	Urban Local Bodies	Population
1.	Osmanabad Municipal Council	111,825
2.	Tuljapur Municipal Council	35,403
3.	Omerga Municipal Council	35,560
4.	Naldurg Municipal Council	18,341
5.	Murum Municipal Council	18,374
6.	Bhoom Municipal Council	22,077
7.	Paranda Municipal Council	18,758
8.	Kallam Municipal Council	25,713
9.	Lohara Nagar Panchayat	8,661
10.	Washi Nagar Panchayat	17,147
11.	Osmanabad Municipal Council	111,825

### 3.1 Domestic Solid Waste Management Plan

Osmanabad district is having 10 ULBs with 149 Wards. As per collected data, total solid waste generation of Osmanabad district is 99.69MTD. Out of total generated solid waste, 29.34MTD is treated per day.

Osmanabad Municipal Corporation stands on top with the highest quantity i.e. 45MTD followed by Omerga M. Council i.e 13.3MTD. Vashi Nagar Panchayat generates lowest quantity i.e. 2MTD. It is observed that quantity of solid waste generation is in line with the respective population of ULBs.

Osmanabad district generates 8.345MTD of Street Sweeping Waste. Maximum quantity of Street Sweeping Waste is generated by 3 ULBs with total quantity of 2MTD each followed by 4 ULBs with 0.2MTD each and Naldurg Municipal Council stands lowest with 0.015MTD.

Total quantity of Drain Silt Waste generated is 8.75MTD. It seems that maximum quantity of Drain Silt Waste is generated by Tuljapur Municipal Council with total quantity of 3MTD followed by Osmanabad Municipal Council with 1MTD. Paranda Municipal Council stands lowest with 0.05MTD. However it is observed that quantity of Drain Silt waste by Omerga Municipal Council is not estimated and Naldurg Municipal Council does not generate any Drain silt waste.

Total DHW quantity generated is 0.383MTD. Maximum quantity of DHW is generated by Omerga Municipal Council with total quantity of 0.2MTD and Lohara Nagar Panchayat stands lowest with 0.001MTD.

Total Quantity of Horticulture, Sanitary and other waste is 0.72MTD. Maximum quantity of Other Waste is generated by Murum Municipal Council with total quantity of 0.2MTD and Kallam Municipal Council generates lowest quantity i.e. 0.02MTD. It is observed that Naldurg Municipal Council does not generate Horticulture, Sanitary and other waste.

Osmanabad district is having total 9 Bulk Waste Generators with one each in all ULBs except in Murum Municipal Council. It is observed that inventory for Murum Municipal Council. All the Bulk waste generators have on site treatment facilities for Wet waste.

### **3.1.1 Infrastructure Adequacy**

All 10 ULBs have provided 100% door to door collection facility. It is observed that all ULBs carry of manual road sweeping. Almost 100% of waste is being transport through segregated waste transport system. 72% wet waste collected in district is treated through composting.

All the 10 ULBs are using Multi Re Use Facility to separate and prepare recyclable materials. 4 ULBs have started reclamation of old dump site. No ULB have linkage with waste to energy boiler / cement plant. However each ULBs have linkage with recycler & TSDF / CBMWTF. All ULBs have issued authorization to the waste pickers.

It is observed that there are total no waste transfer points in Osmanabad district. District has total 10 waste trolleys of, 74 Mini collection trucks and 9 Bulk transport trucks. As per record, it is observed that all 10 ULBs have implemented the Solid Waste Management Rules.

### **3.2 C&D Waste Management Plan**

The Construction and Demolition Waste [C&D Waste] generated by Osmanabad district is about 10MTD. C&D Waste generated by Vashi Nagar Panchayat alone. It is observed that vashi Nagar Municipal Council is only the not generating any C&D waste which is not practically possible and need to review the data. Non availability of data will not help in preparing ingenious and executable plan for waste management of the district hence local bodies must ensure proper sampling and factual measurement of the various types of waste being generated.

### 3.3 Plastic Waste Management

Overall Plastic waste generated in the district is 0.96MTD. Lohara Nagar Panchayat generates maximum waste with 0.5MTD. There are total 4 Plastic Waste Collection Centre across the district with 71 Plastic Waste Pickers. ULBs has Established linkage with 12 NGOs. Out of 10ULBs, 3 ULBs have been used MRF. PW Management Rules, 2016 is implemented in all the ULBs. However no information is available related to programme conducted for mass awareness of public regarding plastic waste.

### 3.4 Biomedical Waste Management

There are total 557 Health Care Facilities including bedded, non bedded hospitals, Veterinary hospitals, Pathology Labs, Clinics and Blood banks etc. Authorization is taken by 547 HCFs [181 Bedded & 366 Non-bedded]. Total BMW generation from all HCFs is 315 Kg/Day. There is only 2 Common Facilities available which collects all BMW for further treatment and disposal. It seems that 100% pre segregation of waste is being done.

### 3.5 Hazardous Waste Management

There are 12 industries which generates Hazardous Waste to the tune of 1,930.06 MT/Annually. Out of which 1,873.66 MT is sent for incineration, 244.37 MT is sent for land filling and 50.4MT is processed for recovery of recyclable/realizable materials. All industries have taken authorization for HW generation. As there is no Common Hazardous Waste TSDF installed within the district hence all generated HW is being sent to Common HW Facility present in other district of the State.

### 3.6 E Waste Management

E waste is generated annually is not estimated. According to the E Waste Rules, ULBs has established 8 Collection Centres. ULBs have linkage with authorized E-Waste recyclers / Dismantler.

### 3.7 Action Plan

As per the above data it is observed almost all ULBs are handling & disposing generated solid waste as per the Solid Waste Management Rules, however certain practices needs to be strengthen and can be improved by adopting precise and excitable action plan as mentioned in **Table 3**.

**Table 3 Action Plan for Solid Waste Management**

Sectors	Gaps	Action Points	Priority
<b>Domestic Solid Waste</b>			
Quantification	<ul style="list-style-type: none"> <li>▪ Methodology for solid waste quantification should be ascertained</li> <li>▪ Quantification based on Income group, culture affluence and technology to be considered</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mechanism for graded weighing system either through intermediate transfer station or at the common receiving station to be created. Usually one weigh bridge at any treatment / disposal location required</li> <li>▪ Quadrate sampling methodology to be adopted in order to reduce quantity as well as quality</li> </ul>	Immediate

Sectors	Gaps	Action Points	Priority
Infrastructure	<ul style="list-style-type: none"> <li>▪ Mostly composting is the main treatment methodology</li> <li>▪ Sanitary landfill is not installed</li> <li>▪ Bio - Methanation unit is not installed</li> </ul>	<ul style="list-style-type: none"> <li>▪ Intermediate / Transfer station based decentralized waste treatment facility to be evaluated</li> <li>▪ Need to provide at least one SLF per ULB</li> <li>▪ Composting facility can be further augmented with aid-on of at least one Bio-Methanation plant per ULBs</li> </ul>	High
Plastic Waste	<ul style="list-style-type: none"> <li>▪ Lack of SOP for not only quantification but also life cycle analysis [LCA]</li> <li>▪ Limited understanding / interpretation of EPR / PRO</li> </ul>	<ul style="list-style-type: none"> <li>▪ Strengthening surveillance of life cycle assessment for type and quantity of Plastic Waste</li> <li>▪ Effective EPR Policy</li> <li>▪ Mass awareness through ULBs</li> </ul>	High & Immediate
C&D Waste	<ul style="list-style-type: none"> <li>▪ No facility for C&amp;D Waste Recycling Plant</li> </ul>	<ul style="list-style-type: none"> <li>▪ Minimum 1 such facility at each of the ULB to be established</li> <li>▪ System for utilization of recovered material and processed C&amp;D waste to be effectively implemented and monitored</li> </ul>	High
Biomedical Waste	<ul style="list-style-type: none"> <li>▪ Rooting and effective collection within 48hrs from the time of generation to be effectively handled</li> </ul>	<ul style="list-style-type: none"> <li>▪ Regular Inventorization through automatic / digital platform to be developed</li> <li>▪ Collection mechanism to be strengthen with additional vehicles to cover vast area and scattered HCF [miniscule quantity]</li> <li>▪ Process of Monitoring and review of onsite handling of BMW handling should be stringent and digital surveillance measures can be adopted to achieve 100% compliance</li> </ul>	Very High & Immediate
Hazardous Waste	<ul style="list-style-type: none"> <li>▪ No separate handling of domestic HW</li> <li>▪ Not effective segregation of DHW at source</li> </ul>	<ul style="list-style-type: none"> <li>▪ Either decentralized 4 - 5 step segregation practices to be initiated or at least advisory for intermittent storage and collection of domestic HW to be initiated</li> <li>▪ Inventory to be initiated and maintained</li> </ul>	Very High & Immediate

Sectors	Gaps	Action Points	Priority
E Waste	<ul style="list-style-type: none"> <li>▪ Lack of inventory</li> <li>▪ Limited understanding of E waste rule and management</li> <li>▪ Neither segregation nor separate transfer / handling facility</li> <li>▪ No Awareness programme conducted by ULBs &amp; PROs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Detailed inventory for domestic e waste under 26 different categories</li> <li>▪ Mass awareness campaign</li> </ul>	Very High & Immediate

#### 4.0 Water Quality Management Plan

It is observed that no river flow within the district. Total number of bore-well estimated are 15967. It is observed that no ULB has given permission for extraction of Groundwater. Total 15.9MLD sewage is generated.

37 No's Agro-based Industries are present in district. Total quantity of Industrial effluent generated is 6.86MLD. It is observed that no CETP located in the district.

All the above needs to be combined with the effort of sensitization and awareness at all level in order to formulate and implement successful water quality management strategy. Detailed Issue based management action plan is provided in **Table 4**.

**Table 4 Action Plan for Water Quality Management**

Sectors	Gaps	Action Points	Priority
Water Resources	<ul style="list-style-type: none"> <li>▪ Limited information available on mapping of surface water resources in terms of quantity</li> <li>▪ Limited Inventorization of quantity, usage, availability exploitation etc.</li> <li>▪ Limited Rejuvenation / remediation of water bodies</li> <li>▪ Bore-wells are being used without CGWB permission</li> </ul>	<ul style="list-style-type: none"> <li>▪ Extend water quality monitoring network to include representativeness</li> <li>▪ Based on the criticality initiate Rejuvenation / remediation</li> <li>▪ Online Monitoring system for surface water bodies to be established</li> <li>▪ Notices and actions needs to be taken against violator who are withdrawing water without permission</li> </ul>	High
Domestic	<ul style="list-style-type: none"> <li>▪ Correlation between generation and treatment often misleading</li> <li>▪ Water budgeting exercise often missing</li> <li>▪ Computation of water footprint missing</li> <li>▪ It seems there is no STP installed within the district and entire sewage is being discharged in to the river without treatment</li> <li>▪ Surveillance /Inventorization in cradle to grave approach</li> </ul>	<ul style="list-style-type: none"> <li>▪ Digital Platform to accommodate water budgeting / reuse potential</li> <li>▪ Approximately 17MLD of STP needed</li> <li>▪ Need to construct sewage collection network to cover 100% Population</li> <li>▪ Policy for reuse / recycle of treated wastewater</li> </ul>	Very high & Immediate

Sectors	Gaps	Action Points	Priority
	absolutely never applied ▪ Limited collection system and treatment facility especially in remote area ▪ No established reuse options / reuse network		

## 5.0 Air Quality Management

Both CPCB & MPCB through their NAMP & SAMP programme has not set up any monitoring station in Osmanabad district. It is observed that out of total Industries in district 26 Industries are meeting the standards and 11 industries are not meeting the emission standards. It is noted that, all the ULBs have provided vehicular pollution check centres in the district however provision for dust suppression vehicles is only 50% in the district.

Gap identified and action plan to be adopted with its priority for air quality of the district is presented in **Table 5**.

**Table 5 Action Plan for Air Quality Management**

Sectors	Gaps	Action Points	Priority
Air	▪ No provision of CAAQMS ▪ Sectoral action plans not effectively established ▪ 11 Numbers of industries not meeting air emission standards ▪ Provision for dust suppression vehicles only 50%	▪ Emission inventory and source apportionment supported with dispersion and health based iterative process for science based AQM strategy to be established ▪ Each ULB to have atleast one urban and one rural CAAQMS or three manual stations at least to include criteria pollutants with minimum one location to include parameters of 2009 CPCB notification and meteorological data including cloud cover ▪ Fugitive emission control system for hot spot emission control to be installed ▪ Action against industries violating air emission norms under Polluter Pay Principle ▪ Provision of atleast one dust suppression vehicles per ULB ▪ Green barriers / Photo catalyst options to be evaluated ▪ Capacity building to be enhanced	High

## 6.0 Mining Activity Management plan

Osmanabad region is known for mining activity. Total area covered under mining is 43.84 Sq.Km. As on date 29 numbers of licenses for various Mining activities are issued by the respective authorities and all mining areas are meeting Environmental Clearance conditions.



## 7.0 Noise Action Plan

There are 23 numbers of noise measuring devices with all ULBs and Noise quality reveals mainly source specific non compliance such as traffic related in most of the kerb side analysis. Though zoning categories and regulations therein are particularly specified, in limitation of noise regulations has always been challenge to the regulatory authority. **Table 6** spells potential management plan that could be taken up on priority by each of the ULBs. There is no complaint received in last one year related to the noise pollution.

**Table 6 Action Plan for Noise Quality Management**

Sectors	Gaps	Action Points	Priority
Noise	<ul style="list-style-type: none"> <li>▪ Excessive exposure during noise generating potential events/ festivals</li> </ul>	<ul style="list-style-type: none"> <li>▪ Noise mapping to be carried out for zonation purposes</li> <li>▪ At source control using physical or natural attenuation methods to be adopted</li> <li>▪ In the path noise control methodologies using noise absorbers creating zone of inhibition / silence zone to be done</li> <li>▪ Event based noise control policy to be effectively implemented</li> </ul>	High