



MADHYA PRADESH POLLUTION CONTROL BOARD  
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Phone 0755-2466191, 2464428. Fax 0755-2463742. website-mppcb.nic.in

No. /HO/MSW/MPPCB/2017

Bhopal. Date:

To,

**The Member Secretary,  
Central Pollution Control Board,  
Parivesh Bhawan, CBD cum Office Complex,  
East Arjun Nagar,  
Delhi -110032**

**Sub:** Annual Report for year 2016-17 on implementation of Solid Waste Management Rules, 2016.

**Ref:** Your letter No. B-11011/1/UPC-II/2016-17/6506 date: 25/07/2017.

Sir,

Please find enclosed herewith the Annual Report for year 2016-17 on Solid Waste Management in from (V) as per the provision of the rule - 24 (3) of Solid Waste Management Rules, 2016 for your information & necessary action please.

Encl : As above

(A.A. Mishra)  
Member Secretary

Encl.No. 2857 /HO/MSW/MPPCB/2017

Bhopal. Date: 22/8/2017

Copy to :-

1. Principal Secretary, Urban Development & Housing Deptt. Govt. of M.P. Mantralaya, Bhopal for information please.

2. IT M.P. Pollution Control Board Bhopal for upload the same on Web Site of MPPCB.

Encl : As above

(A.A. Mishra)  
Member Secretary  
M.P. Pollution Control Board, Bhopal


Form - V

[see rule 24(3)]

**FORMAT OF ANNUAL REPORT TO BE SUBMITTED BY THE REGIONAL  
OFFICE**

**PART- A**

To,  
The Chairman  
Central Pollution Control Board  
Parivesh Bhawan, East Arjun Nagar  
Delhi - 110032

1.	Name of the State	Madhya Pradesh
2.	Name & address of the State Pollution Control :	M.P. Pollution Control Board, Paryawaran Parisar E-5 Arera Colony Bhopal pin - 462016
3.	Number of local bodies responsible for management of Solid Waste in the State under these rules	Urban Local Bodies - 379 Cantonment Board - 05
4.	No. of authorisation application Received :	Nil
5.	A Summary Statement on progress made by local body in respect of solid waste management	The Action plan of Madhya Pradesh prepared by Urban Development & Housing Department (February 2017) is enclosed as <b>Annexure-I</b>
6.	A Summary Statement On Progress Made By Local Bodies In Respect Of Waste Collection, Segregation, Transportation And Disposal	<b>Annexure-II</b>
7.	A summary statement on progress made by local bodies in respect of implementation of Schedule II :	Kindly refer above Annexure- I. The monitoring of ground Water Quality & Ambient Air Quality around the dump sites is being carried out by Regional Offices of Madhya Pradesh Pollution Control Board from time to time. 240 samples of Ground Water & 125 Samples of Ambient Air Quality have been collected & analysed. The Urban Local Bodies are still not complying all the norms prescribed in Scheduled II. However Madhya Pradesh Pollution Control board have also conducted good numbers of workshops, interaction meets, rallies for creating awareness in order to sensitize public and municipal authorities to guide them at all levels for better compliance of Solid Waste Management Rules 2016. These workshops, interaction meets, rallies have been conducted involving all stake holders.
	Date : Place : Bhopal	 Member Secretary Madhya Pradesh Pollution Control Board A.A. Mishra Member Secretary M.P. Pollution Control Board Bhopal

## Part B

### 1. Towns/cities

Total number of towns/cities	384
Total number of ULBs	Urban Local Bodies - 379 Contonment Board - 05
Number of class I & class II cities/towns	class I Cities - 33 class II Cities - 28 Towns - 323


### 2. Authorization status (names/number)

Number of applications received	Nil
Number of authorizations granted	Nil
Authorizations under scrutiny	Nil

### 1. Solid Waste Generation status

Solid Waste generation in the state (TPD)	6773
Collected	5480
Treated	Total Waste treated - 1141 TPD Compost Making - 701 TPD Waste to Energy - 440 TPD
Land Filled (Dumped)	4339 TPD

### 4. Compliance to Schedule I of SWM Rules (Number/Names of towns/ Capacity)

Good practices in cities/towns	 <p style="font-size: 1.2em; margin: 0;">As per Annexure-II</p>
House-to-house collection	
Segregation	
Storage	
Covered transportation	

## 5. Processing of SWM(Number/names of towns/capacity)

(i) Solid Waste processing facilities setup:

Composting	Vermi Composting	Biogas	RDF/ Pelletization
Bhopal – Bhanpura Khanti, Ganjbasoda, Shahganj, Seoni- Malwa, Badnawar, Rajgarh, Kukshi, Indore, Khandwa, Maheshwar , Khargone, Gautampura, pithampur, Rewa, Sagar, satna, singrauli, Sailana, Ujjain	Seoni- Malwa,	Bhopal (Vegetable Market Arera Colony)	Indore

Note- The composting / Vermi composting facilities are setup to address a very small quantity of MSW in all cities.

## 6. Processing Facility Operational:

Total City

Composting	Vermi Composting	Biogas	RDF/ Pelletization
Bhopal -- Bhanpura Khanti, Ganjbasoda, Shahganj, Seoni- Malwa, Badnawar, Rajgarh, Kukshi, Indore, Khandwa, Maheshwar , Khargone, Gautampura, pithampur, Rewa, Sagar, satna, singrauli, Sailana, Ujjain	Seoni- Malwa,	Bhopal (Vegetable Market Arera Colony)	Indore

## 7. Processing facility under Installation/planned:

Total Places

Composting	Vermi Composting	Biogas	RDF/Pelletization
As per report obtained from Urban Development & Housing Department, out of 378 ULBs, setting up of compost & Waste to Energy plants are under planning based on cluster approach . The details are enclosed as <b>Annexure-III</b>			

## 8. Waste to Energy Plants: (Number/names of towns/capacity)

Plant Location	Status of Operation	Power Generation	Remark
1.JABALPUR MSW PVT.LTD, (Essel msw Private Ltd.) Vill. Kathonda teh. Jabalpur Dist. Jabalpur	Operational	11.5 MW	The plant has commissioned on dated 29/02/2016 and waste utilized 300 – 320 TPD.

### 9. Disposal of Solid Waste (number/names of towns/capacity):

Landfill sites identified	286
Landfill constructed	10
Under Construction	13
Landfill in operation	03
Landfill exhausted	-
Land filled capped	Capping work in one cell is under progress and remaining cells are operational. (Nagar Nigam Jabalpur )

### 10. Solid Waste Dumpsites (number/names of towns/capacity):

Total number of existing dumpsites	381
Dumpsites reclaimed/capped	Nil
Dumpsites converted to sanitary landfill	01 [JMC Jabalpur]

### 11. Monitoring at Waste processing/Landfills sites

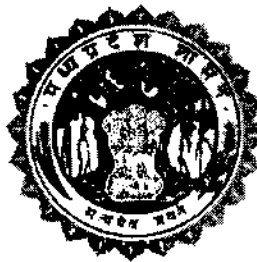
No. of Facilities	Ambient Air	Ground Water VOCs	Leachate Quality	Compost Quality	VOC's
Major portion of MSW is illegally dumped	MPPCB has conducted Ambient Air Quality monitoring at 125 points.	MPPCB has conducted Ground Water monitoring at 240 points.	-	-	-

### 12. Status of Action Plan prepared by Municipalities:

Total number of municipalities	379
Number of Action Plan submitted	Action Plan & Time Line submitted by Urban Development & Housing Department Govt. of M.P. is attached. Point no. 7 may please be referred.  State Govt. has prepared an action plan for whole state & ULBs divided into 26 clusters to develop MSW Managment facilities..

**ACTION PLAN**  
**FOR**  
**MUNICIPAL SOLID WASTE MANAGEMENT**  
**IN MADHYA PRADESH**

**(Revised February 2017)**



**URBAN DEVELOPMENT & HOUSING DEPARTMENT (UD&HD)**  
**GOVERNMENT OF MADHYA PRADESH**

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## 1. Background & Introduction

Madhya Pradesh is a state with a population of 72.5 million covering 9.5% of the total area of the country (308,000 Sq.). The urban population of the state is across 378 ULBs which has increased to 20 million in 2011 from 16.1 million in 2001, growing at a CAGR of ~2.2%. The high rate of urbanization has led to increased focus on urban infrastructure and Municipal service delivery which has further led to increased investment requirement in the urban development. However, this rate of urbanization has resulted in generation of large quantities of Municipal Solid Waste in big cities as well as small towns also.

Thus, preparation of object and time-targeted action plan for management of municipal solid waste (MSW), for each city and town in the state is essential in accordance with the population and developmental growth, so that environmental conditions improve and makes city liveable for every citizen.

## 2. Directions of HON'BLE NGT

Hon'ble National Green Tribunal (NGT) in OA No 199 of 2014 (Almitra H. Patel Vs Union of India) on 12<sup>th</sup> January, 2017 directed State government to *"file complete and detailed Action Plan and affidavits to show how the municipal solid waste in the State would be processed and degradation of environment and public health resulting here from would be prevented. As part of this Action Plan they would also required to submit a total solid waste generated and how that solid waste was required to be treated in a time bound manner in regard to this directions."*

## 3. Need for Municipal Solid Waste Management

Solid Waste Management is a part of public health and sanitation, and according to the Indian Constitution, falls within the purview of the State list. Since this activity is non-exclusive, non-rivalled and essential, the responsibility

for providing the service lies within the public domain. The activity being of a local nature is entrusted to the Urban Local Bodies by 12th Schedule of 74th Amendment of the Constitution. Supreme Court direct all the ULBs to manage Municipal Solid Waste in accordance with "MSW Management and Handling Rules 2000", hence all ULBs are obliged to carry collection, transportation, segregation, processing and scientific disposal of MSW as per the mandated rules. Govt has also framed eight parameters as Service Level Benchmarks (SLBs) for MSW in 2009 and 13th Finance Commission links the disbursement of Performance Grant to ULBs with the level of achievement of SLBs, as specified in Chapter 10 of its report. Importantly, National Green Tribunal has stipulated ULBs to follow NGT's all environmental rules and norms in order to avoid adverse environmental effects of MSW activities. The scientific management of Municipal Solid Waste Management includes:

- **Waste minimization and reduction at source**
- **Door to door collection** of waste from all residential, commercial, institutional establishments in covered vehicles in compliance with MSW Rules 2000 and in accordance with SLB for MSW.
- **100% Segregation** of waste at source in accordance with SLB for MSW
- **Covered Bins** for secondary collection in compliance with MSW Rules 2000
- **Secondary collection and transportation** in covered vehicles in compliance with MSW Rules 2000
- **Covered waste transfer/storage stations** in compliance with MSW Rules 2000 and CPCB/SPCB norms, if required.
- **More than 80% Waste recovery/recycling** in accordance with SLB for MSW
- **Scientific processing** in compliance with MSW Rules 2000 and CPCB/SPCB norms
- **Scientific disposal** of inert in compliance with MSW Rules 2000 and CPCB/SPCB norms
- **100% cost recovery of O &M expenses from user charges as mandatory urban reform stipulates and 90% collection efficiency of user charges** in accordance with SLB for MSW.

#### 4. Past prevailing situation of MSWM & Practice

The Solid Waste Management in all ULBs should have started as directed by the Honourable Supreme Court of India by 2005. But due to non availability of trained and knowledgeable manpower, lack of financial resources, operational non viability because of inadequate quantity of waste generated in maximum number of ULBs, the complete management of MSW as per rules could not be implemented in any of ULBs.

However some of the bigger ULBs have been implementing it on a piece meal basis. Some examples are as follows:

1. Indore	Outsourced secondary collection and waste processing of 500 TPD to a private operator. But the result was not satisfactory because of many reasons.
2. Gwalior	It was the first town in Madhya Pradesh which got Sanitary Landfill constructed and started managing it. It also outsourced door to door collection (DTDC) to a private operator. All the operations stopped later on
3. Ujjain	Have recently outsourced waste processing to private operator. The complete results are yet to be assessed.
4. Rewa	It also outsourced secondary transportation of waste. But the results have not been satisfactory.

#### 5. Initiative of State Government for Integrated Solid Waste Management (ISWM)

The State Govt. has been issuing regular instructions to ULBs for implementing SWM as per provisions of MSW Rules 2000/2016. It also got Govt. land allotted to all ULBs for processing / landfill facility, all large towns i.e. above 50000 populations. The State Govt. had been providing support to ULBs through grants from **Mukya Mantri Swachta Mission** as initiative of State Govt. for sanitation, for purchasing of equipments and vehicles for Solid Waste

Management. Now this scheme has been merged with **Swachchha Bharat Mission (SBM)** launched by Govt. of India.

At some places waste processing for composting is being done by engaging private operators for waste processing. But in none of the places Integrated Solid Waste Management has been implemented fully as per MSW rules.

Many ULBs of the State are regularly conducting IEC activities for citizens and explaining them the importance of collecting waste in a segregated manner.

**Below: Photographs represent status of waste management in ULB's:**

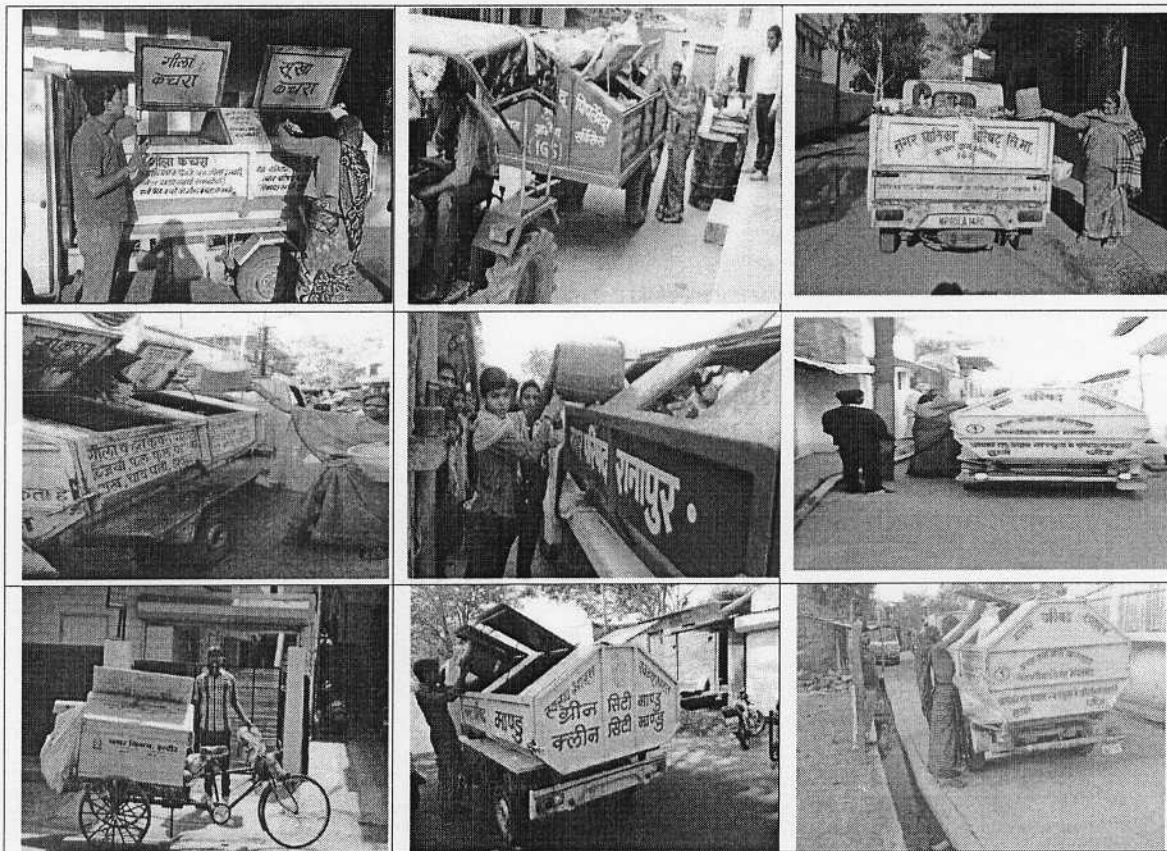


The State Govt. has also instructed all ULBs to start door to door collection (DTDC) in every ward of the town which is being followed across all ULBs. Many NGOs are involved in door to door collection in some of the areas of many towns. Many Resident Welfare Associations are also engaged in door to door collection in their own colonies. Collection & Transportation is being done by urban local bodies. The status of door to door collection across the state is shown in table below.

Total No. of Wards	Ward with 100% door to door collection, Nos.
6999	4136

Many of the smaller ULBs have started 100% door to door collection (DTDC) and also treating waste through composting. However, as presently there is no Landfill site has been constructed, the scientific disposal of reject/inert is not being done

**Below: Photographs depicting Door to Door Collection across the State:**



## 6. Acton plan for Waste Management in the State –

### **Integrated Solid Waste Management on Cluster based Regional Landfill approach on PPP mode.**

The urbanization pattern in MP is quite skewed, as shown in table below. Only 15 ULBs have population greater than 2 lakhs while 318 ULBs have population less than 50,000. The scientific solid waste management in ULBs, with population less than 1 lakh, would be uneconomical and would result in huge financial burden on the ULBs, apart from being operationally non viable for smaller ULBs because of very less quantity of waste being generated. Most of these ULBs further lack the financial as well as the technical capacity to carry out the solid waste management. Hence, cluster approach on regional landfill for implementing Solid Waste Management in the State looks to be the only solution.

Population Range	Number of ULBs
<20,000	210
20,000 - 50,000	107
50,000 – 1,00,000	28
1,00,000 – 2,00,000	18
>2,00,000	15

### **6.1. Long term Plan – Cluster based Regional Landfill approach for Waste**

Considering the prevalent situation of waste management across the state Government has decided to implement Integrated Solid Waste Management (ISWM) on regional landfill approach on cluster based model across all ULBs in the state, through Public Private Partnership (PPP) mode.

The clusterization has been designed considering two factors; first is optimizing the waste and second being the logistics. Clusters generating around 150 TPD and within a radius of 50-70 Km's has been formed.

Also, considering the lack of financial resources, technical knowhow and paucity of funds implementing projects through Public Private Partnership (PPP) mode has been envisaged.

- **Regional Integrated MSW facilities:** The whole state has been divided into ~26 clusters for MSW management (Details list towns in cluster is attached in Annexure-1).

1	Sagar Cluster (11 ULBS)	11	Chhatarpur Cluster (28 ULBS)	21	Mandsaur Cluster (22 ULBS)
2	Katni Cluster (05 ULBS)	12	Damoh Cluster (12 ULBS)	22	Vidisha Cluster (15 ULBS)
3	Jabalpur Cluster (01 ULBS)	13	Bhind Cluster (14 ULBS)	23	Shajapur Cluster (26 ULBS)
4	Bhopal Cluster (08 ULBS)	14	Narsinghpur Cluster (15 ULBS)	24	Ratlam Cluster (17 ULBS)
5	Rewa Cluster (28 ULBS)	15	Singrauli Cluster (01 ULBS)	25	Chhindwara Cluster (20 ULBS)
6	Indore Cluster (08 ULBS)	16	Betul Cluster (08 ULBS)	26	Pithampur Cluster (24 ULBS)
7	Gwalior Cluster (16 ULBS)	17	Balaghat Cluster (13 ULBS)		
8	Burhanpur Cluster (10 ULBS)	18	Shahdol Cluster (16 ULBS)		
9	Dewas Cluster (24 ULBS)	19	Shivpuri Cluster (10 ULBS)		
10	Hoshangabad Cluster (14 ULBS)	20	Guna Cluster (11 ULBS)		

Name of Clusters for Integrated Solid Waste Management on Regional Landfill approach

In each of the clusters, a regional Integrated Solid Waste Management (ISWM) Facility will be developed where waste collected and transported from all the ULBs will be processed and disposed in a scientific landfill site as per MSW Rules 2016 and other statutory requirements.

Further, satellite waste storage and satellite processing facilities may be developed in each of the clusters to minimize the transportation costs. Therefore, each cluster will have a combination of ISWM Facility, satellite segregation-cum-processing units (if required) and waste storage units.

PPP mode will allow state government to leverage on the technical as well as O&M expertise of private sector. A combination of grant from

GoMP and concessional loan will be provided to ULBs, based on their financial capacity. The private sector will contribute the remaining cost of infrastructure creation /equipment and will carry out various activities of MSW management - door to door collection, transportation, segregation, processing and disposal, in accordance with MSW Rules and relevant statutory requirements. The private operator shall conduct Information, Education and Communication activities throughout the concession period, so that the citizens adopt segregation at source and follow other instructions and pay user charges regularly. This will help in achieving the objectives and making projects sustainable.

**Below: Images portray the system under proposed ISWM Projects**



- **Hazardous & e-waste disposal facilities:** Four hazardous & e-waste waste facilities are planned at zonal level i.e. in Bhopal, Indore, Jabalpur, and Gwalior. The residential/ industrial hazardous waste and e-waste will be transported to these facilities and will be processed and disposed by relevant technologies. These four projects will be planned as PPP projects with private operator responsible for collection, transportation, processing and disposal of waste.



